Fifth Edition

Conditions in Occupational Therapy

Effect on Occupational Performance

Ben J. Atchison

Diane Powers Dirette

Wolters Kluwer

FIFTH EDITION

CONDITIONS IN OCCUPATIONAL THERAPY

EFFECT ON OCCUPATIONAL PERFORMANCE

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To my wife, Marcia, my best friend

—Ben J. Atchison

To the Mexican Monday Crew; Claire, Madeleine, Jayce, Jordan, and Dave. Thank you for the love, laughter, and support that make Mondays the best day of the week!

—Diane Powers Dirette

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Preface

In this fifth edition of *Conditions in Occupational Therapy: Effect on Occupational Performance*, we continue with the approach used in previous editions which includes common conditions seen by occupational therapists as published in the executive summary of the most recent practice analysis published by the National Board for Certification of Occupational Therapists (NBCOT, 2012). The book is designed to facilitate the teaching and learning of conditions from an occupational therapy perspective. We honor Dr. Ruth Hansen, Professor Emeritus, Eastern Michigan University, for her significant contributions as the founding coeditor of this textbook in which she created the design for analysis of conditions using an "occupational therapy way of thinking." Dr. Hansen's original idea continues to hold forth in Chapter 1, *Thinking Like an OT*, which begins with an overview and relevance of the philosophy and values of occupational therapy in relation to understanding a given condition and its impact on occupational performance.

In this new edition, we organized the conditions into units including pediatric, mental, and physical conditions. Each chapter is consistent in its structure to include an opening case, definition and descriptions, incidence and prevalence, signs and symptoms, course and prognosis, medical/surgical management, and impact on occupational performance, followed by two case illustrations. We continue to incorporate the language of the *Occupational Therapy Practice Framework*, third edition (OTPF) where relevant, as this is the most current "language of the profession."

Following a national review of faculty who have used the fourth edition of our textbook and their helpful input, new content has been included. We are pleased to announce new chapters in this edition. These include Obsessive Compulsive and Related Disorders, Somatic Symptoms and Related Disorders, Feeding and Eating Disorders, Sensory Processing Disorders, Substance Related and Addictive Disorders, Personality Disorders, Cancer, and Obesity. Where relevant, chapters have included updates published in the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (American Psychiatric Association, 2013). As always, each chapter has incorporated the most recent information available. The notion that occupational therapists treat diagnoses is on ongoing point of discussion and debate. As emphasized in Chapter 1, we are mindful of the importance of "person first" philosophy that a person is more than a sum of his or her diagnosis. Simultaneously, it is essential that occupational therapists understand the distinct client factors of a given condition that impact a person's ability to regain function necessary to resume occupational roles.

Each chapter in this edition provides the authors' interpretation of the effects of the condition on occupational performance and is not necessarily all inclusive. Our goal is that the information will motivate occupational therapy students to expand their knowledge and understanding of the given condition. We expect that each chapter is a starting point for discussion and analysis of the condition which then will lead to the development of effective intervention planning.

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American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

National Board for Certification of Occupational Therapists. (2012). *Practice analysis of the occupational therapist registered: Executive summary*. Gaithersburg, MD: Author.

To review key terms and their definitions, visit http://thePoint.lww.com/Atchison5e, and use the access code on the inside front cover of this book. Resources for instructors include a test generator, PowerPoint presentations, and an image bank.

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1 Thinking Like an OT

Diane Powers Dirette and Ben J. Atchison

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Occupations
Performance patterns
Performance skills
Personalized medicine
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Philosophical assumptions
Practice Framework
Prudence
Truth

It is more important to know what kind of person has the disease than what kind of disease the person has.

—Sir William Osler (Address at Johns Hopkins University, February 1905)

Lindsey is finishing her course work in occupational therapy and is now beginning her first level II fieldwork experience. Throughout her education, she has learned the importance of evidence-based practice to guide her treatment decisions. Her challenge now is to develop her clinical reasoning skills to merge the science she has learned with the art of practice. To achieve this, she must understand the person's diagnosis, analyze the person's unique set of problems based on the person's individual characteristics, and determine the impact on occupational performance. The first step of this process is the referrals she receives. Each referral gives her some basic information about the person including the person's diagnosis. Her job is to decide what to do next.

How does a student learn to correlate general information about a diagnosis with the needs of a particular person and to identify the problems that require occupational therapy intervention? How does a staff therapist set priorities for problems and decide which require immediate attention? How much problem identification can be done before the therapist actually sees the patient? How does a supervisor know when a student or therapist is doing a "good job" of screening referrals and anticipating the dysfunction that the patient might be experiencing? These are precursors to the actual intervention process and are essential to effective and efficient clinical reasoning (Benamy, 1996).

The clinical reasoning procedure used by each health care professional is somewhat different. The information that is the main focus of intervention for a speech therapist will differ from that of a psychologist or a nurse. The basic tenet of the occupational therapy profession is that practitioners gather and use information to help people function in their daily activities. Such data gathering and analysis provide the therapist with the foundation for a treatment plan through a prioritized list of anticipated problems or dysfunctions for an individual.

To comprehend the unique aspects of occupational therapy requires an understanding of the core values, philosophical assumptions, and domain of concern of the profession, as well as the language that is used to communicate information clearly and precisely.

Core Values of Occupational Therapy

The core values of occupational therapy are set forth in the document "Core Values and Attitudes of Occupational Therapy Practice" (Kanny, 1993). Seven have been identified: altruism, dignity, equality, freedom, justice, truth, and prudence.

1. ***Altruism*** is the unselfish concern for the welfare of others. This concept is reflected in actions and attitudes of commitment, caring, dedication, responsiveness, and understanding.
2. ***Dignity*** emphasizes the importance of valuing the inherent worth and uniqueness of each person. This value is demonstrated by an attitude of empathy and respect for self and others.
3. ***Equality*** requires that all individuals be perceived as having the same fundamental human rights and opportunities. This value is demonstrated by an attitude of fairness and impartiality.
4. ***Freedom*** allows the individual to exercise choice and to demonstrate independence, initiative, and self-direction.
5. ***Justice*** places value on the upholding of such moral and legal principles as fairness, equity, truthfulness, and objectivity.
6. ***Truth*** requires that we be faithful to facts and reality. Truthfulness or veracity is demonstrated by being accountable, honest, forthright, accurate, and authentic in our attitudes and actions.
7. ***Prudence*** is the ability to govern and discipline oneself through the use of reason. To be prudent is to value judiciousness, discretion, vigilance, moderation, care, and circumspection in the management of one's affairs, to temper extremes, make judgments, and respond on the basis of intelligent reflection and rational thought (Kanny, 1993).

These values are the foundation of the belief system that occupational therapists (OTs) use as a moral guide when making clinical decisions.

Philosophical Assumptions

The philosophical assumptions of the profession guide OTs in providing client-centered therapy that meets the needs of the client and society. These assumptions express our basic beliefs about the client and the context in which the client functions (Mosey, 1996). These assumptions are as follows:

- Each individual has a right to a meaningful existence: the right to live in surroundings that are safe, supportive, comfortable, and over which he or she has some control; to make decisions for himself or herself; to be productive; to experience pleasure and joy; and to love and be loved.
- Each individual is influenced by the biological and social nature of the species.
- Each individual can only be understood within the context of his or her family, friends, community, and membership in various cultural groups.
- Each individual has the need to participate in a variety of social roles and to have periodic relief from participation.
- Each individual has the right to seek his or her potential through personal choice, within the context of accepted social constraints.
- Each individual is able to reach his or her potential through purposeful interaction with the human and nonhuman environment.
- Occupational therapy is concerned with promoting functional interdependence through interactions directed toward facilitating participation in major social roles (occupational performance) and development of biological, cognitive, psychological, and social components (client factors) fundamental to such roles.
- The extent to which intervention is focused on the context, on the areas of occupational performance, or on the client factors depends on the needs of the particular individual at any given time.

Personalized Medicine

The core values and philosophical assumption of the profession of OT lead practitioners of OT to a focus on personalized medicine. According to Burke, Trinidad, and Press (2014), "personalized medicine is best understood as a comprehensive process to determine the best health care options for a particular patient, deriving from a partnership between patient and clinician. This approach offers the opportunity to weigh personal values and preferences as well as clinical findings" (p. 196). In addition, Topol (2014) defines personalized medicine as the tailoring of medical treatments to the individual characteristics of each patient with a focus on the individual as the source of medical data and as the driver of health care.

The core values, especially dignity, equality, and freedom, are the profession's moral guide to personalized medicine. They guide us to value differences, to treat people equally despite those differences, and to allow individuals to make their own choices based on differing perspectives and preferences.

The philosophical assumptions summarize the OT profession's basic beliefs about focusing on the rights and preferences of individuals relative to their biological and social environments. In addition, the philosophical assumptions help guide practitioners to form a partnership with each individual to determine the focus of the intervention. Each of these concepts form a practice in which personalized medicine is an essential element.

Whereas the primary purpose of this book is to describe the potential impact of a condition on occupational performance, the descriptions should not be considered prescriptive or exhaustive. It is necessary to understand common facts of these conditions, including etiology, basic pathogenesis, commonly observed signs and symptoms, and precautions. However, it is equally important to recognize that the effects of a condition on occupational well-being will also be dependent on contextual factors such as age, developmental stage, health status, and the physical, social, and cultural environment (Dunn, Brown, & McGuigan, 1994). Rather than viewing an individual as a diagnostic entity, as a condition, or as the sum of biological cells, the treatment must be personalized.

Language

Although many language systems and mechanisms are available, we will discuss language from two perspectives. First is a philosophical discussion of using person-first language. Second is the use of the *Occupational Therapy Practice Framework: Domain and Process, Third Edition* (AOTA, 2014) that presents the professional language and the occupational therapy domain of concern.

Person-First Language

In many cases, the literature and the media, both popular and professional, describe a person with a given condition as the condition—the arthritic, the C.P. kid, the schizophrenic, the alcoholic, the burn victim, the mentally disabled. All of these terms label people as members of a large group rather than as a unique individual. The use of person-first language requires that the person be identified first and the disease used as a secondary descriptor. For example, a woman, who is a physicist, is active in her church and has arthritis; the fourth grade boy, who is a good speller, loves baseball and has cerebral palsy. The condition does not and should not be the primary identity of any person.

Consider the following: a father is introducing his son to his coworkers. Which of the following is the best introduction?

> *"Hey, everyone, this is my disabled son, John."*
>
> *"Hey, everyone, this is my son, John, who is disabled and loves soccer and video games."*
>
> *"Hey, everyone, this is my son, John. He loves soccer and video games."*

Of course, the third statement is the best choice. Yet it is common when describing a person who has a disability to emphasize the disability first. The consequence is a labeling process. "Although such shorthand language is commonplace in clinics and medical records, it negates the individuality of the person. Each of us is a person, with a variety of traits that can be used to describe aspects of our personality, behavior, and function. To use a disease or condition as the adjective preceding the identifying noun negates the multiple dimensions that make the person a unique individual" (Hansen, 1998).

THE OCCUPATIONAL THERAPY PRACTICE FRAMEWORK

The official language for the profession of occupational therapy was revised in 2014 and presented in a document titled the *Occupational Therapy Practice Framework: Domain and Process, Third Edition* (AOTA, 2014). The Practice Framework outlines the language and constructs that describe the occupational therapy profession's domain of concern. The domain defines the area of human activity to which the occupational therapy process is applied. The process facilitates engagement in occupation to support participation in life. The specific aspects of the domain are outlined in the language of the Practice Framework.

The Framework is organized into five aspects—occupations, client factors, performance skills, performance patterns, and context and environment. **Occupations** are various kinds of life activities in which individuals, groups, or populations engage. Occupations include activities of daily living, instrumental activities of daily living, rest and sleep, education, work, and play, leisure, and social participation. **Client factors** are values, beliefs, and spirituality, the body functions, and the body structures that reside within the person. These client factors influence the person's participation on occupations. **Performance skills** are observable elements of action that have an implicit functional purpose. These skills are separated into the categories of motor skills, process skills, and social interaction skills. **Performance patterns** are the habits, routines, roles, and rituals used by the person in the process of engaging in occupations or activities. These patterns may enhance or hinder occupational performance. **Context and environment** refers to a variety of interrelated conditions that are within and surrounding the person. Those conditions include cultural, personal, temporal, and virtual contexts. Environments are the physical and social conditions that surround the person (Table 1.1).

Each of these aspects has a relationship and influence on the others. The outcome is, of course, the ability to function and engage in occupations. Although at a given time you may focus on an occupation or client factors, the ultimate concern is whether the individual is able to function in daily life. For example, a therapist may evaluate a person's attention span, but not in isolation. Attention span is evaluated within the realm of the performance patterns and context of the person—the attention span required to work on an assembly line, to drive a car, to learn a card game, or to conduct a business meeting.

Once a therapist knows the diagnosis and age of the person, he or she can use this Practice Framework to examine systematically the deficits that occur in the client factors, as well as how these particular deficits can and do alter the person's ability to complete functional activities relevant to occupations. In other instances, the therapist may focus primarily on the occupation or the context, without paying much attention to the underlying client factors that influence the occupational performance. Definitions of all terms are provided in the Glossary at the back of the book.

TABLE 1.1 Occupational Therapy Practice Domains

Occupations	Client Factors	Performance Skills	Performance Patterns	Context and Environment
Activities of daily living	Values, beliefs, and spirituality	Motor skills	Habits	Cultural
Instrumental activities of daily living	Body functions	Process skills	Routines	Personal
Rest and sleep	Body structures	Social interaction skills	Roles	Temporal
Education			Rituals	Virtual
Work				Physical
Play and leisure				Social
Social participation				

EVIDENCE-BASED PRACTICE

There has been a call to action in the health professions to practice health care based on evidence of the effectiveness of each treatment approach (Gutman, 2010). High levels of evidence are based on studies that compare groups of people, usually with similar conditions. Evidence, especially high levels of evidence, on which to base one's practice, however, might be limited (Dirette, Rozich, & Viau, 2009). First, it is limited by an insufficient number of resources to support specific treatment approaches for specific conditions. Second, it might be limited by the fact that groups of people with "average" results do not always represent the unique situation of the person with whom the therapist is working.

Therefore, while we support the idea of evidence-based practice in general, there is clearly a need for therapists to develop clinical reasoning skills that will not only help them decide which evidence to use with people who have particular conditions but also help them decide what to do with the unique individual with whom they are working. Understanding the condition with which the individual presents is often the first step in the clinical reasoning process. This textbook provides information about common conditions seen by OTs and provides the first steps in the clinical reasoning process by providing ideas about the potential impact on occupational performance.

FRAMEWORK OF THIS TEXTBOOK

As an instructional tool, this book provides an opportunity to examine each condition closely. The reader is urged to use the information as a springboard for further study of the conditions included here and the many other conditions that OTs encounter in practice. The analysis of the impact on occupational performance for a particular condition is dynamic, and the identification of the most important areas of dysfunction and, therefore, treatment will vary from practitioner to practitioner. In addition, factors such as secondary health problems, age, gender, family background, and culture contribute greatly to the development of a unique occupational performance profile for each individual served.

The occupational performance approach to the identification of dysfunction described in this book can be used to examine the effects of any condition on a person's daily life. This process will enable the therapist to identify and set a priority for problems in occupational performance, which, in turn, will serve as the foundation for creating an effective intervention plan.

REFERENCES

American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process, 3rd edition. *American Journal of Occupational Therapy*, *68*(Suppl. 1), S1–S51. Retrieved from http://dx.doi.org/10.5014/ajot.2014.682006

Benamy, B. C. (1996). *Developing clinical reasoning skills*. San Antonio, TX: Therapy Skill Builders.

Burke, W., Trinidad, S. B., & Press, N. A. (2014). Essential elements of personalized medicine. *Urologic Oncology: Seminars and Original Investigations*, *32*, 193–197. Retrieved from http://dx.doi.org/10.1016/j.urolonc.2013.09.002

Dirette, D., Rozich, A., & Viau, S. (2009). Is there enough evidence for evidence-based practice in occupational therapy? *American Journal of Occupational Therapy*, *63*, 782–786. Retrieved from http://dx.doi.org/10.5014/ajot.63.6.782

Dunn, W., Brown, C., & McGuigan, A. (1994). Ecology of human performance: A framework for considering the effect of context. *American Journal of Occupational Therapy*, *48*(7), 595–607.

Gutman, S. A. (2010). From the desk of the editor: AJOT publication priorities. *American Journal of Occupational Therapy*, *64*, 679–681. Retrieved from http://dx.doi.org/10.5014/ajot.2010.064501

Hansen, R. A. (1998). Ethical implications. In J. Hinojosa & P. Kramer (Eds.), *Evaluation: Obtaining and interpreting data*. Bethesda, MD: AOTA.

Kanny, E. (1993). Core values and attitudes of occupational therapy practice. *American Journal of Occupational Therapy*, *47*, 1085–1086.

Mosey, A. C. (1996). *Applied scientific inquiry in the health professions: An epistemological orientation* (2nd ed.). Bethesda, MD: American Occupational Therapy Association.

Topol, E. J. (2014). Individualized medicine from prewomb to tomb. *Cell*, *157*, 241–253. Retrieved from http://dx.doi.org/10.1016/j.cell.2014.02.012

UNIT

1

Pediatric Conditions

The Pediatric Conditions Unit includes the most common conditions that children have who are treated by occupational therapists as determined by the National Board of Certification in Occupational Therapy. These chapters focus on conditions that are typically diagnosed in childhood, but many of them affect people throughout their lifespan. Each chapter provides information about the etiology, incidence and prevalence, signs and symptoms, course and prognosis, diagnosis, medical/surgical management, and impact on occupational performance of these conditions. Case illustrations are used to provide examples of lives affected by the condition. The conditions included in this unit are the following:

CHAPTER 2

Cerebral Palsy

Mary Steichen Yamamoto

KEY TERMS

Ataxia
Athetoid (dyskinetic)
Clonus
Contracture
Diplegia
Dysarthria
Equinovarus
Equinovalgus
Gastroesophageal reflux
Hemiplegia
Homonymous hemianopsia
Hydrocephalus
Hypertonicity (spasticity)
Hyperreflexia
Hypotonicity
Kyphosis
Lordosis
Nystagmus
Primitive reflexes
Quadriplegia
Scoliosis
Strabismus
Stretch reflex

A couple who had been trying to conceive a child for several years were thrilled when a family friend asked if they would be interested in adopting a baby girl that had just been born to a young unmarried woman in her church. The baby was born 6 weeks early and her weight was 4 lb, but she appeared to be healthy. After initiating the paperwork for a private adoption, they brought the baby home and named her Jill. By the time of Jill's 6-month well-baby visit, her parents had become concerned. She appeared to be a bright baby who smiled and cooed and enjoyed reaching for and playing with toys, but her legs seemed stiff and she was not yet rolling over. They spoke with their family doctor about their concerns, but he assured them that Jill was developing normally and they had nothing to be concerned about. By the time of Jill's 9-month well-baby visit, her parents' concerns were only growing. Jill was still not sitting up and had not yet learned to roll over or crawl. Her doctor decided to refer Jill to the county early intervention program for a developmental assessment. Jill was assessed by the early intervention team consisting of an occupational therapist, physical therapist, and speech and language pathologist. The occupational therapist noted some mildly increased tone and incoordination in her upper extremities and a 2- to 3-month delay in fine motor and self-help skills. The physical therapist noted that Jill had hypertonicity and retained primitive reflexes in her lower extremities, which was causing significant delay in the acquisition of gross motor skills. The speech and language therapist found Jill's cognitive, language, and social skills to be at age level. The team suggested to the parents that they have a pediatric neurologist assess Jill, as she was demonstrating some of the signs and symptoms of cerebral palsy. Both the occupational and physical therapist recommended that therapy services begin as soon as possible. An IFSP (Individualized Family Service Plan) was developed at a subsequent meeting, and Jill began receiving weekly physical and occupational therapy services.

Jill's parents took her to a pediatric neurologist who diagnosed her with spastic diplegia, a type of cerebral palsy. Her parents were initially overwhelmed and devastated by the diagnosis. The next year was very