The Foundation

Functional Measures, Part 1: What is Function, What Should We Measure, and How Should We Measure It?

Occupational therapists, physical therapists, nurses, social workers, psychologists, and physicians all share a common concern with promoting functional independence of their clients. In addition, members of each profession might administer functional assessments or implement interventions intended to enhance the functional independence of their clients. This often makes us uneasy or results in role conflicts, but it need not. What makes us different is not our shared concern with, or ownership of, the client’s problem. What makes us different is our perspective on the problem, and it is our unique perspective on function that we own.

Indeed, the unique perspective that occupational therapists have on function is one that can be clearly differentiated from those of physical therapy, nursing, social work, psychology, or medicine. Moreover, having a clear understanding of how we are similar to, and different from, our colleagues within these related disciplines enables us to use and develop functional assessments that focus our evaluation on the client’s problem from the perspective of our own unique professional frame.

Defining Function

Consideration of our unique perspective and, given that unique perspective, what we should measure requires that we first clarify what it is that we mean by function. This is not a simple task; function is a term that is frequently used but rarely defined in the literature.

According to Webster’s Ninth New Colleagiate Dictionary (Merriam-Webster, 1989), function comes from the Latin fungire, to perform, and is defined as

1. professional or official position. OCCUPATION 2. the action for which a person or thing is specially fitted or used or for which a thing exists: PURPOSE 3. any group of related actions contributing to a larger action: e.g. the normal and specific contribution of a bodily part to the economy of a living organism. FUNCTION implies a definite end or purpose that the one in question serves or a particular kind of work it is intended to perform. (p. 498)

This definition, which ties function to occupation, purpose, and goal-directed activity, implies a relationship between function and productivity. To an occupational therapist, however, occupation implies more than purposefulness; it also implies meaningfulness. Interestingly, Webster’s also notes that fungus is probably akin to the Sanskrit bhunkte, meaning “he enjoys” (Merriam-Webster, 1989, p. 498). Given this definition of function, it should not surprise us that the evaluation of basic self-care, or activities of daily living (ADLs), and instrumental activities of daily living (IADLs) (e.g., homemaking, traveling outside the home, managing finances) are most typically classified under the rubric of functional assessment (Lawton, 1987), mental, emotional, and social performance are only sometimes considered (Jette, 1984; Lawton, 1987). Indeed, quality of life is the more generic term that is used to denote cognitive and social functioning, life satisfaction, overall health status, and functional status (cf. Kane & Kane, 1981; Kirshner & Guyatt, 1985). Wagner (1987) stated that

in comprehensive medical rehabilitation, functional assessment is largely concerned with evaluating the degree of assistance the patient requires in performing ADL skills. The emphasis on ADL skills has at least two reasons. First, activities such as dressing and personal hygiene are of self-evident importance in daily life. Second, minimizing patients’ dependency on assistance by others is one of rehabilitation’s most cherished goals. (p. 22)

Granger (1984), on the basis of Nagi’s (1969, 1976) work on the disablement experience and on Wood’s (1980) efforts that culminated in the World Health Organization’s (WHO’s) International Classification of Impairments, Disabilities, and Handicaps (WHO, 1980), argued that

analysis of function means identification and classification of functional abilities and activities and functional limitations. A functional limitation is a consequence of a health problem and represents an inability to meet a standard of anatomical, physiological, psychological, or mental nature (impairment). This can lead to reduction in behavioral skills or performance of tasks (disability) or deficits in fulfillment of social roles (handicap). (p. 16)

The above classification of function by levels offers a somewhat broader perspective on function. For impairment, psychological, physiological, and anatomical impairments as well as mental deficits are measured through tests of such behaviors as depression, strength, sensation, range of motion, perception, and memory. For disability, the restriction in the ability to perform daily life tasks is measured by tests of ADLs or IADLs, work, school, play and leisure, and mobility. For handicap, the restriction in the ability to fulfill social roles is measured in terms of the ability...
to assume the roles of homemaker, worker, student, and player.

The Occupational Therapist's Unique Perspective on Function

As I have suggested, members of each discipline have their own unique perspective on function. Occupational therapists frame function in occupation, or the ability to perform the daily life tasks related to ADLs and IADLs, work, and play and leisure. Because function, from the perspective of occupational therapists, relates primarily to the ability of the individual to perform the daily life tasks that he or she wants and needs to perform, occupational therapists typically evaluate and treat the client within the context of his or her actual performance of daily life tasks. That is, (a) the daily life problem is defined; (b) the interrelationship among occupational performance and underlying musculoskeletal, neurologic, cardiopulmonary, or cognitive capacities is evaluated; and (c) treatment programs are developed and implemented, all within the context of doing. Occupational therapists emphasize the ability to do. Our concern with the prerequisite neuromotor, psychosocial, and cognitive-perceptual performance capacities is framed in their impact on occupational performance.

What Should We Measure?

Deciding what to measure can be a difficult task. Occupational therapists are qualified to evaluate an endless list of things. According to Kane and Kane (1981),

Perhaps the most common pitfall is the "cafeteria" approach to measurement. The clinician identifies one or more areas or domains he would like to tap and shops through the literature to identify measures whose titles suggest they cover the appropriate ground. If they come with appropriate psychometric pedigrees indicating high degrees of reliability and validity, they are almost certain to be adopted. Unfortunately, such measures may not always be suitable. They may be designed for a different population or may not measure the aspects of the attribute of interest that are of concern. . . . Any frequenter of the buffet line knows that it is far easier to fill one's plate than to find just the food that one really wants to eat. (pp. 19-20)

Instead, our choice of what to measure should be driven by our theories; we should focus first on measuring what it is that we hope to change (Kane & Kane, 1981). For an occupational therapist, this is the ability of our clients to participate in meaningful, sometimes purposeful, occupation. We can also ask ourselves the following questions:

- What will I know when I have the results of this test?
- How do the results of this test contribute to the overall assessment?
- Is it what I really want to know?

Until we know if and how functional limitations affect the performance of occupational behaviors and the assumption of occupational roles a person needs or wants to perform, we have not gone far enough.

How Should We Measure It?

I think that the real question is not what we measure, but how we assess our clients—how we place the evaluation results within context and how we interpret the results given that context. Moreover, I believe that it is that context and that interpretation that should be explicitly linked to the accumulated knowledge of our profession (cf. Kielhofner, 1983; Yerxa, 1991). Three additional things can be considered. First, occupational therapists draw important conclusions about their clients based on their observation of their clients' performance of meaningful daily life tasks. Although we may use interviews or checklists to augment the assessment process, we need to develop and use quantitative measures that are based on direct observation of performance and that facilitate the objectification of our clinical judgments.

Second, we should examine the practice of using the same measures that physical therapists, nurses, social workers, and psychologists use to evaluate the same function. By using the same measures, we convey the implicit message to our colleagues and clients, who may ask us how occupational therapy differs from physical therapy, nursing, social work, and psychology. Bundy (1989) pointed out another important caveat regarding our choice of measures. When we use instruments that were developed by other professionals to measure treatment effectiveness, we increase the risk that the measure will not be a sensitive measure of the change we hope to affect. This practice also may suggest to our colleagues that we believe that we change the same things that they do or that we view function from their perspective.

Third, we must consider meaningfulness. Occupation is what we do. Whether or not it is purposeful, in the sense of productivity, it is self-directed and it is concerned with autonomy and choice (Yerxa, 1991). Therefore, it is essential to understand that "persons are agents who, for various reasons, decide what they will do and when and how they will do it" (Yerxa, 1991, p. 201). It is critical, therefore, that the evaluation process be collaborative and that the client have the opportunity to choose. We need to develop and use functional assessments that consider the volitional characteristics of our clients.

With a rapidly increasing societal emphasis on function, occupational therapists are confronted with a unique opportunity and challenge. We are recognized for our expertise in performance evaluation (Guralnik, Branch, Cummings, & Curb, 1989). We bring to the evaluation process a unique perspective on function. This perspective stresses process as well as outcome and gives consideration to the occupational nature of our clients. My hope is that we become leaders in developing and using functional measures that reflect our unique perspective.

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