
THE ISSUE IS

Implementing Occupation-Based Assessment

In the early 1990s, occupational therapists were challenged to refocus their evaluation processes. Specifically, they were urged to focus on their clients' abilities to do what they want and need to do and to carry out meaningful occupation rather than evaluating the components underlying occupational performance problems (Fisher, 1992a, 1994a; Law et al., 1994; Mathiowetz, 1993; Trombly, 1993). Subsequently, the call for occupation-based assessment has been repeated and amplified (cf., Baum & Law, 1997; Coster, 1998).

Several compelling rationales for this refocusing have been offered. First, evaluations that do not focus on the occupations that clients find problematic will not communicate the purpose of occupational therapy to clients or colleagues and, thus, will contribute to confusion and dissatisfaction with occupational therapy services (Fisher & Short-DeGraff, 1993; Trombly, 1993). As Baum and Law (1997) noted, clients need to understand the purpose of occupational therapy and its potential outcomes as much as therapists need to understand clients' occupational performance problems. Failure to communicate the purpose or anticipated outcomes of intervention would, in effect, compromise the principles of client-centered occupational therapy because clients cannot fully engage in processes they do not understand (Pollock & McColl, 1998). In addition, failing to communicate the purpose of intervention is contrary to the increasing consumer demand that any evaluation of function is both relevant and useful to the person being assessed (Batavia, 1992).

A second area of concern is which

Clare Hocking

Clare Hocking, MHSc(OT), is Principal Lecturer, School of Occupational Therapy, Auckland University of Technology, Private Bag 92 006, Auckland, New Zealand; clare.hocking@aut.ac.nz.

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aspect of a client's performance to measure. Until recently, occupational therapists assumed that a strong correlation exists between performance components and occupational performance. Based on this assumption, evaluation of the components that underpin performance appeared to provide a good basis for intervention. A growing body of research, however, has revealed that improvement in performance components does not automatically translate into improved occupational performance (Fisher, 1992b; Mathiowetz & Haugen, 1995; Schmidt, 1988; Trombly, 1995, 1999). Thus, an increase in concentration span, for example, may not carry over into improved performance of work tasks.

A third concern is that occupational therapists who focus their evaluations solely on performance components risk focusing treatment around those components, thus failing to address critical occupational issues. These issues might include, for example, volitional aspects of performance (Fisher, 1992b) or attitudinal, organizational, or physical environmental barriers to occupation (Roulstone, 1998). As Kielhofner (1993)

argued, therapists' attention can become diverted from the person who has the condition to the medical condition itself. In addition, evaluations that focus on performance components are unlikely to reveal clients' capabilities and adaptive strategies or to contribute to understanding the interaction between people and their environments (Mathiowetz, 1993).

Overall, a consensus seems to be developing that evaluations that focus directly on occupation are most true to the basic concepts of occupational therapy (Coster, 1998; Fisher, 1992a; Gillette, 1991; Trombly, 1993). The complexities of implementing occupation-based assessments, however, have received little attention.

This article suggests that conceptualizing occupation in terms of meaning, function, form, and performance components may provide a useful framework to guide clinical reasoning about what to assess. I propose that occupational concerns become the primary consideration guiding the selection of assessments, and I outline three broad strategies to evaluate the use of available assessments within occupation-based evaluations. These strategies are presented in Figure 1. An assumption underlying the discussion is that occupational therapy evaluations and interventions are guided by theory. Examples of the influence of theoretical frameworks on clinical reasoning are incorporated throughout the discussion.

What To Assess

Trombly (1995) advised occupational therapists to enact "top-down" evaluations, that is, to first focus on clients' occupational performance issues rather than the underlying occupational perfor-

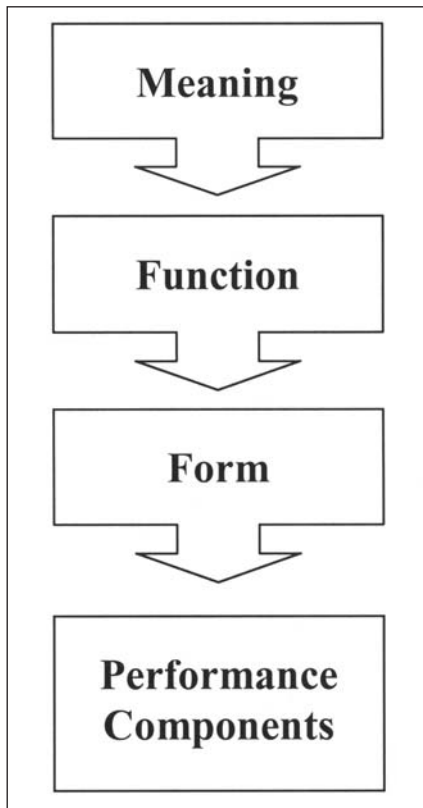


Figure 1. Conceptual framework for occupation-based assessment.

mance limitations. In this way, she argued, clients would more easily understand the unique concerns of occupational therapy and more readily make sense of occupational therapy intervention. Further, Trombly argued that therapists need to evaluate performance components only when the cause of the problem is not already apparent in order to determine how to intervene. Accepting Trombly and others' rationale, however, does not necessarily assist therapists trained and skilled in "bottom-up" evaluation to determine how to proceed. This section outlines a top-down evaluation strategy.

According to Clark et al. (1991), people are occupational beings. Occupation can be conceptualized in terms of its performance components (or substrates [Clark et al., 1991]), form, function, and meaning, where the form of an occupation refers to its observable features (Clark, Wood, & Larson, 1998) rather than the broader definition proposed by Nelson (1988). Proposed here is that thinking about occupational performance in terms of its meaning, function, form, and performance components may guide therapists' clinical reasoning about what

to assess and in what sequence. From this perspective, and working top-down, occupational therapists' first imperative is to understand clients as occupational beings who create meaning in their lives through the occupations in which they engage. Framed by this understanding, the function or purpose of the occupations that are problematic, the form those occupations take, whether the cause of the problem is clear, and the performance components or environmental conditions that may be impeding performance can be addressed. Each dimension of the occupationally based evaluation is discussed in sequence as follows.

Understanding People as Occupational Beings

The occupational therapy literature offers various perspectives on people as occupational beings as well as the *meanings* that people experience and express through daily occupation that center on the notion of identity. For example, Kielhofner, Borell, Burke, Helfrich, and Nygard (1995) proposed in the Model of Human Occupation that people have a "commonsense" understanding of who they are, what they might do, the contexts in which they might act, and who they might become. People's understandings of themselves are constructed and revealed in their volitional narratives (Helfrich, Kielhofner, & Mattingly, 1994).

A related concept—occupational identity—emerged from research into the psychometric properties of second version of the Occupational Performance History Interview (OPHI-II; Kielhofner et al., 1998). The developers defined occupational identity as the extent to which the person has integrated and feels confident about his or her values, interests, and occupational roles. Christiansen (1999) and Crabtree (1998) each concluded that identity is developed and expressed through occupation and that occupation is the vehicle for experiencing life meaning. Similar ideas are incorporated within the Canadian Model of Occupational Performance (Canadian Association of Occupational Therapists, 1997), where people's occupations are centered on their spirituality, their inner core or essence. Taken together, these ideas suggest that understanding people as occupational beings is to understand

the core themes of their lives and the meanings they experience and express through occupation (i.e., why people do something, what they might do in the future, who they perceive they are becoming).

To understand clients as occupational beings, the first focus of occupation-based assessment, therapists are guided by the following questions:

- How does this person describe himself or herself? What kind of person is he or she?
- How does this person's occupation contribute to constructing or maintaining identity, to expressing and experiencing meaning, or to achieving his or her life purpose?
- What are this person's occupational goals? That is, what identity or meanings does the person wish to achieve?
- In what ways do the occupations this person finds problematic affect his or her identity or expression or experience of meaning?

Examples of assessments that address occupational identity are the OPHI-II and the Occupational Case Analysis Interview and Rating Scale (Kaplan & Kielhofner, 1989). Both assessments generate data about people's occupational histories. The Volitional Questionnaire (de las Heras, 1993) is an example of an assessment that helps therapists to understand the meaning or volitional aspects of occupational performance from the performer's perspective.

In addition to understanding the meanings clients experience and express through occupation, occupational therapists are concerned with whether those meanings are acceptable to others. Kielhofner (1995), among others, has reminded us that the persons in our clients' social environments both create the social contexts within which they act and provide opportunities to enter occupational roles. For example, a child who takes his wheelchair to the beach, thus exposing it to sand and salt water, may challenge his parents' value of looking after such expensive equipment better. Alternatively, parents may encourage their child to venture onto the beach, believing the child has a right to this experience. Therapists need to under-

stand whether a client's occupations fit with the occupational roles and expectations of the client's social environment and to ensure that the occupations they propose or endorse are acceptable to and valued by the client. Generally, this information is sought through interviewing all persons concerned.

Understanding the Function of Occupations

Understanding the *function* of occupations that are affected by disability, environmental disruption, or occupational role transitions, such as retirement, is a second focus for data gathering. People engage in occupation for a wide variety of reasons, which Wilcock (1993) summarized as meeting "immediate bodily needs of sustenance, self care and shelter"; developing "skills, social structures and technology aimed at safety and superiority over predators and the environment"; and exercising personal capacities (p. 20). Research that has explored people's engagement in particular occupations has revealed other, more specific functions or purposes. For example, Segal (1999) found that parents select and construct occupations for their children in order to bring family members together; share their experiences; and provide opportunities for the children to learn something of their religious, ethnic, and family background and of their parents' interests. Similarly, women demonstrate real caring for their partners and children by acknowledging their individual preferences as they shop for groceries and plan and prepare meals. For these women, these occupations also function as an expression of individual skill, pride, and responsibility (De Vault, 1991; Miller, 1998).

Thus, the function of an occupation refers to its purpose or importance within the person's daily realm of occupations and the contribution it makes to his or her own and others' lifestyles. In that people generally interdepend on others for their survival and success, an individual's occupations may range from providing support for others to creating unnecessary and excessive work. Between these extremes, occupations may be experienced as mutually enjoyed or beneficial or as providing a focus for other's actions and care. In this regard, acknowledging that the performer's perspective may dif-

fer from that of the recipient is important. The essential questions for understanding the function of occupations are as follows:

- What functions are disrupted by the occupational challenges this person experiences, and who is affected? For example, is the disruption an issue of health, happiness, generating an income, parenting one's children, getting along with others, or maintaining a clean and comfortable home environment?
- In what ways does the physical environment support or impede the person from achieving the intended purpose of his or her occupation?
- In what ways do others' occupations support or hinder the person, and how might they better provide support?

An example of an assessment that captures information about the function of occupation in people's lives is the Canadian Occupational Performance Measure (COPM; Law et al., 1994) in which clients identify occupations as part of their productivity, leisure, or self-care and prioritize them in order of importance and personal satisfaction with performance.

Understanding the Form of Occupations

The *form* of an occupation, as defined by Clark et al. (1998), refers to its observable features. In a top-down, occupation-based assessment, establishing the quality of the occupational performance, its observable features, within the environment in which it is performed is the next focus. This process includes both determining the nature and extent of any observable disruption to performance and identifying occupational performance skills and environmental opportunities that support performance.

Understanding the ways in which occupational performance is disrupted and the extent of that disruption requires an understanding of the occupation in terms of the capacities required to carry it out successfully. Occupational performance is the product of the person, the occupation, and the environment (Kielhofner, 1995) and is best understood in the context of its performance.

The first questions, therefore, are as follows:

- What actions are required to complete the occupation successfully? That is, what will be observed to happen?
- Where, when, and how often can the occupation be observed?
- What performance standards will apply? That is, what quality of performance will be observed?
- What will happen as a result of performing the occupation? What, if any, outcomes might be observed?
- Does the environment in which the occupation is performed provide the necessary resources?
- In what ways does the environment support or hinder performance?

Having understood the requirements and context of performance, therapists need to establish the nature and extent of the disruption to performance. In this regard, acknowledging disruptions observable to the performer as well as to an outside observer is important. The broad questions, therefore, are as follows:

- What is the quality of the person's current occupational performance, including its strengths and weaknesses?
- How does the existing form of the occupation compare to the quality of performance he or she is striving for or required to achieve?
- How has the person adapted to or accommodated his or her occupational performance challenges?

Finally, therapists will be concerned about potential for change in performance. Relevant questions are the following:

- Does the person have the capacity to improve the quality of his or her performance?
- In what ways might the occupation or the occupational context be modified to better support performance?

Exactly how these questions are framed will depend on and vary with the models informing therapists' clinical reasoning. For example, the Model of Human Occupation would frame these

questions in terms of the setting in which the occupational behavior occurs, the person's occupational roles, motor and process skills, and so on. Relevant assessments would include the Assessment of Motor and Process Skills (AMPS; Fisher, 1994b), the Assessment of Communication and Interaction Skills (Salamy, Simon, & Kielhofner, 1993), and the Functional Independence Measure (Keith, Granger, Hamilton, & Sherwin, 1987). All of these assessments gather information about the skillfulness or effectiveness of the person's performance within the environment.

Evaluating Performance Components

Finally, if the cause of the occupational dysfunction a client experiences is not already evident, evaluation of the nature and extent of deficits in the components of occupational performance may be necessary (Baum & Law, 1997; Mathiowetz, 1993; Pollock & McColl, 1998). As Coster (1998) noted, the therapist uses knowledge of the cause of observed dysfunction to select appropriate intervention strategies. For example, establishing that a client has difficulty shampooing her hair because of limited range of movement at the shoulder points to biomechanical intervention, whereas difficulty with the same task because of cognitive dysfunction subsequent to a traumatic brain injury points to cognitive rehabilitation approaches.

Many occupational therapy assessments generate data about the status of the components underlying effective performance. For example, the Bay Area Functional Performance Evaluation (BaFPE; Bloomer & Williams, 1986) assesses cognitive abilities, and the Jebsen Hand Function Test (Jebsen, Taylor, Trieschmann, Trotter, & Howard, 1969) measures dexterity in the context of simulated tasks of daily living. Further, some assessments focus on the environmental context of performance. For example, the Ward Atmosphere Scale (Moos, 1989) assesses the perceived social expectations and rules of a rehabilitation setting and the ways in which self-reliant occupational performance is supported or restricted.

Selecting Occupation-Based Assessments

Determining how the data generated by an assessment will be relevant and useful

to the client and the therapist is the primary professional issue in relation to evaluation (Batavia, 1992). In the context of occupational therapy in which occupation is both a goal and a means of therapeutic intervention (Moyers, 1999), ensuring that assessments are relevant and useful means identifying and using ones that have an occupational basis. Three broad strategies to analyze the occupational basis of assessments are (a) determining whether the assessment actually measures some aspect of occupation, (b) identifying what kind of occupation(s) the assessment involves and how clients might experience those occupations, and (c) analyzing whether the occupations incorporated in the assessment are real or simulated and familiar or unfamiliar. These strategies are discussed here, and questions to analyze critically whether assessments are occupation based are proposed.

Does the Assessment Measure Occupation?

As previously discussed, a top-down, occupation-based evaluation process looks at the meaning of occupation; the function or purpose of occupation within people's lives; the form of their occupational performance; and, if necessary, the performance components or environmental conditions that support or restrict occupational performance. Two components aid in judging whether a particular assessment is occupation based: determining whether the assessment measures some aspect of occupation, such as the meaning of occupation or the skillfulness of performance, and determining whether occupation is the core construct of the assessment.

Perhaps the most obvious indicator that occupation is the core construct of an assessment is that the assessment involves people carrying out an occupation; documenting their occupational performance; or talking about the importance or meaning of occupations, how their occupations are organized, or their satisfaction with their occupational performance. For example, the AMPS assesses performance of two or three familiar domestic or self-care tasks of choice while an occupational therapist observes the skillfulness of the client's performance. This assessment specifically evaluates motor and process skills, and

the core construct is skillful performance in both motor and process domains. Another example is the Volitional Questionnaire, which involves observing a nonverbal client's behavior while engaged in an occupation to understand what motivates him or her. The core construct in this assessment is volition for occupation. Examples of assessments in which occupation performance is the core construct are the COPM and the Self Assessment of Occupational Functioning (Baron & Curtin, 1990), both of which ask clients to evaluate their satisfaction with their level of occupational performance as a basis for collaborative treatment planning.

The second component of analyzing whether and how an assessment measures occupation is determining whether the "philosophy, rationale, and frame of reference used in constructing the instrument" (Opacich, 1991, p. 369) is occupational or supports an understanding of occupation. For assessments developed to operationalize specific theories of occupational performance, such as the Model of Human Occupation or the Canadian Model of Occupational Performance, this process is straightforward. For other assessments, however, the underpinning philosophy or theory is less evident either because the developers did not explicitly identify the theory informing their thinking or because the relationship of the philosophy or rationale to occupational performance is less direct. For example, the Refined ADL Assessment Scale for Patients with Alzheimer's and Related Disorders (Tappen, 1994) does not explicitly identify an underlying theory base. The author's qualification as a registered nurse and the assessment's concern with need for nursing home admission and type and level of assistance required to complete activities of daily living tasks, however, reveal an underlying philosophy of care delivery and minimizing care requirements.

In contrast, the Automatic Thoughts Questionnaire (Hollon & Kendall, 1980) is clearly based on cognitive behavioral theory, which posits that changing the way people think about themselves and the things that happen to them can change their feelings and behaviors. To use data generated by the Automatic Thoughts Questionnaire to change a person's experience of particular occupations

requires knowledge about both cognitive behavioral theory and the role that cognition plays in occupation. For example, in the context of the Model of Human Occupation, automatic thoughts might influence the processes of anticipating, choosing, experiencing, and interpreting occupational behavior (Kielhofner et al., 1995). In this case, occupational therapists themselves must judge their ability to make the necessary links between the theory base of the assessment and occupation.

Questions to guide therapists' evaluations of the occupational basis of assessments are the following:

- Is occupation the core construct measured by the assessment? Does the assessment evaluate the meaning, function, form, or components of occupational performance or the ways in which the environment supports or impedes occupational performance?
- Does the assessment involve people in carrying out an occupation or documenting or talking about their occupational performance?
- Are the philosophy, rationale, and frame of reference of the assessment occupational?

What Kind of Occupation is the Assessment?

As well as considering whether occupation is the core concept of an assessment, evaluating the occupational basis of an assessment involves considering the assessment itself an occupation. Thus, therapists are concerned with what kind of occupation it will be for the client to "be assessed." For occupational therapists who strive to achieve client-centered practice, an important consideration is the potential impact of formal evaluation processes on the developing therapeutic relationship. Managh and Cook (1993), for example, found that many of the Canadian occupational therapists they studied modified the administration protocol of the BaFPE. What these therapists reported was that the assessment protocol constrained how they interacted with clients. They perceived administering the assessment as a coldly formal occupation that did not allow them to be encouraging of their clients' efforts or supportive of their failures.

A further consideration in all aspects of occupational therapy practice is the importance of addressing cultural issues. In relation to evaluation processes, this concern raises issues about whether the occupation of being assessed is culturally safe (Hocking, 1998; Hocking & Whiteford, 1995). For an assessment to be culturally safe, it should not incorporate concepts that are foreign or irrelevant in the person's cultural context, practices that contravene codes of modesty or privacy, or expectations that the person will self-report or make decisions in ways that are not culturally sanctioned. Many assessments that occupational therapists use, for example, have an underlying assumption that persons are self-determining, autonomous agents. Within some cultures, however, making decisions without reference to the family or wider social group would be considered selfish and present a danger to group cohesion. Relevant questions to evaluate how clients may experience the occupation of being evaluated are as follows:

- In what ways does the assessment protocol constrain how the therapist may interact with the client? How may any constraints to interaction affect the development or maintenance of a therapeutic relationship?
- Is the assessment culturally safe?

Are the Occupations Real or Simulated, Familiar or Unfamiliar?

Also important when analyzing the occupational basis of assessments is whether they involve carrying out real or simulated occupations. For example, the Structured Observational Test of Function (Laver & Powell, 1995) involves carrying out basic self-care tasks to judge the impact of perceptual and cognitive deficits on task performance. In contrast, the tasks involved in perceptual tests, such as the Visual Cancellation Test (Abreu, 1992), or in assessments like the Purdue Pegboard (Tiffen, 1968) require clients to perform simulated activities that are not part of everyday life. In occupational science terminology, such simulations are not occupations in that they are not "named in the lexicon of the culture" (Clark et al., 1991, p. 301) and may not elicit the same motivation to perform or similar motor patterns as the real-life occupation the client experiences as diffi-

cult. In addition, clients with cognitive dysfunction are likely to be confused by assessment activities that are not substantially the same as the occupations they find problematic. To avoid these problems, I suggest that therapists seeking to establish occupationally based practice may be better served by assessments that involve real rather than simulated occupation whenever possible.

A related concern is whether the assessment involves familiar or unfamiliar occupations. Many assessments designed by psychologists expose clients to tasks that they have not had the opportunity to practice. Indeed, opportunities to practice assessment tasks render the assessment useless in that the results can no longer be taken as representative of general skill levels. The BaFPE is an occupational therapy assessment that is based on similar premises and composed of a set of tasks intended to be unfamiliar to clients. In contrast, the AMPS stipulates that the assessment tasks be familiar to the client and carried out in an environment to which he or she has been oriented. The difference lies in the intent of the AMPS to evaluate skill in monitoring one's own actions in the midst of an unfolding occupation rather than assessing underlying performance capabilities. Therapists need to determine whether observing clients performing familiar or unfamiliar tasks will best reveal the nature and extent of the occupational performance deficits their clients experience. Similarly, whether the environment in which the assessment is completed is familiar or unfamiliar may have motivational implications or change the quality of the performance (Park, Fisher, & Velozo, 1994).

A final consideration is the kind of data the assessment will generate. For example, will the final score be a measure of the person's performance skills or satisfaction with their occupational performance, or will it be a measurement of their performance capacity (e.g., degrees of movement at a joint)? Although either or both may be useful, if the intent of occupational therapy intervention is to change occupational performance, it is more clearly demonstrated by assessments that directly measure and describe that performance.

Questions that summarize the key points made here are the following:

- Does the assessment involve real or simulated occupations? What motivational or performance implications may the use of simulated occupations have?
- Does the assessment involve familiar or unfamiliar occupations carried out in familiar or unfamiliar environments? What are the implications for the usefulness of the data to be generated?
- Does the data generated by the assessment summarize occupational performance or the status of performance components?

Conclusion

Evaluation is the basis from which occupational therapists define the nature of their clients' occupational performance challenges, determine clients' priorities, and negotiate the goals of interventions. In addition, it is through this process that clients come to understand the nature and outcomes of occupational therapy and the ways in which the occupational therapist will engage them in the process of achieving valued occupational performance outcomes. In this article, I have extended Trombly's (1995) notion of top-down evaluation processes and interpreted what such a process might mean in occupational terms. I have proposed applying a framework of conceptualizing occupation as a hierarchy consisting of performance components (at the bottom), occupational form, the function of the occupation in a person's life, and the meaning of occupation and its contribution to creating or maintaining an identity (at the top).

Therapists are urged to analyze assessments to determine whether they in fact collect data about occupation and how well their underlying theoretical framework relates to occupational performance. Also important is the consideration of the occupation of being assessed in terms of its impact on the therapeutic relationship and its cultural meanings. A final consideration is whether the activities within the assessment are real or simulated, familiar or unfamiliar occupations. In this way, it is argued, therapists will be enabled to implement assessments that provide an occupationally based, client-centered foundation for practice. ▲

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