The Issue Is

Occupational Science is Multidimensional

Anne Henderson, Sharon Cermak, Wendy Coster, Elizabeth Murray, Catherine Trombly, Linda Tickle-Degnen

The development of a science of occupation is one of the goals of the profession of occupational therapy. Disagreement exists, however, as to the definition of occupational science and therefore as to what is considered legitimate occupational therapy research. An overly restrictive interpretation of the term occupational science will affect the funding and publication of research studies, resulting in potentially valuable knowledge being lost to the profession.

We believe that occupational science comprises not only the study of occupation (self-care, work, leisure) but also the components of function related to occupational performance (e.g., movement, cognition, emotion). Furthermore, we propose that research in occupational science should not be restricted to treatments involving purposeful activity. To address fully the domain of occupation, we must study facilitatory agents that are not traditionally called purposeful activity.

Definitions of Purposeful Activity

We believe that the use of purposeful activity, including occupation, is the core of occupational therapy, that is, the therapeutic kernel of what makes change in patients. We have three provisos, however: First, that the definitions of purposeful activity must be multidimensional; second, that purposefulness and meaningfulness are attributes of persons and not of activities; and third, that it be recognized that legitimate occupational therapy services include techniques other than purposeful activity.

The Multidimensional Nature of Purposeful Activity

The debate over the identification of purposeful activity as the core of occupational therapy (American Occupational Therapy Association [AOTA], 1979) arose in part from misinterpretation of the term purposeful activity and in part from differing occupational therapy philosophies. For example, some practitioners saw purposeful activity as synonymous with crafts (West, 1984).

Hinojosa, Sabari, and Rosenfeld’s (1983) position paper began the process of clarifying the meaning of the term purposeful activity, but struggles for a better definition continue (Breines, 1984, 1989; Nelson, 1988; Steinbeck, 1986). We believe that wide acceptance of purposeful activity as the core of occupational therapy is contingent on definitions that recognize the multilevel nature of activities used in the field. The multidimensional nature of occupational therapy is well recognized (Allen, 1987; Breines, 1989; Kielhofner, 1983, 1988; Llorens, 1981). Activity used in therapy ranges from concern with life tasks of work and leisure (i.e., high level) to single-action skills such as reaching for or touching something (i.e., low level). The level of activity chosen, from simple to complex, is determined by the presenting clinical problem as well as by the therapist’s frame of reference. Thus, adaptive living skills, which are high-level activities, are used in chronic disability, particularly within the occupational behavior frame of reference. Practice in acute physical disabilities, however, also emphasizes low-level activities (Allen, 1987). In any area of practice, whenever activity is used to remediate motor, cognitive, perceptual, or socioemotional disability, that is, when therapy is directed toward enhancing components of performance, simple activities or parts of activities, including exercise, may be the most appropriate.

The Meaning of Activity

Low-level activity, such as single-action movements or exercise, are often decried as nonmeaningful and therefore are viewed as inappropriate tools of occupational therapy. We believe all activities are potentially meaningful. The meaning of an activity changes, however, with the person, the treatment context, and the timing of its use. The meaningfulness may be in the enjoyment of the activity process, for example, in a game or play; it may be in the production of a product, as in crafts; it may be in the gratification of succeeding in a task such as dressing; or it may be in the satisfaction of increasing strength or motor skill. The meaning or lack of meaning does not lie with the activity but with the person for whom it is chosen and with the context in which it is done.

Facilitatory Agents

There are many non-occupational techniques that are legitimate and necessary adjuncts to occupational therapy service, including interpersonal interaction, orthotics, physical agents, family counseling, biofeedback, and the shaping of behavior. Such techniques would not be defined as occupation, but they prepare for or are facilitatory to occupation (Kielhofner, 1983); they are not the core but are important to good occupational therapy practice in many areas. The meaningfulness of these techniques to the patient lies in their power to enhance the effectiveness of an activity or to facilitate performance.
Summary

We believe that the conceptualization of purposeful activity should be congruent with the uses of activity in occupational therapy practice. Definitions of purposeful activity should then encompass the breadth of activities from single actions or movements to adaptive living skills and should encompass historic and traditional as well as contemporary uses of activity in the profession. From the profession’s beginnings, the occupational therapy process has included the use of activity focused on the increasing of competence in daily occupations of work, self-care, and leisure and on the use of activity to reduce pathology and restore function. We believe the boundaries of the use of activity should continue to be fluid. Definitions of activity should be used for orientation, not for limitation, and should capture the richness of our profession.

Occupational Science

We believe that the definition of what is proper occupational therapy research should reflect contemporary practices that are widespread in occupational therapy. Just as the definitions of purposeful activity should be congruent with definitions of occupational therapy, so should definitions of what is proper occupational therapy research be congruent with definitions of purposeful activity and of occupational therapy.

Reilly (1960) said that our most fundamental area of research is and always will be the nature and meaning of activity. We see the nature of activity as not only including the characteristics of an activity that make it meaningful to a person but also the complex of human subskills that are needed to engage in an activity. The study of purposeful activity must include not only the occupational nature of man in his environment but also the effects of disease and injury on specific activities and the effects of activity on dysfunction.

The research of the AOTA/American Occupational Therapy Foundation Neurobehavioral Rehabilitation Research Center of the Occupational Therapy Department, Boston University, Sargent College, is directed toward an understanding of the relationship between purposeful activity and health. One focus is on the subskills of activity, that is, the components of performance as well as facilitatory procedures used in therapy. We seek to better define and measure the deficits in various clinical populations in order to clarify the goals of treatment. Much of our knowledge of disabilities and components of activities is gleaned from the research of other disciplines. Researchers in other disciplines, however, conduct their studies with different aims. The basic research questions of concern to occupational therapy are not asked by these researchers. We are concerned with the questions that will otherwise go unanswered. Some of our questions are: (a) What are the components of occupational performance? (b) How do the performance components change with disease or injury and how do they change as function is restored? (c) What aspects of disability provide barriers to life experiences?

The applied science questions begin with the assumption that occupational therapy facilitates the mechanism of change from dysfunction toward function and that there is a need to investigate the assumptions about how this occurs. What are the critical therapeutic aspects? What are the assumptions of treatment and are they valid? What aspects of the therapeutic process beyond activity affect goal attainment? How does the context of treatment, including therapeutic interaction, affect therapeutic change?

A research focus on components of performance or aspects of disability has been labeled reductionist and therefore "bad" and "not occupational therapy." A focus on the understanding of components of behavior, however, does not imply that we have reduced occupation and activity to nothing more than their components. We believe, rather, that a better understanding of the components of function will help to construct better models of occupational science and to analyze how the components contribute to occupation and purposeful activity.

We believe that life skills and component skills, activity and enabling agents, remediation and adaptation, are all a part of the fabric of occupational therapy and thus proper subjects for occupational therapy research.

Acknowledgments

This paper was supported in part by the Neurobehavioral Rehabilitation Research Center, Boston University, Boston, Massachusetts, a center for scholarship and research in occupational therapy funded by the American Occupational Therapy Association and the American Occupational Therapy Foundation.

References


Anne Henderson, PhD, OTR/L, is Professor Emeritus of Occupational Therapy, Sargent College, Boston University, 635 Commonwealth Avenue, Boston, Massachusetts 02215, and Research Faculty Member, Neurobehavioral Rehabilitation Research Center, Boston University.
Sharon Cermak, PhD, OTR/L, is Associate Professor of Occupational Therapy, Sargent College, Boston University, Boston, Massachusetts, and Director, Neurobehavioral Rehabilitation Research Center, Boston University.

Wendy Coster, PhD, OTR/L, is Assistant Professor of Occupational Therapy, Sargent College, Boston University, Boston, Massachusetts, and Research Faculty Member, Neurobehavioral Rehabilitation Research Center, Boston University.

Elizabeth Murray, MA, OTR/L, is Assistant Professor of Occupational Therapy, Sargent College, Boston University, Boston, Massachusetts, and Research Faculty Member, Neurobehavioral Rehabilitation Research Center, Boston University.

Catherine Trombly, MA, OTR/L, is Professor of Occupational Therapy, Sargent College, Boston University, Boston, Massachusetts, and Acting Director, Neurobehavioral Rehabilitation Research Center, Boston University.

Linda Tickle-Degnen, PhD, OTR/L, is Professor of Occupational Therapy, Sargent College, Boston University, Boston, Massachusetts, and Research Faculty Member, Neurobehavioral Rehabilitation Research Center, Boston University.

This article was accepted for publication October 15, 1990.

The issue is provided for debate and discussion of occupational therapy issues and related topics. The contributing editor of this section, Julia Van Deusen, strives to have both sides of an issue addressed. Readers are encouraged to submit manuscripts discussing opposite points of view or new topics. All manuscripts are subject to peer review. Submit three copies to Elaine Viseltear, Editor.

Published articles reflect the opinion of the authors and are selected on the basis of interest to the profession and quality of the discussion.