MOTOR DEVELOPMENT AND MOVEMENT ACTIVITIES FOR PRESCHOOLERS AND INFANTS WITH DELAYS
Second Edition

MOTOR DEVELOPMENT AND
MOVEMENT ACTIVITIES FOR
PRESCHOOLERS AND INFANTS
WITH DELAYS

A Multisensory Approach for
Professionals and Families

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PREFACE

The second edition of the book is intended to provide information for professionals, families, and students interested in learning about motor development of young children with delays or disabilities. A practical approach is used so that families and caregivers can provide instruction utilizing the ecological dynamics of the home environment. The book emphasizes the age group of infancy (6 months) to 6 years. However, families with older children and professionals who work with older children who have significant motor delays will also benefit from the information and activities in this book. Activities are specifically designed for parents of children with delays/disabilities and specialists of motor development, adapted physical education, special education, early childhood, early intervention and allied health.

The purpose of the book is to explain the principles of motor developmental theories and relate them to practical intervention, answer questions about muscle tone (hypotonicity, hypertonicity) related to positioning, lifting, carrying, and feeding of young children, provide directions for early diagnosis and assessment of symptoms recognizable in developmental domains including autism, and help professionals and families understand the impact of medical conditions on motor development and related daily living skills for young children. In addition, practical suggestions and activities for families and professionals to enhance sensory motor development of the young child during structured motor intervention and throughout the day are provided.

Throughout this book, the term “movement specialist” has been used to refer to one of the many professionals that provide motor assessment and activities to young children with disabilities. This array of professionals may include, but is not limited to: adapted physical educator, occupational therapist, physical therapist, early childhood
educator, preschool classroom teacher, home-based early intervention teacher, and so forth. Regardless of the title of this professional, a movement specialist will have been trained in the psychomotor domain, and will have knowledge to provide appropriate and valuable motor assessment and intervention to young children with disabilities. Additionally, it must be noted that a para-educator (teacher assistant) may also be provided specific training to complete intervention.

Jo E. Cowden
Carol C. Torrey
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I also want to dedicate this publication to the memory of my beloved pup, Chelsea Makala Cowden, who stayed very close to her mom for 15 years providing companionship for hours of writing.

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MOTOR DEVELOPMENT AND
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Chapter 1

MOTOR DEVELOPMENT

Chapter Objectives: After studying this chapter, the reader will be able to:
1. Relate the importance of the interaction between the child and environment;
2. Give a meaningful definition of motor development;
3. Explain the principles of Motor Development Theory;
4. Provide a summary of traditional developmental theories, neurodevelopmental theories and Dynamic Systems Theory (DST).

Figure 1.1. Motor development begins prenatally and continues throughout the lifespan as repetitive practice and increasingly difficult challenges expand one’s motor skills.
INTERACTION OF CHILD AND THE ENVIRONMENT

The interaction of a young child with his/her environment provides critical opportunities for motor development, as well as development within all of the other learning domains (language, self-help, cognitive, social). The interplay between forces within the individual and the environment is referred to by Gallahue and Ozmun (2006) as adaptation, while Sherrill (2004) referred to changes within the individual, the environment and the blend of both the individual and everything in his environment as ecological theory. Most professionals agree that the child's environment is critical in the learning process and that valuable opportunities for learning experiences are provided through interaction with an enriched environment. Thus, the importance of early intervention is highlighted.

An understanding of motor development theory and principles of normal motor development influence one's ability to administer motor assessments and to develop motor intervention programs for young children with delays or abnormal motor development. The needs of young children place specific challenges on movement specialists or teachers who provide service delivery in the motor domain. A unique understanding of varied theoretical perspectives, combined with the talents of selecting the appropriate plan of action result in development of optimal movement programs. Philosophical concepts are applied and incorporated into performance objectives for intervention and provide the framework or structure for long-term goals or outcomes. Combining elements from the various traditional, neurodevelopmental, and contemporary theories is the key to successful individualization of intervention curricula for preschoolers and infants with delays. An overview of selected theoretical perspectives will be briefly discussed within this theoretical framework.

A theoretical basis of motor development provides a basis for linking assessment and intervention processes. A theoretical background assists the movement specialist in understanding the relationship between normal and abnormal motor development. Each movement specialist who participates in the evaluation process develops an internal schema that depicts mature versus immature patterns of movement. A critical reference is then needed to determine if the immature patterns actually have a neurological orientation that would indicate possible central nervous system damage associated with abnormal
motor developmental patterns (e.g., cerebral palsy). The specialist establishes an assessment approach based on his or her theoretical frame of reference. The following model (see Figure 1.2) will assist in clarifying the link between theory, assessment, and intervention. Theories included in this model are summarized following the model.

![An Interactive Model of Theory-Assessment and Intervention](image)

Figure 1.2. The Model for Linking Theory, Assessment, and Intervention.