



## Occupational Therapy (OT) and Applied Behavior Analysis (ABA)

### ORIGINS OF THE PROFESSIONS

<b>Occupational Therapy</b>	<b>Applied Behavior Analysis</b>
Foundations began with the era of moral treatment for the mentally ill in institutions and the arts and crafts movement. The founders of the profession included physicians, psychiatrists, nurses, and social workers (1910).	Origins are from scientists in the area of psychology especially Watson’s stimulus-response behaviorism (early 1900s) and Skinner’s operant conditioning (1930s).

### PROFESSIONAL TRAINING AND EXPERIENCE

<b>Title</b>	<b>Occupational Therapist</b>	<b>Behavior Analyst</b>
<b>Entry Level Education</b>	Master’s Degree	Master’s Degree
<b>Fieldwork</b>	24 weeks (960 hours)	1500 hours supervised independent fieldwork OR 1000 hours in practicum program OR 750 hours in intensive practicum
<b>Certification Exam</b>	NBCOT exam	BCBA exam
<b>Continuing Education Requirements</b>	12 hours per year in CA	32 hours every 2 years

<b>Title</b>	<b>Occupational Therapy Assistant</b>	<b>Assistant Behavior Analyst</b>
<b>Entry Level Education</b>	Associate Degree	Bachelor’s Degree
<b>Fieldwork</b>	16 weeks (640 hours)	1000 hours supervised independent Fieldwork OR 670 hours in practicum program OR 500 hours in intensive practicum
<b>Certification</b>	NBCOT exam	BCaBA exam
<b>Continuing Education Requirements</b>	12 hours per year in CA	20 hours every 2 years

<b>Title</b>	<b>Aide</b>	<b>Registered Behavior Technician</b>
<b>Minimum age</b>	None	18 years old
<b>Minimum Education</b>	None	High School Education or equivalent
<b>Training</b>	On the job training	40 hours training by employer
<b>Certification</b>	None; competency determined by the supervisor	Competency Assessment

### THEORETICAL / SCIENCE / PHILOSOPHICAL BASE

<b>Human Occupation</b>	<b>Behaviorism</b>
Occupational science – the science of everyday living and the benefits of engagement in occupation with research that supports theories/treatment approaches	Experimental analysis of behavior – basic research
Occupational therapy – technical application to increase occupational function and performance	Applied behavior analysis – technology for improving behavior

### DEFINITION

<b>Occupational Therapy</b>	<b>Applied Behavior Analysis</b>
"Practice of occupational therapy' means the therapeutic use of purposeful and meaningful goal-directed activities (occupations) which engage the individual's body and mind in meaningful, organized, and self-directed actions that maximize independence, prevent or minimize disability, and maintain health. Occupational therapy services encompass occupational therapy assessment, treatment, education of, and consultation with, individuals who have been referred for occupational therapy services subsequent to diagnosis of disease or disorder (or who are receiving occupational therapy	Applied behavior analysis is “an applied science that develops methods of changing behavior and a profession that provides services to meet diverse behavioral needs.” Professionals “in applied behavior analysis engage in the specific and comprehensive use of principles of learning, including operant and respondent conditioning, in order to address behavioral needs of widely varying individuals in diverse settings. Examples of these applications include: building the skills and achievements of children in school settings; enhancing the development, abilities, and choices of children

services as part of an Individualized Education Plan (IEP) pursuant to the federal Individuals with Disabilities Education Act (IDEA).” <sup>1</sup>	and adults with different kinds of disabilities; and augmenting the performance and satisfaction of employees in organizations and businesses.” <sup>2</sup>
The therapeutic use of everyday life activities (occupations) with individuals or groups for the purpose of enhancing or enabling participation in roles, habits, and routines, in home, school, workplace, community and other settings. <sup>3</sup>	“Applied behavior analysis is the science in which tactics derived from the principles of behavior are applied systematically to improve socially significant behavior and experimentation is used to identify the variables responsible for behavior change.” <sup>4</sup>

### SETTINGS AND CLIENTS/POPULATIONS

Hospitals, homes, schools, community centers, mental health settings, early intervention settings, etc.	Homes, schools, group homes, community settings, hospitals, businesses, industries, etc.
Occupational therapists may be best known for helping people with physical disabilities from an illness or injury. However OTs also use occupation to help individuals of all ages with mental illness, developmental, learning, and other disabilities; as well as in prevention, health promotion and wellness.	Best known for working with children with a diagnosis of autism spectrum disorder, but behavior analysts apply principles of behavior change to any individual and in any setting.

### INTERVENTION PROVIDED BY OCCUPATIONAL THERAPISTS

- “Occupational therapy assessment identifies performance abilities and limitations that are necessary for self-maintenance, learning, work, and other similar meaningful activities.”<sup>1</sup>
- “Occupational therapy treatment is focused on developing, improving, or restoring functional daily living skills, compensating for and preventing dysfunction, or minimizing disability. Occupational therapy techniques that are used for treatment involve teaching activities of daily living (excluding speech-language skills); designing or fabricating selective temporary orthotic devices, and applying or training in the use of assistive technology or orthotic and prosthetic devices (excluding gait training).”<sup>1</sup>
- “Occupational therapy consultation provides expert advice to enhance function and quality of life.”<sup>1</sup>
- “Consultation or treatment may involve modification of tasks or environments to allow an individual to achieve maximum independence.”
- “Services are provided individually, in groups, or through social groups.”<sup>1</sup>
- Services are provided in both natural and contrived settings.
- Occupational therapy professionals maintain documentation of evaluation results, goals, treatment plans and summary of treatment.<sup>1</sup>
- A variety of specific treatment approaches may be utilized by the occupational therapist such as: Ayres Sensory Integration<sup>®</sup> (ASI); neurodevelopmental (NDT); compensatory; developmental; cognitive behavioral; behavioral, psychosocial, motor learning; constraint-induced movement therapy (CIT); biomechanical. Some practitioners also obtain training for other approaches such as the DIR (Developmental, Individual Difference, Relationship-Based) Floortime<sup>®</sup> model; SCERTS; TEACCH, etc.

### INTERVENTION PROVIDED BY BEHAVIOR INTERVENTIONISTS

- Behavior analysts perform assessments to determine if the function of maladaptive behavior is to get attention, to get a tangible reinforcer, to escape a task, or is automatically providing internal sensory stimulation.
- Possible goals may include: “building the skills and achievements of children in school settings; enhancing the development, abilities, and choices of children and adults with different kinds of disabilities; and augmenting the performance and satisfaction of employees in organizations and businesses.”<sup>2</sup>
- Behavior analysts change behaviors by changing one or more environmental factors: the stimulus, response, or consequence.
- Use data collection method to measure behavior change.<sup>2</sup>
- Fundamental elements of behavior change are used for individuals or groups.
- Services are provided in both natural and contrived settings.
- Some practitioners use specific types of ABA such as: discrete trial training (DTT); pivotal response treatment (PRT); verbal behavior therapy (VB); Early Start Denver Model (ESDM); organizational behavior management (OBM).

<sup>1</sup> OT Practice Act; California Business and Professions Code Section 2507.2(k); www.cbot.com

<sup>2</sup> Behavior Analysts Certification Board website; www.bacb.com

<sup>3</sup> AOTA. (2014) *OT Practice Framework: Domain & Process*

<sup>4</sup> Cooper, J.O, Heron, T. E., & Heward, W. L. (2007) *Applied Behavior Analysis Second Edition*.