

Second Edition

**ADAPTED
PHYSICAL
EDUCATION
AND
SPORT**

Joseph P. Winnick
Editor

ADAPTED PHYSICAL EDUCATION AND SPORT

Second Edition

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Preface

During the past three decades, increasing attention has been given to the education of individuals with unique needs. Much of the impetus for high-quality education and sport participation has been sparked by federal legislation dealing with individuals with disabilities. With this increased attention has come the realization that individuals with disabilities are really individuals with *abilities* who are capable of much more than society has ever believed. In physical education and sport, persons with unique needs have been provided with increased opportunities, and the result has been an unbelievable demonstration of abilities and a virtual knowledge explosion in these fields. As opportunities are provided and more persons with unique needs participate, the value of physical activity is more clearly recognized and accepted. More parents, medical professionals, educators, and others recognize the tremendous value of physical education and sport today than ever before. This recognition and acceptance extends throughout the world, as clearly demonstrated at international symposia and international competition in sport.

The advances in adapted physical education and sport have become so pronounced that a series of recognizable subspecialties have emerged in connection with these areas. It has become very difficult, if not impossible, for one or two authors to write, keep current, and provide up-to-date revisions of quality texts on these topics. Thus, I have assembled the top people in their areas of expertise to serve as a textbook writing team. The result is a book that reflects the very sharply focused thinking of a team of specialists who draw on more than 350 years of experience in adapted physical education and sport.

This book has been designed as both a text and a resource in adapted physical education and sport. As a text it can be used to prepare students majoring in physical education, recreation, sport management, special education, and related disciplines. As a resource it can serve a variety of individuals and groups: teachers, administrators,

parents, coaches, volunteers, and other professionals.

In both this and the first edition, emphasis has been focused on physical education and sport. This is evidenced by the number of chapter titles reflecting areas of physical education and sport. This emphasis is maintained as readers receive the essential educational and medical background necessary to work with individuals with disabilities. Emphasis is also placed on making this text comprehensive yet easy to read and understand. Although many of the strengths of the first edition of this text are retained in this second edition, some notable changes appear in this edition. The second edition presents updated information and expanded coverage in many topical areas and includes new topics as well. For example, this second edition adds information on individuals with traumatic brain injury, stroke, autism, and dwarfism. More information is provided relative to infants, toddlers, and preschoolers.

In this edition, key terms are highlighted throughout. The text is fully illustrated, concise, accessible, and practical. An instructor's guide accompanies the book. The instructor's guide provides suggestions for an introductory course in adapted physical education and subsequently provides chapter-by-chapter suggested objectives appropriate for students; enrichment or learning activities that instructors may use to supplement class lectures, discussions, and readings; study or test questions that instructors may use; and additional resources that might be helpful to amplify material included in each chapter.

I have divided the book into four parts. Part I, "Foundational Topics in Adapted Physical Education and Sport," presents information that introduces the reader to adapted physical education and sport. It includes a brief history and overview of adapted physical education and sport, information on the organization and management of programs, and information on developing and implementing individual education programs successfully.

In Part II, "Children and Youth With Unique Needs," seven chapters are devoted to disabilities associated with the Individuals With Disabilities Education Act (IDEA) and one chapter discusses nondisabled youngsters with unique needs in physical education. An important part of this section talks about understanding the nature of conditions that result in unique physical education and sport needs and implications for meeting these needs.

Part III, "Developmental and Early Childhood Topics in Adapted Physical Education," begins with three chapters discussing physical fitness development, motor development, and perceptual-motor development and concludes with two chapters discussing programs associated with early childhood; i.e., relating to infants, toddlers, and preschoolers. The latter two chapters are new and unique contributions to the body of knowledge in adapted physical education, and the writers of these chapters will be particularly interested in the professional response to the positions taken and the ideas presented.

Part IV, "Activities for Students With Unique Needs," describes physical education and sport activities in school and community contexts. It includes separate chapters on body mechanics and posture; developmental and remedial exercises; rhythms and dance; aquatics; team sports; individual, dual and cooperative sports; winter activities; and wheelchair sport performance. A key aspect of this part is the presentation of specific activity modifications for the various populations involved in adapted physical education and sport. This part concludes with a chapter related to the enhancement of wheelchair sport performance.

The book has been designed to be a comprehensive, high-quality introduction to adapted physical education and sport and to be interesting, relevant, and user friendly. I hope it will help to provide quality services to individuals with unique needs.

Joseph P. Winnick

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PART I

Foundational Topics in Adapted Physical Education and Sport

Part I of this book, consisting of six chapters, introduces you to adapted physical education and sport. The first chapter defines adapted physical education and sport and offers a brief orientation concerning its history, legal basis, and professional resources. In chapter 2, where the focus shifts to the organization and management of programs, topics include programmatic and curricular direction in adapted physical education, guidelines for administrative procedures and program implementation, human resources necessary for adapted physical education and sport programs, and program evaluation. Chapter 3 is a detailed discussion of individualized education programs developed for students with unique needs. Vital to the establishment of these programs are several concepts related to measurement and evaluation. These concepts are treated in chapter 4, which discusses various types of tests and standards, purposes of measurement and assessment, and tests and awards relevant to adapted physical education. Chapters 5 and 6 deal with instructional styles and strategies related to adapted physical education and basic concepts and approaches related to methods of managing behavior.

CHAPTER 1

An Introduction to Adapted Physical Education and Sport

Joseph P. Winnick

Many individuals who pursue a career of teaching physical education and coaching sports are skilled athletes. They have had a great deal of success and have probably earned letters in high school and college athletics. Many have interacted with high-level athletes like themselves. As they prepare for careers, they often become aware of the existence of adapted physical education and sport, which provides services to individuals with unique needs, who need activities adapted for them.

Although most individuals with unique needs remain rather obscure, some have become sport celebrities. For example, Wilma Rudolph—despite birth defects and polio—was a triple gold medalist in the 100m, 200m, and 400m relays in the 1960 Rome Olympics. Peter Gray, whose right arm was amputated, played centerfield for the St. Louis Browns in 1945. Others include Harry Cordellos, a sightless distance runner who ran the 1975 Boston Marathon with a sighted partner in 2 hours, 57 minutes, and 42 seconds; Tom Dempsey, born with only half a right foot, who set a National Football League record in 1970 for the longest field goal kicked (63 yards); and Jim Abbott, who became an award-winning lefthanded pitcher for the New York Yankees despite an impaired right hand. As Figure 1.1 shows, individuals with unique needs are capable of feats that many people would not think possible.

THE MEANING OF ADAPTED PHYSICAL EDUCATION

Because different terms and different definitions of the same term have been applied to physical education that meets unique needs, it is necessary to clarify some terms. Adapted physical education is an individualized program of developmental activities, exercises, games, rhythms, and sport designed to meet the unique physical education needs of individuals. As a subdiscipline of physical education (PE), it includes instruction individually planned to meet the needs of students who require adaptations in physical education for safe, satisfying, and successful participation.

Adapted physical education is generally designed to meet *long-term* (more than 30 days) unique needs. These include disabilities as specified in the Individuals with Disabilities Education Act (IDEA). According to this legislation, children with disabilities, ages 6–21, are those with mental retardation, hearing impairments, speech or language impairments, visual impairments, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; for this reason, they need special education and related services. At a state's discretion, children with disabilities, ages 3–5, may include those who are experiencing developmental delays in one of the following areas: physical, cognitive, communication,

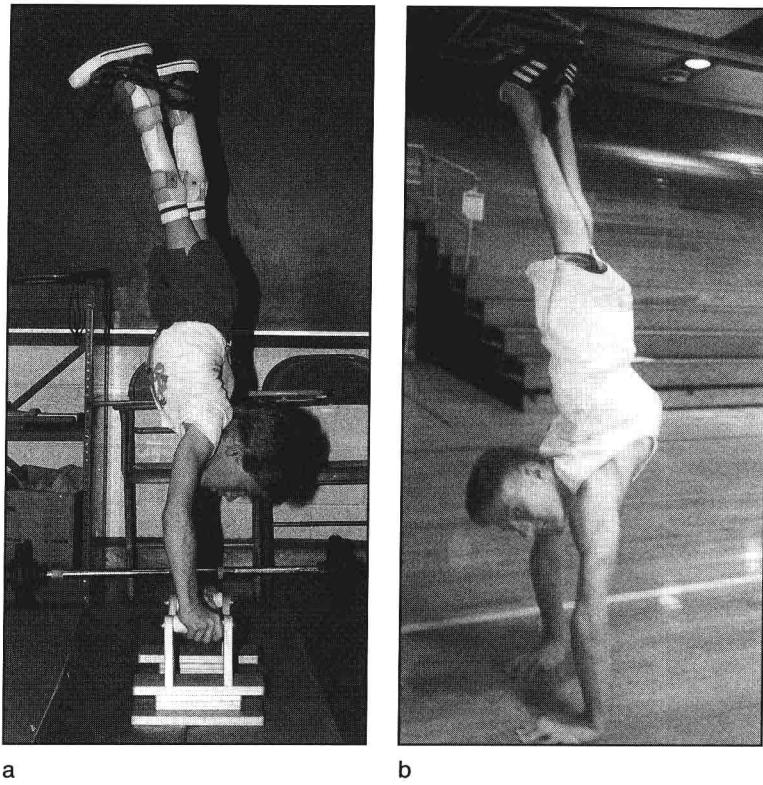


Figure 1.1 An elite performer with a lower limb impairment performing a handstand (a) in the early years and (b) as a teenager.

adaptive, social, or emotional development and who, by reason thereof, need special education and related services. Adapted physical education may also include infants and toddlers with disabilities who need early intervention services because they are experiencing delays in one or more of the following areas: cognitive, physical, communication, social, or emotional development or self-help skills or they have a diagnosed physical or mental condition that has a high probability of resulting in developmental delay. Adapted physical education may include pupils who are not identified by a school district as disabled under federal legislation, but who may have unique needs that call for a specially designed program. The latter group may include students of low fitness (including exceptional leanness or obesity), inadequate motor development, or low skill and those pupils with poor functional posture. These individuals may require individually designed programming to habilitate or remediate physical and motor functions required for continued physical education, functional skills, and physical well-being.

According to IDEA, students with disabilities, ages 3–21, must have an *individualized education program* (IEP) developed by a planning committee.

In developing an IEP, physical education needs must be considered, and the IEP developed may include specially designed instruction in physical education. Federal legislation also requires the development of an *individualized family service plan* (IFSP) for infants and toddlers with disabilities. Although physical education services are not required for this age group, they may be offered as part of an IFSP. Although not required by federal law, an *individualized physical education program* (IPEP) should also be developed for those who have a unique need but have not been identified by the school as disabled. It is recommended that each school have policies and procedures to guide the development of all individualized programs. More specific information on the development of programs and plans are presented in chapter 2.

Adapted physical education may take place in classes that range from those *mainstreamed* (i.e., regular physical education) to those *segregated* (i.e., only persons with unique needs). Although an adapted physical education program is individualized, it can be implemented in a group setting. It should be geared to each student's needs, limitations, and abilities. Whenever appropriate, students receiving an adapted physical education

program should be included in regular physical education settings.

Adapted physical education is an *active* program of physical activity rather than a *sedentary* alternative program. It supports the attainment of the benefits of physical activity by meeting the needs of students who might otherwise be relegated to passive experiences associated with physical education. In establishing adapted physical education programs, educators work with parents, students, teachers, administrators, and professionals in various disciplines. Adapted physical education may employ developmental, community-based, or other orientations and may use a variety of teaching styles. It takes place in schools and other agencies responsible for educating individuals. Although adapted physical education is *educational*, it draws upon *related services* (more on related services later in this chapter), especially medically related services, to help meet instructional objectives and goals.

In this text, adapted physical education and sport are viewed as part of the emerging area of study referred to as adapted physical activity, a term used to encompass the comprehensive and interdisciplinary study of physical activity for the education, wellness, sport participation, and leisure of individuals with unique needs.

Adapted physical education can help to restore the individual's capabilities. Although it may exceed the minimal time required by policies or law, it should not be supplanted by related services, intramurals, sport days, athletics, or other experiences that are not primarily instructional.

ADAPTED SPORT

Adapted sport refers to sport modified or created to meet the unique needs of individuals with disabilities. Adapted sport may be conducted in a variety of settings, ranging from integrated settings in which individuals with disabilities interact with nondisabled participants to segregated environments in which play in sport includes only persons with disabilities (see Figure 2.4). Based on this definition, for example, basketball is a sport and wheelchair basketball would be considered an adapted sport. Special Olympic sport participation would be considered adapted sport if rules were modified, and goal ball (a game in which players with visual impairments attempt to roll a ball that emits a sound across their opponents' goal) would be considered an adapted sport.

Adapted sport programs are conducted in diverse environments and organizational patterns for a variety of purposes. Educational programs are generally conducted in schools and include intramurals, extramurals, and interschool activities. Intramural activities are conducted within schools, involve only pupils enrolled in that school, and are organized to serve the entire school population. Extramural sport activities involve participation of pupils from two or more schools and are sometimes conducted as play days or sport days at the end of instructional or intramural sessions. Interschool sports involve competition between representatives from two or more schools and offer enriched opportunities for selected and more highly skilled individuals. Adapted sport activity may also be conducted for leisure or recreational purposes within formal, open, or unstructured programs or as part of the lifestyle of individuals and/or groups. Adapted sport activity may also be conducted for wellness, medical, or therapeutic reasons. For example, sport or adapted sport may be used as part of recreational therapy, corrective therapy, sport therapy, or wellness programs. Finally, adapted sport may be conducted for team or self-actualization and/or pursuit of excellence; that is, be all you can be in a particular sport. In general, one's involvement in sport or adapted sport serves several purposes. This text will focus on adapted sport in educational settings and in regional, national, and international competition under the governance of formalized organizations promoting sport for individuals with disabilities.

BRIEF HISTORY OF ADAPTED PHYSICAL EDUCATION

Although significant progress concerning educational services for persons with disabilities is relatively recent, the use of physical activity or exercise for medical treatment and therapy is not new. Therapeutic exercise may be traced in China to 3000 B.C. It is known that the ancient Greeks and Romans recognized the medical and therapeutic value of exercise. However, the provision of physical education or physical activity to meet the unique needs of persons with disabilities is a recent phenomenon. Efforts to serve these populations through physical education and sport has only been given significant attention during the twentieth century, although they began in the United States in the nineteenth century.