Editorial*

FUNCTIONAL COGNITION: THE OCCUPATIONAL THERAPIST'S EXPERTISE

COGNICIÓN FUNCIONAL: LA EXPERIENCIA DEL TERAPEUTA OCUPACIONAL

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Summary

Occupational therapists have always placed their emphasis on helping people achieve the skill to perform the activities that are important to their roles and responsibilities. Over the last 20 years, we have expanded our understanding of what contributes to function and performance in daily life. Occupational therapists provide an important clinical lens that we share as members of teams in medical, rehabilitation and community sites.

MeSH Occupational Therapy.

Resumen

Los terapeutas ocupacionales siempre han puesto su énfasis en ayudar a las personas a desarrollar las destrezas necesarias para que de esa forma que puedan realizar las actividades que son importantes para sus roles y responsabilidades. En los últimos 20 años, hemos ampliado nuestra comprensión de la contribución a la función y al rendimiento en la vida cotidiana. Los terapeutas ocupacionales proporcionan una visión clínica importante que comparten como otros miembros de equipos en establecimientos médicos, de rehabilitación y de la comunidad.

DeCS Terapia Ocupacional.

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Functional cognition: the occupational therapist's expertise

Occupational therapists have always placed their emphasis on helping people achieve the skill to perform the activities that are important to their roles and responsibilities. Over the last 20 years, we have expanded our understanding of what contributes to function and performance in daily life. Occupational therapists provide an important clinical lens that we share as members of teams in medical, rehabilitation and community sites.

In this short essay, I have chosen to address the concept of *functional cognition*. Occupational therapists determine whether and how a client can safely and effectively perform essential activities that support daily lives. These may be basic activities such as personal hygiene and transfers, instrumental activities such taking medications or planning and preparing a meal, or work activities such as timeliness, safety, and productivity. When we think about functional cognition, it requires the occupational therapist to go beyond the information-processing functions carried out by the brain like planning, problem solving, self-monitoring, self-awareness, and visual perception among others. These cognitive functions can be isolated with neuropsychological tests and certainly affect daily life but to understand their use the occupational therapist must observe how the person uses and integrated his or her thinking and processing skills to accomplish everyday activities that are necessary for home and community life.

Many of the people that occupational therapists serve have subtle, but significant, cognitive impairment that critically affects safety, resource utilization, outcome stability and burden of care. Such impairments have been established as occurring frequently in chronic neurologic and metabolic diseases including Alzheimer's disease⁽¹⁾, Parkinson disease^(2,3), multiple sclerosis⁽⁴⁾, head injury⁽⁵⁾, stroke⁽⁶⁾, spinal cord injury⁽⁷⁾, psychiatric disorders, in particular schizophrenia^(8,9), depression⁽¹⁰⁾, cancer⁽¹¹⁾ and, more recently, in diabetes⁽¹²⁾, Cronic Obstructive Pulmonary Disease (COPD)⁽¹³⁾ and kidney disease⁽¹⁴⁾.

As background, I want to introduce the concept of executive function, as it is central to understanding functional cognition. Executive Function (EF) is the capacity to plan, organize, and monitor the execution of behaviors that are strategically directed in a goal-oriented manner. Executive functions involve complex planning, cognitive flexibility, higher level, abstract thinking, initiating actions, and inhibiting actions. Executive functions underlie our ability to complete complex tasks in daily life such as making a meal, completing a school assignment, managing a family, and completing essential job functions^(15,16).

Executive functions are often more evident when they are disordered or absent than when intact. Components of executive function include the ability to formulate and maintain goals and strategies, to hold information in mind for further processing, to inhibit irrelevant information, and to shift from one part of a task to another. It is possible to observe executive function any time multi-tasking is required; when goals need to be formulated to accomplish a task; when tasks have a particular sequence of activities that must be performed for successful completion; when individuals need to display flexibility and change strategies of a task when faced with changing rules; or when competing stimuli must be ignored to maintain goal-directed activities⁽¹⁶⁻¹⁹⁾. The performance demands associated with executive function can be observed as the person carries out daily life activities that require initiation, organization, sequencing, judgment and completion^(1,6,8,20-23). This observation uses performance-based testing.

Occupational therapists have been developing valid performance-based cognitive tools that address the issues of functional cognition since the 1990's. With this understanding in mind, there are many ecologically-valid performance-based assessments of functional cognition that measure the capacity of a person to perform IADLs and address the issues of safety, stability of outcomes, resource utilization and burden of care. These measures include the Kitchen Task Assessment⁽¹⁾, the Assessment of Motor and Process Skills⁽²⁴⁾, the Executive Function Performance Test (EFPT)^(8,21,22,25,26), the Complex Task Performance Assessment^(27,28) the Kettle Test⁽²⁹⁾, occupational therapy versions of the Multiple Errands Test⁽³⁰⁻³²⁾, the Test of Actual Reality⁽³³⁾, and the Weekly Calendar Planning Activity (WCPA)⁽³⁴⁾. In contra-distinction to psychological assessments⁽³⁵⁻³⁸⁾ that identify localized impairments in cognitive functions, the occupational therapy assessments of functional cognition identify retained or residual cognitive capacity, which is essential for guiding treatment, determining post-acute care and community placement, as well as the amount and type of care required. Occupational therapists have an



important role to play in identifying and using client-centered and family centered interventions to improve the lives of those with executive function difficulties.

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