



Occupational Therapy Treatment for People with Cognitive Limitations: Position paper

Background

The purpose of a position paper is to present the professional stance regarding a given topic. The Senior National Professional Committee for Occupational Therapy, which includes the formal bodies that represent the profession (i.e., the Organization of Occupational Therapists, the Occupational Therapy Society, the supervisors in the Ministry of Health, in the Israeli Health Management Organizations and in the Educational Ministry and representatives of the various departments of occupational therapy in the Israeli universities) decided to draft position papers in the various areas in which occupational therapists are involved. The first position paper on the subject of occupational therapy in the school system was published in the February, 2003 IJOT, and the position paper on the subject of occupational therapy treatment for people with cognitive limitations is published in the February, 2004 IJOT.

We hope that this document will help occupational therapists in defining their position and roles and in their contacts with professionals and organizations outside of our profession.

Occupational therapy is a health profession that is rehabilitative-therapeutic-educational in nature. Our profession is concerned with enabling the individual to participate in purposeful occupations that are significant and important for him/her. In this way, the individual can become an active participant in different daily situations, as a basis for his/her health, well being, self-confidence and quality of life. The treatment is adapted to the age, abilities/limitations, life roles, values and cultural background of the individual and is performed in participation with the individual, his/her family and/or significant others.



Educational background and professional body of knowledge of the occupational therapist

Occupational therapists are knowledgeable in the medical sciences, occupational sciences and social and behavioral sciences, They are skilled in activity analysis and have an in-depth understanding of the different components of function (i.e., sensorimotor, cognitive and psychosocial, etc.). In addition, occupational therapists have the knowledge and understanding needed for different approaches used in cognitive rehabilitation, which were developed both within and outside of the profession.

Goals of the intervention

The therapeutic intervention goals are to encourage independent and significant daily function, such as self-care, work/learning and productivity by working on improving individuals' thought processes and cognition. The intervention is designed to help in the acquisition of skills, to change behaviors, to improve abilities and enable adaptation to the environment in which the person functions. For example, occupational therapists can teach a person to safely cross the street at a crosswalk after brain damage in general, or specifically to a person with hemispatial neglect.

Similarly, activities that may prevent difficulties from developing or promote improved function are utilized, such as memory training in healthy elderly.

The population of clients treated includes people with congenital or acquired cognitive deficits:

1. Developmental problems (for example: developmental delay and children with environmental deprivation).
2. Learning disabilities.
3. Brain damage or disease (such as stroke, brain tumors, traumatic brain injury, Alzheimer's disease and dementia).
4. Mental illnesses (such as: schizophrenia, depression).



5. Sociocultural conditions (for example, malnutrition, environmental deprivation).
6. Addiction to harmful substances (such as drugs).

Description of cognitive deficits

Among other things, cognitive deficits include confused or disturbed thinking processes, disorientation, problems with attention and memory, difficulty in problem solving, difficulty in identifying a situation and responding appropriately, lack of awareness and executive function deficits (i.e., difficulty initiating and planning activities, difficulty in organization and in self-analysis of activity performance).

- Cognitive deficits influence different aspects of daily function, including work, learning, play, leisure activities; activities of daily living such as hygiene, communication, mobility and socializing; and instrumental activities of daily living, such as managing a household, shopping and managing finances.
- A decrease or a lack of awareness of cognitive deficits may result in the decreased ability to identify risks, observe the results of actions and behavior, apply rules of safety and respond to emergency situations. These factors are extremely important and may influence a person's independence.

Assessment of cognitive deficits

In general, the evaluation process includes an interview with the individual, his/her family and/or significant others. These help the occupational therapist become familiar with the individual's occupational history, identify areas of intervention and determine the order of priorities. The information from the interview forms the basis for the therapist's evaluation and for developing treatment goals together with the individual, the family or a supervisory therapist.

During the assessment process, standardized evaluations are chosen that are in accord with the goals that were defined for the client (see appendix with a list of



tools), as well as observations and tools designed to assess the function of people with cognitive limitations. The assessment and evaluation tools must be suitable for the individual with respect to age, cognitive status, context or his/her cultural and social background.

Principles of occupational therapy therapeutic intervention

- The intervention approaches must suit the learning style and abilities of the person, the manner in which he/she processes information and the treatment goals. It is possible to combine intervention approaches that are directed to the person, as well as to the task and the environment.
- One should consider aspects such as changes to the person's motivational system, awareness of his/her abilities and limitations, his/her physical and psycho-social stability, premorbid personality, the time since the initiation of the deficit, the environment in which the person lives, the person's wishes, values, beliefs, culture, access to potential resources and the presence of a support system.
- The treatment framework includes - individual sessions, group treatment, guidance for the family or caregivers or consultation with other service providers, teachers or employers.
- The treatment setting can be a hospital, clinic, rehabilitation center, hostel, or the person's natural environment; such as his/her home, community, school or work setting.

Interventions aimed at improving the client's abilities or behaviors include:

1. **Training of specific abilities** – such as attention, memory, categorization, conceptualization or problem solving; through the use of sensory stimulation, training exercises and tasks in which the cognitive requirements are incrementally increased. In addition, the compensatory mental strategies can be taught under a variety of conditions, such as visualization or verbal self-guidance.
2. **Metacognitive training** - including increasing awareness and providing efficient work strategies. Awareness of strengths and limitations is important for



function in any occupation, task or role. In order to encourage awareness, one can use feedback through a videotape, questionnaires, role playing or assessment of function before and after the actual performance. Efficient work strategies include, among other things: techniques for planning, organizing and performing a variety of tasks in varied surroundings.

3. **Compensatory techniques** - such as the use of a diary and lists, for people with memory difficulties.

4. **Training in social abilities** – encouraging the development of social abilities such as parent-child relationships or relationships with peers - by increasing awareness of the social environment, nonverbal cues, developing verbal and nonverbal means of interaction, coping with situations involving conflict through role playing and group activities.

5. **Training in specific tasks** – systematic training of routines through repetition and successively diminished cues. Behavioral techniques such as reinforcements and shaping behaviors are sometimes effective together with training for specific tasks in order to promote associative learning.

6. **Intervention with the help of a virtual environment (virtual reality)** – for training specific abilities such as memory, attention or of functional tasks such as crossing the street.

7. **Changing the environment** – designing and structuring an environment in order to prevent accidents, as well as adapting tasks in order to maintain and encourage function in the near environment or in the social setting. This may require the involvement of the community and social resources. Sometimes it is possible to use interventions designed for changing the environment that include educating and guiding the direct caregivers, the family, the employees and/or teachers. This will help them to understand the nature of the cognitive problems and encourage effective coping techniques, promote function and socialization and minimize the influence of symptoms related to the cognitive limitations.



Assessing the results of intervention and documentation

Occupational therapists are responsible for presenting the treatment results and their efficacy and to examine whether the treatment objectives were achieved.

Optimally, the individual should be evaluated both before and after treatment.

The cognitive intervention must be evidence-based and must be documented.

The means by which the effectiveness of treatment can be determined are:

1. Examining the improvement in overall function, including through the use of standardized cognitive and metacognitive evaluation tools.
2. Examining the change in clients' specific cognitive abilities through standardized cognitive evaluations.
3. Assessing change and perceiving limitations through questionnaires, assessment scales and interviews with the person and his/her caregivers.
4. Analysis of activity patterns can help in evaluating the relative amount of time that the person devotes to play and productive activities, social activities or fulfilling those roles that he/she desires.
5. In order to evaluate change in social abilities, it is possible to use scales for the assessment of behavior while the person is performing tasks or functioning in a group setting.
6. Observations enable one to check the number of verbal, visual or physical cues needed for functioning, or the number of times that a person selects a certain strategy for functioning.

Issues regarding the professional ethics of occupational therapists who treat people with decreased cognitive function.

- Occupational therapists are ethically responsible to maintain their level of professional knowledge and develop it, and to decide when they can treat independently and when they require supervision and guidance.
- People with cognitive deficits who are not aware of their limitations and refuse to accept treatment or place themselves in danger represent an ethical problem. Occupational therapists strive to honor the autonomy of the



individual, but are also worried by the fact that a certain person does not understand his/her situation and the results of their actions.

- Ethical problems must be considered by a multidisciplinary team and/ or ethical committees, since moral dilemmas involve the individual's family as well as the person him/herself, in addition to the other health and educational service providers.

This position paper was based on the publication of Drs. Smadar Birnbaum, Naomi Josman, Professor Noomi Katz and Sarah Auverbach.

Note: Expertise in cognitive rehabilitation is defined in the framework of the Law of Occupational Therapists. The current document is a position paper.

Toglia, J. (1999). Management of occupational therapy services for persons with cognitive impairments (Statement). *American Journal of Occupational Therapy*, 53, 601-607.

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