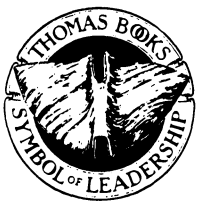
ADAPTED PHYSICAL EDUCATION FOR STUDENTS WITH AUTISM

ADAPTED PHYSICAL EDUCATION FOR STUDENTS WITH AUTISM

By

KIMBERLY DAVIS, M.S. (Physical Education)

Specialization in Adapted Physical Education
Indiana University
Institute for the Study of Developmental Disabilities
Adapted Physical Education Specialist Consultant



CHARLES C THOMAS • PUBLISHER
Springfield • Illinois • U.S.A.

Published and Distributed Throughout the World by

CHARLES C THOMAS • PUBLISHER
2600 South First Street
Springfield, Illinois 62794-9265

ISBN 0-398-05688-9 (cloth)
ISBN 0-398-06085-1 (paper)
Library of Congress Catalog Card Number: 90-33488

With THOMAS BOOKS *careful attention is given to all details of manufacturing and design. It is the Publisher's desire to present books that are satisfactory as to their physical qualities and artistic possibilities and appropriate for their particular use.* THOMAS BOOKS *will be true to those laws of quality that assure a good name and good will.*

Printed in the United States of America
SC-R-3

Library of Congress Cataloging-in-Publication Data

Davis, Kimberly
Adapted physical education for students with autism / by Kimberly Davis.
p. cm.
Includes bibliographical references.
ISBN 0-398-05688-9. — ISBN 0-398-06085-1 (pbk.)
1. Physical education for handicapped children. 2. Autistic children. I. Title.
GV445.D34 1990
613.7'042—dc20

90-33488
CIP

This book is dedicated to
Heather
for helping me form my views of seeing
abilities rather than disabilities,
possibilities rather than impossibilities,
and
love rather than indifference.

PREFACE

This volume is the culmination of eight years of work in a research and development center for children and youth with autism at Indiana University. The program which provided the basis for this manuscript was established to help students begin to learn basic gross motor skills which could then be carried over to play/leisure time activities. Communication, integration, and independence of movement were all stressed as major goals of the program. The suggestions herein are the author's attempt to assist her colleagues in the field who may encounter students with autism or similar problems with communication and social interaction.

ACKNOWLEDGMENTS

I wish to extend my appreciation to Dr. Susan K. Shuster and Georgia Sheriff for their enthusiasm and encouragement, and time to complete this text while on the job. Thanks to Nancy Dalrymple for her expertise in autism and her comments regarding the text.

Special thanks to Stine Levy, Annamaria Mecca, and Barbara Porco, my colleagues on the Autism/Assessment Training Team at the Institute, for their written and spoken comments, critical reading, encouragement, and the expert knowledge they shared with me over the years.

INTRODUCTION

This book has been written for physical educators and adapted physical educators who may encounter children or young adults with autism. Autism is a severe communication disorder which is life long. People with autism also have great difficulties in daily social interaction. Most people with autism are also retarded to some degree, yet some may have normal or above normal intelligence. The diversity of characteristics of autism creates a unique challenge to educators.

Autism is a very puzzling disorder, which to date has not been discussed in great detail in most adapted physical education texts. In the texts which were reviewed, autism was hidden within the discussion of emotional disturbance. Most frequently the description was a series of paragraphs with very sketchy information or, worse, misinformation about autism. This limited and misleading description of autism is often the only reference undergraduate students receive in their course of study. It is not the author's intent to taint the value of these texts, but to illustrate the need for additional information. This book will describe autism and offer suggestions regarding the assessment and programming for students with autism in adapted physical education/regular physical education classes.

Since physical education is written into P.L. 94-142 as part of the required education of special students, every effort should be made to provide them with a quality education. Proper adapted physical education can often be overlooked as a necessary part of the school day. It is important to keep in mind that physical educators and other teachers working with students with autism must all work together to provide the student with the best possible program. Physical education for special students is often part of a team or interdisciplinary approach. No one discipline can program in isolation. Interdisciplinary approaches increase the flow of ideas and keep morale up, while maximizing the students' level of learning.

CONTENTS

ADAPTED PHYSICAL EDUCATION FOR STUDENTS WITH AUTISM

Chapter One

GENERAL OVERVIEW OF AUTISM

Autism is puzzling. The disorder is so puzzling that textbook authors may differ substantially in their descriptions of the disorder. This can lead to confusion among the professionals who encounter and teach students with autism. An understanding of autism, or any other disorder, is needed in order to facilitate proper programs for these students. The following overview is an attempt to unify all of the current information and make it applicable to the physical education teacher.

DEFINITION

Autism, by federal definition, is a developmental disability. This definition emphasizes what a person can or cannot do rather than labeling the disability. The general characteristics of autism which fit the federal definition are one: early onset. With autism this onset is evident in infancy or in childhood (DSM III–R). Secondly, the disability persists throughout the individual's life; it does not go away, nor does the child "outgrow" the autism. It is lifelong. Lastly, the individual's ability to cope with life is greatly affected. More specific to autism is the fact that language development and social development are significantly delayed. The central nervous system of people with autism cannot process all of the sensory stimulation and input that it receives; thus, coping with everyday situations becomes very difficult or impossible without some guidance and teaching.

CAUSES

There are many theories surrounding the causes of autism. Particularly damaging is the theory stating that parents cause their child to become autistic. This is not true. Autism is an organic disorder which affects the central nervous system and interferes with normal development. It manifests itself in a wide range of behavioral symptoms (Coleman and

Gillberg, 1985). Professionals are not able to explain autism with one single cause or set of causes. There are many possible theories which link autism with environmental factors. Exposure of the parents to occupational chemicals such as paint, farm chemicals, or water-treatment chemicals for a prolonged period of time has been noticed in some cases (Coleman and Gillberg, 1985; Felicetti, 1981). Damage to the fetus during pregnancy or bleeding in the middle trimester of pregnancy have also been documented. Genetic factors such as a family history of speech delay, learning disability or other developmental disorders, plus other genetic links to Fragile X syndrome or PKU, have come to the forefront as possible correlates to autism (Coleman and Gillberg, 1985). All of these theories suggest that there is something which affects the child's central nervous system enough to interfere with normal development and cause the child to become very different from other children. No one theory can explain everything about autism. At best they can offer ideas or clues as to what has been damaged and why, but not how to cure it. However, the current researchers are leaning towards a combination of genetic and biological factors.

PREVALENCE

Within the total population autism is relatively rare, affecting 5 to 20 of 10,000 births (Wing and Gould, 1979; Gillberg, 1984). This number is similar to the numbers of children born who are congenitally blind or deaf. Most people are not likely to encounter people with autism in their everyday lives since the numbers are so rare within the total population. Many families with children who have autism note that the general public does not understand or recognize autism. Some families have reported that the police have been called when someone mistakes a tantrum as a response to child abuse. Misinformation or insufficient information can add to this problem. The disability itself is usually not physically visible; thus, uninformed people have no outward clues to help explain the unusual behaviors they may see.

However, within the population of developmentally disabled students the number with autism dramatically increases. Rather than 5–20 in 10,000, the numbers become 1–5 in 20 with autism (Levy, personal communication, 1986). This means that it is very likely that those teachers who work with developmentally disabled students will encounter students with autism in their classes.

MENTAL ABILITIES

The range of intelligence in people with autism contributes to the confusion for professionals. Individuals with autism have IQ scores which range from severely retarded to average or above average. Most do have some degree of retardation. Testing has shown that 60 percent have an IQ below 50, 20 percent between 50–70, and only 20 percent above 70 (Rutter, 1983). That means 80 percent of people with autism also have mental retardation. What adds even more to the puzzle is the fact that some people with autism may show some amazing splinter skills such as recall of complete movie scene dialogues, mathematical abilities such as adding or multiplying large numbers instantaneously, word recall/recognition of new, unrelated words, or extraordinary artistic abilities. These splinter skills can often cause confusion regarding the individual's true mental abilities. Educators, health care providers and others may key into the person's splinter skill and use that one skill as the basis for how much that person knows as a whole. Much of this splinter skill knowledge is fun for the individual but is not functional or useful in everyday living.