

# THE FUNDAMENTALS OF WORKFORCE COMPETENCY: IMPLICATIONS FOR BEHAVIORAL HEALTH

**Michael A. Hoge, Janis Tondora, and Anne F. Marrelli**

**ABSTRACT:** Increasing attention is being directed to the competency of those who deliver healthcare in the United States. In behavioral health, there is growing recognition of the need to define, teach, and assess essential competencies. Since attention to this issue in behavioral health is relatively recent, there is much to be gained by learning from the principles, definitions, and conceptual models of competency that have been developed in other fields. This article outlines the forces that drive the current focus on competency of the healthcare workforce. Relevant history, principles, definitions, and models that have evolved through research and application in business and industry are reviewed. From this analysis, recommendations are offered to guide future work on competencies in behavioral health.

**KEY WORDS:** behavioral health; competency; education; training; workforce development.

In September 2001, a group of professionals, students, and consumer and family advocates gathered at the Annapolis Conference on Behavioral Health Workforce Education and Training. Their purpose was to address growing concerns about the preparation of providers for practice in contemporary healthcare systems (Hoge & Morris, 2002). As part of that process, an initial effort was made to define some of the competencies required to work effectively in this field. One of the formal re-

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Michael A. Hoge, Ph.D., is Professor of Psychology (in Psychiatry) at the Yale University School of Medicine in New Haven, CT, and Co-Chair of the Annapolis Coalition on Behavioral Health Workforce Education. Janis Tondora, Psy.D., is an Assistant Clinical Professor of Psychology (in Psychiatry) at the Yale University School of Medicine in New Haven, CT. At the time this work was conducted, Anne F. Marrelli, Ph.D., was a Senior Managing Associate at Caliber Associates in Fairfax, VA.

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Address for correspondence: Michael A. Hoge, Ph.D., Yale Department of Psychiatry, 34 Park Street, Room 139, New Haven, CT 06519. Phone: 203-785-5629. E-mail: michael.hoge@yale.edu.

commendations generated by conference participants was that workforce competencies should be a priority for in-depth study and development.

The “competency” of individuals who provide services has rapidly emerged as a major focus in the field of behavioral health (Coursey et al., 2000a, b; Joint Commission on Accreditation of Healthcare Organization [JCAHO], 2000). At first glance, the concept of competency is both simple and compelling. It has been defined as the “quality of being properly or well qualified” (Pickett, 2000). Few would question that providers of healthcare should be competent. However, in actual practice, achieving or demonstrating competence is complex. Certainly, a diploma or license hanging on the office wall is no longer accepted by all as sufficient evidence of one’s abilities to provide safe and effective care (Drotos, 2001).

Behavioral health has much to learn from work on competencies conducted outside of this specialty. For example, the emphasis on competence, accountability, and outcomes, though relatively new to behavioral health, has been a fundamental aspect of corporate culture for some time (Prahalad & Hamel, 1990). The purpose of this article is to first examine the dynamics within healthcare that have heightened attention to this issue. This is followed by a review of the founding principles, initial research, and subsequent conceptual and practical work on competencies that has occurred mainly in business and industry. From this review we derive a series of recommendations to guide the application of competencies to the behavioral health workforce.

## **THE EMERGING FOCUS ON COMPETENCY IN HEALTHCARE**

A complicated array of forces have been at play, driving the emphasis on workforce competency. First, purchasers of healthcare, concerned about the quality, value, and cost of services, turned to managed care well over a decade ago (Hoge, Thakur, & Jacobs, 2000). While there are differing opinions about the value and impact of managed care organizations, there is no doubt that they have played an active role in intensifying the debate about the effectiveness of specific treatments and the qualifications and competence of providers to deliver those treatments.

Demand for healthcare that is both clinically- and cost-effective has also led to the proliferation of practice guidelines (APA, 2000; Herz et al., 2002; Lehman et al., 1998; McEvoy, Scheifler, & Frances, 1999) and a clamor for evidence-based approaches to treatment (Drake et al., 2001). The fact that there is wide variation in clinical practice patterns (Coursey et al., 2000a) and frequent failures to deliver care in

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accordance with established guidelines (Lehman et al., 1998; Milner & Valenstein, 2002) has generated concerns about the competence of the workforce.

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***A competency is a measurable human capability required for effective performance.***

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Concerns about provider competency and its impact on the quality of US healthcare also have been heightened by three major reports issued by the Institute of Medicine (IOM): *To Err is Human* (2000), *Crossing the Quality Chasm* (2001), and *Health Professions Education* (2003). These “calls to action” presented indictments of current healthcare delivery and the avoidable errors in care that lead to increased morbidity and mortality. Rather than blaming individual practitioners, the IOM heavily criticized the systems of care where individuals practice, as well as the educational systems responsible for preparing those practitioners.

There is substantial evidence that our educational systems have not kept pace with the dramatic changes in healthcare (Hoge, 2002). For example, educational programs have been slow to introduce practice guidelines into clinical training, or teach students to deliver evidence-based services (Crits-Christoph, Chambless, Frank, Brody, & Karp, 1995; Yager, Zarin, Pincus, & McIntyre, 1997). Too few students learn to work in managed health systems or manage the care of the individuals whom they serve (Blumenthal, Gokhale, Campbell, & Weissman, 2001; Moffic, 2000). Training also occurs in disciplinary silos, leaving students unprepared for multi-disciplinary practice (APA, 1998; Casto & Julia, 1994; Richards, 1996).

Looking beyond the formal classroom to the realm of continuing education, research has shown that the prevalent teaching format, the didactic lecture, workshop, or conference, tends to neither change a provider's practice nor improve consumer outcomes (Davis & Taylor-Vaisey, 1997). Of equal concern is the fact that little, if any, education or training is offered to the non-degreed and bachelor-degreed personnel who deliver a large proportion of all care, particularly in public sector and institutional settings (Morris & Stuart, 2002).

A final driver of the concern about competency is tied to the rise of consumerism in healthcare. Consumers increasingly demand meaningful participation in decisions about their care, and this dramatically shifts the traditional balance of power in the treatment relationship. More often, consumers now expect caregivers to be capable of providing information about treatment options and engaging them in collaborative decision-making in treatment planning. This unique set of practitioner

competencies is seldom addressed in education and training programs (Chinman et al., 1999; Dixon et al., 2001; Young, Forquer, Tran, Starzynski, & Shatkin, 2000).

As a result of these various forces and concerns, competency has become an “unavoidable” term in healthcare (JCAHO, 2000). Policymakers laud it, educational programs are required to produce it, and consumers increasingly demand it. Accreditation bodies, such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), require provider organizations to ensure that the competence of all staff members is assessed, maintained, demonstrated, and improved on a continual basis (JCAHO, 2002).

In behavioral health, a common outcome of attention to the issue of competency has been published “lists” of the knowledge or skills considered essential for practice. Various national initiatives have resulted in extensive inventories of competencies (Addiction Technology Transfer Center, 2002; American Board of Examiners in Clinical Social Work, 2001; American Managed Behavioral Healthcare Association and American Society of Addiction Medicine, 2000; American Psychological Association, 1997; Carling, 1993; Coursey et al., 2000a, b; Gill, Pratt, & Barrett, 1997; Hartman, Young, & Forquer, 2000; Kuehnel & Liberman, 1997; Society for Education and Research in Psychiatric-Mental Health Nursing, 2002; Trochim & Cook, 1993).

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Several of these inventories have begun to address the complexities involved in specifying competencies for different types of providers, levels of training, areas of specialization, treatment settings, and populations. However, minimal conceptual work has been completed as a foundation for understanding and implementing competency approaches in the field of behavioral healthcare. Largely unaddressed are questions regarding what constitutes a competency and how it can be reliably assessed. These basic issues are further complicated by shifting standards of care (JCAHO, 2002), the rapidly growing and changing evidence base (Drake et al., 2001), and the inability of educational programs to handle a seemingly endless and ever-growing list of externally imposed requirements regarding the process and content of training (Hoge, Jacobs, Belitsky, & Migdole, 2002). The value of existing competency inventories will be enhanced in their practical application if there is a clearer foundation that provides a framework for both defining and assessing competency within the context of behavioral health practice.

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## HISTORICAL ORIGINS

The concept of competencies can be traced to the distant past. For 3,000 years, the Chinese empire recognized differences in individual abilities by employing civil service exams in selection for government jobs (Anastasi, 1968). In medieval times, apprentices were expected to develop the specific skills they would need for effective job performance by working with a master craftsman. For hundreds of years, educators have defined the knowledge and skills to be covered in their curricula (McLagan, 1997). The English biologist Sir Francis Galton and the American psychologist James McKeen Cattell pioneered the development of objective techniques to measure human intellectual capabilities in the late 19th and early 20th Centuries (Anastasi, 1968; Shippmann et al., 2000).

### A Focus on Work and Employee Selection

In the 1940s and 1950s, Ernest Fleishman and John Flanagan systematically analyzed the work behavior of supervisors and identified broad performance factors (Shippmann et al., 2000). Beginning in the 1960s, many psychologists attempted to identify individual variables that would effectively predict job performance without inherent bias against subgroups (Shippmann et al., 2000). By this time in history, numerous research studies had demonstrated that assessments of academic aptitude, tests of knowledge, grades, and credentials were not good predictors of either job performance or success in life. Research had also demonstrated that academic tests and credentials were biased against women, racial minorities, and persons of lower socioeconomic status (Marrelli, 1998; Spencer, McClelland, & Spencer, 1994). Employees and rejected job candidates were beginning to file legal suits against employers, claiming that employment selection and promotion decisions were being made on the basis of factors other than valid qualifications for a job (Aamodt, 1991).

In 1978, the federal government published the *Uniform Guidelines on Employee Selection Procedures*. The *Guidelines* specified that the selection of workers had to be based on job-related qualifications. These qualifications were to be grounded in an analysis of the important work behaviors and desired outcomes of the job (Equal Employment Opportunity Commission, 1978; Harvey, 1991; Shippmann et al., 2000).

Many of the traditional job analysis approaches still in use today were developed in response to the pressing need to identify individual variables that were effective, unbiased predictors of future job performance,

and could be used in making employment decisions. Some of the job analysis techniques developed were Ernest Primoff's *Job-element Approach*; McCormick, Jeanneret, and Mechams' *Position Analysis Questionnaire*; Ammerman's *Ammerman Technique*; the *Threshold Traits Analysis* developed by Lopez, Kesselman, and Lopez; and the *Job Element Inventory* developed by Cornelius and Hakel (Aamodt, 1991).

Among the individuals working to identify predictive, unbiased variables were Harvard psychologist David McClelland and his colleagues. They developed a two-step strategy to guide their research: (1) the identification of criterion samples comprised of individuals who were either clearly successful in their work or life outcomes, or were significantly less successful, and (2) the comparison of these samples to determine which behaviors and other variables were causally related to the differences in success (Spencer, McClelland, & Spencer, 1994).

Another research strategy developed by McClelland and his colleague, C. Dailey, involved the Behavioral Event Interview (BEI). This was a structured interview process based on John Flanagan's Critical Incident Technique, where interviewees were asked to describe key successful and unsuccessful events that had occurred on the job. Following the interviewee's description of each major event, the interviewer asked a series of questions such as: What led up to the event? Who was involved? What happened? What did you do? What was the result? The BEI was administered to different groups of workers who were performing the same tasks, but had been differentiated as high, average, and poor performers. Using structured content analysis of their interview responses, McClelland identified the variables that distinguished superior performers from average and poor performers (Spencer, McClelland, & Spencer, 1994).

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In 1973, McClelland published an influential article, "Testing for Competence Rather than for Intelligence." In that article, he proposed replacing intelligence and aptitude tests with "competency testing" or "criterion sampling." McClelland defined competencies as the knowledge, skills, traits, attitudes, self-concepts, values, or motives directly related to job performance or important life outcomes and shown to differentiate between superior and average performers (Shippmann et al., 2000; Spencer, McClelland, & Spencer, 1994).

The first field tests of McClelland's research in the early 1970s involved US State Department Foreign Service Information Officers and US Navy Race Relations Consultants. For the Foreign Service Information Officer

positions, McClelland identified numerous competencies that distinguished superior from average officers. He named some of these competencies “Cross-cultural Interpersonal Sensitivity,” “Maintenance of Positive Expectations of Others Despite Provocation,” and “Speed in Learning Personal Networks.” Traditional job analysis had primarily focused on the duties and tasks of the job, and McClelland’s focus on the behaviors and characteristics of the workers was an innovative approach to identifying the requirements for success at work (Spencer, McClelland, & Spencer, 1994).

### **Evolving Competency Frameworks**

Early work on competencies has continued to evolve as different disciplines developed strategies to apply the concept in the workplace. Four disciplines have been especially influential: Industrial-Organizational Psychology, Differential Psychology, Educational Psychology, and Human Performance Technology. The differences among the four disciplines lie more in emphasis than in widely divergent principles and methodologies.

The Industrial-Organizational Psychology framework places more emphasis on the job itself rather than on the performer. Competency identification begins by fully describing the duties and tasks of the target job. Job incumbents and their supervisors are asked to identify the knowledge, skills, abilities, and personal characteristics needed to perform each task. All levels of performers are included in the identification of job duties, tasks, knowledge, and skills, and there is usually no effort to differentiate the input received about job duties from high, average, and low performers. Typically, long and detailed lists of knowledge, skills, abilities, and personal characteristics are developed. The most common application of competencies in Industrial-Organizational Psychology is identifying the competencies to be included in employee selection processes, such as interviews and written tests.

Practitioners in the Differential Psychology perspective have tended to focus on differences between superior and other performers. Emphasis is placed on physical and cognitive abilities, values, interests, and personality traits rather than knowledge and skills. Competencies are perceived as largely innate characteristics that are difficult to develop (McLagan, 1997). A common application of competencies in Differential Psychology involves identifying employees with high potential for leadership positions.

The Educational Psychology approach focuses on specifying the full range of competencies required for successful job performance. The differentiation of superior performers from others is not seen as crucial, and the emphasis is on developing people so they will be successful. Knowledge and skills that can easily be taught and developed are per-

ceived as important, as well as more complex abilities and personal characteristics that are more difficult to develop. Important applications of competencies in Educational Psychology are in identifying the competencies workers need in order to become effective performers, and creating performance management, training, and other development programs to help them build these competencies (McLagan, 1997).

The Human Performance Technology (HPT) framework approaches competencies from the perspective of performance improvement. What can the organization do to maximize the performance of its employees? HPT competency initiatives focus on identifying the knowledge, skills, abilities, and personal characteristics consistently demonstrated by exemplary performers. Exemplary performers are those who consistently exceed expectations for work accomplishments, in contrast to fully successful performers who consistently meet expectations (Dubois, 1999). The key idea is that if an organization can discover what makes an employee an exemplary performer, it can then apply that information in helping other employees build those competencies and increase their accomplishments (Gilbert, 1996). Typical applications of competencies in the HPT framework include organizational development and design initiatives, business process improvement, succession management, training and development programs, performance management, and implementation of incentive systems.

## **DEFINING COMPETENCIES**

A fundamental challenge in the application of competency approaches is establishing consensus regarding an operational definition of the concept. The published literature contains numerous definitions that outline the core elements of competency (Athey & Orth, 1999; Lucia & Lepsinger, 1999; Marrelli, 1998; Mirabile, 1997; Spencer, McClelland, & Spencer, 1994; Spencer & Spencer, 1993). These elements and the language used to describe them, vary among authors. The same term may be used by different competency theorists and practitioners to describe two or more different capabilities. The particular terms used are not important in themselves. What matters is consistency within an organization or community of practice in the use of the terms. Offering and adopting a clear definition of an individual competency in a work environment is much more important than focusing on whether, in an abstract way, it is the "correct" definition (Marrelli, 1998).

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We present a definition of the competency construct and four elements of competency based on a synthesis and distillation of previously published works and our practical experience in the application of competencies in the workforce:

A competency is a measurable human capability that is required for effective performance. It is comprised of knowledge, a single skill or ability, or personal characteristic—or a cluster of these building blocks of work performance. Successful completion of most tasks requires the simultaneous or sequenced demonstration of multiple competencies.

Competency experts often refer to the elements of competency as the KSAPs: *knowledge, skills, abilities, and personal characteristics*. Each of these elements is described below.

### **Knowledge**

Knowledge is awareness, information, or understanding about facts, rules, principles, guidelines, concepts, theories, or processes needed to successfully perform a task (Marrelli, 2001b; Mirable, 1997). The information may be concrete, specific, and easily measurable or more complex, abstract, and difficult to assess (Lucia & Lepsinger, 1999). Knowledge is acquired through learning and experience. Examples include knowledge of the federal, state, and local regulations governing patient care; knowledge of the diagnostic characteristics of a disorder; or knowledge of a practice guideline.

Historically, training and education programs have placed heavy emphasis on imparting knowledge. From a competency perspective, it is important that knowledge considered essential for a task or job be identified as explicitly as possible. Consistent with McClelland's original set of premises, the knowledge imparted should also have a link to meaningful, work-related outcomes. Therefore, the assessment of knowledge as an element of competency should take into consideration the impact of that knowledge on individual job performance.

### **Skills**

A skill is a capacity to perform physical or mental tasks *with a specified outcome* (Marrelli, 1998). Similar to knowledge, skills can range from highly concrete and easily identifiable tasks, such as completing a patient

registration form, to less tangible and more abstract tasks, such as facilitating a team meeting in order to achieve consensus on a treatment plan (Lucia & Lepsinger, 1999). Other examples of skills include formulating a diagnosis, administering a medication through injection, and following a structured interview protocol. Spencer and Spencer (1993) refer to knowledge and skills collectively as “surface” competencies, as they tend to be the easiest elements of competency to develop through training.

### **Abilities**

An ability is a demonstrated cognitive or physical capability to successfully perform a task with a *wide range of possible outcomes* (Marrelli, 1998). It is often a constellation of several underlying capacities that enable us to learn and perform. Examples of abilities include thinking analytically, problem-solving, making projections based on current data, managing or evaluating a treatment program, and synthesizing and integrating information from several sources, as in preparing a review of the literature on the effectiveness of a treatment. Abilities are more complex than skills, and difficult and time consuming to develop, as they typically have a strong component of innate capacity. For example, analytical thinking comes more naturally to some people. Although most persons can develop a level of analytical thinking over time, for some it can be a long and difficult process.

### **Personal Characteristics**

There are numerous other human characteristics that influence and may be required for effective performance. These include values, attitudes, traits, and the behaviors that are manifestations of these human characteristics. Distinguishing these characteristics and associated behaviors as distinct from skills and abilities is somewhat arbitrary, as these characteristics may be essential to effective performance and, at least to some extent, may be taught and learned. The reason that they are often considered separately relates to their emotional/affective quality or emphasis on personality, as opposed to the cognitive and physical quality of skills and abilities.

Marrelli (1998, 2001b) has suggested that it is useful to approach these “personal characteristics” by defining them as “enabling behaviors.” She describes an enabling behavior as a work habit or manner of conducting oneself that contributes to effective work performance. She prefers use of the term enabling behaviors, rather than attitudes, values, traits, characteristics, or other such abstract terms, to emphasize the importance, from a work performance perspective, of *demonstrating* rather than simply *possessing* competencies. What is important in the workplace is one’s behav-

ior and how it results in the accomplishment of work. Abstract constructs such as values, attitudes, and traits cannot be directly measured. Rather, assessment of these constructs requires inference. Thus, instead of focusing on trait or personality concepts that would label an individual as organized, intellectually curious, personable, or a high achiever, the related enabling behaviors might be described as follows: manages work assignments to meet schedule commitments, engages in continuous learning, develops rapport with others, and routinely exceeds expected results.

This discussion of the elements of competencies points out that these elements vary on several dimensions: learned versus innate, cognitive/physical versus emotional/personality, and simple versus complex. Table 1 compares knowledge, skill, ability, and personal characteristics on these dimensions.

### The Importance of Clusters

To make most competencies practical for use in communication, selection, training, and evaluation, it is important to define them as a cluster of knowledge, skills, abilities, and personal characteristics. This contrasts with the traditional job analysis approach that breaks down work requirements into a multitude of specific elements. For example, a cluster labeled by competency experts as “Analytical Thinking” would likely be defined by traditional human resource personnel with a long list of distinct capacities such as deductive reasoning, inductive reasoning, information ordering, classification, ability to synthesize information, and pattern identification. In contrast to this “laundry list” approach, competencies are ideally developed as “user-friendly” clusters that can be easily understood and applied by students, educators, staff, and supervisors. If broken down in the traditional job analysis approach, a list of 10 clus-

**TABLE 1**  
**Attributes of Competency Elements**

<i>Dimensions</i>	<i>Competency Elements</i>			
	<i>Knowledge</i>	<i>Skill</i>	<i>Ability</i>	<i>Personal Characteristic</i>
Learned	X	X	X	X
Innate			X	X
Cognitive/physical	X	X	X	
Emotional/personality				X
Simple	X	X		
Complex	X	X	X	X

tered competencies could easily expand into a list of 60 or 80 individual competencies, which would be an unworkable number for practical application in managing and developing human resources.

## **FROM COMPETENCIES TO COMPETENCY MODELS**

Individual competencies are combined and organized into competency models. A competency model is simply a conceptual framework or organizing scheme that details the competencies that are required for effective performance in a particular job. To facilitate application, a competency model may be organized into different categories of competencies. For example, a model could be developed on three levels:

- “Core competencies” that apply to everyone in the organization, such as ensuring client rights, and practicing infection control.
- “Job family competencies” that apply to everyone providing a particular type of service in the organization, such as outpatient clinical treatment, case management, or rehabilitation therapy.
- “Level competencies” that apply to each job level working within a job family. For example, clinical staff could have three levels: unlicensed direct care staff, licensed/independent direct care staff, and clinical supervisors. Each level would have its own set of competencies, or may have the same competencies with different behavioral expectations.

In a behavioral healthcare setting, for example, an organization may develop a competency model for each type of job, such as an outpatient social worker or inpatient nurse practitioner. The competencies included in each model, and the levels of expected mastery of those competencies, will vary depending upon job function and role. Alternatively, the organization could identify core competencies that every staff person should demonstrate and then identify additional, specific competencies for each job.

A complete competency model typically includes categories of competencies and the list of individual competencies that comprise each category. The following information would be identified for each competency:

- Competency name
- Definition (the meaning of the competency within the organization)
- Descriptors (words or phrases that clarify or amplify the definition)

- Behavioral examples (how the competency is demonstrated on the job at different levels of proficiency)

The competencies included in a model should be determined by specific job performance requirements *and* organizational factors such as strategic direction, vision, culture, organizational dynamics, and challenges. Thus, competency models for the same job role in two different healthcare settings would most likely include some common competencies and some that are specific to the setting. Also, the competency definition, descriptors, and behavioral examples should be tailored specifically for the context in which they will be applied. Thus, although a competency labeled “Assessment” may be included in the competency models for clinical psychologists in both a for-profit substance use disorders treatment center and a government-operated mental health center, the competency may be defined quite differently, with dissimilar behaviors seen as desirable.

## THE IMPORTANCE OF ORGANIZATIONAL CONTEXT

The competency of an individual is only one determinant of effective work performance. The characteristics of the organization where the work occurs can have a dramatic impact on performance. Those characteristics relate to the nature of information available, the environment, tools provided, and factors that enhance employee motivation. Ineffective job performance can be traced to the absence or insufficiency of one or more of these elements at the individual, work group, or organizational level.

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The element of *information* is related to the clarity of performance goals, standards for performance, policies, work processes, reference materials, and feedback. The element of *environment* pertains to the organizational culture and values, as well as the physical characteristics of the work setting. *Tools* encompass job aids, computer systems, equipment, and supplies. The element of *motivational enhancements* includes consequences to the performer, the appraisal system, the promotional system,

compensation, monetary and non-monetary incentives, recognition and reward, and peer pressure (Marrelli, 2001a).

It is critical that behavioral healthcare organizations understand that possession of the required competencies is not sufficient for effective performance by their workforce. All five elements of performance—information, environment, tools, motivational enhancements, *and* individual competency—must be present in the organization to ensure effective performance. Extensive research in the organizational development and human performance technology fields strongly demonstrates that a competent individual placed in an organization where a competency is not understood, valued, supervised, supported, or rewarded is unlikely to display that competency on an ongoing basis (Gilbert, 1996; Langdon, 2000; Rummier & Brache, 1995). As Geary Rummier, a leader in the human performance technology field, has so cogently stated, “When you pit a bad system against a good performer, the system almost always wins” (Rummier, 2004).

One example, research on continuing medical education, has demonstrated that newly learned skills tend not to be routinely displayed when the learner returns to the workplace if the behavior is not rewarded or sanctioned, or runs counter to prevailing practices within the workplace (Davis & Taylor-Vaisey, 1997). Similarly, research on organizational change has demonstrated that the adoption by healthcare providers of evidence-based practices is influenced by the level of institutional resources, the attitudes of program leaders, and organizational climate (Corrigan, Steiner, McCracken, Blaser, & Barr, 2001; Lehman, Greener, & Simpson, 2002; Rosenheck, 2001). In the work setting, what truly matters is the performance of employees, rather than the “possession” of competencies in some abstract sense. Thus, managers striving to increase the effectiveness of their workforce must attend to both the competency of their employees and the characteristics of the organization where the employees function.

## **APPLICATION OF COMPETENCY MODELS**

The pioneering work of McClelland and other psychologists on identifying specific competencies that lead to success on the job has been widely applied during the past decade in human resource management in business and industry. Thousands of organizations throughout the world have commissioned competency studies that are used as the basis for hiring, developing, managing, and promoting employees (Athey & Orth, 1999; Lucia & Lepsinger, 1999; Mirabile, 1997). It has been esti-

mated that US businesses spend as much as \$100 million per year in developing competency models for specific positions (Athey & Orth, 1999; Spencer & Spencer, 1993).

Competency modeling has drawn such interest because of the heated struggle for competitive advantage in corporate America and the belief that qualified employees are the key to success (Lucia & Lepsinger, 1999; Prahalad & Hamel, 1990). Organizations have discovered that using competencies as the basis of their people management systems offers many general benefits, including:

- Creating a culture where human capital is highly valued.
- Helping employees understand the need for continuous learning by identifying the competencies they will need to obtain desirable roles or positions within the organization.
- Replacing promotions and career ladders with opportunities for the lateral growth of individuals in organizations that have been “flattened” or become less hierarchical due to the drive for efficiency and cost containment.
- Replacing *job* security with the opportunity to develop new capabilities that employees can use to enhance their *career* security.
- Moving away from narrowly-defined individual jobs, and toward more functionally integrated work processes and team-based approaches (Marrelli, 1998).

Beyond these general benefits, competencies have been applied successfully in business and industry in eight different components of human resource management systems, which follow.

*Strategic Workforce Planning* is the process of defining organizational strategies and goals for the next several years, and then planning how to build a workforce that can implement the strategies and achieve the goals. In strategic workforce planning, strategies and goals are clearly defined, and then the specified functions necessary to achieve these are outlined. The subsequent steps involve defining the work roles needed for each function, the number of persons needed in each role, and the competencies required for successful execution of each role. The competencies of the current, and sometimes the projected, workforce are assessed, allowing gaps to be identified. Options for filling the gaps are examined and the selected approaches are planned and implemented. These alternatives may include reassigning employees to new roles, developing current employees, hiring new employees with the required competencies, or establishing special training programs to encourage new entrants into the workforce.

*Selection* is the process of matching people with open positions, including choosing external candidates for new or vacated positions, internal candidates for promotions or lateral moves, and employees for reassignment or displacement. Competency-based selection is driven by the premise that achieving a closer match between the requirements of the job and an employee's capabilities will result in higher job performance and satisfaction. In a competency-based selection process, the required competencies identified for the target positions are used as the selection criteria. Interviews, written tests, assessment centers, ratings of education and experience, and any other selection instruments to be used are based on these competencies.

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***Our educational systems have not kept pace with the dramatic changes in healthcare.***

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*Performance Management* consists of a continuous dialog between supervisors and employees in order to set performance goals and expectations; monitor progress; provide feedback, coaching, and development opportunities; and evaluate progress. Competency-based performance management focuses on assessing and rewarding both how work was accomplished (the process) and the goals achieved (the outcomes). The competencies employees need to succeed in their jobs are identified for them. These are the "how to" of work. Emphasis is placed on providing ongoing coaching and feedback to employees to help them build these competencies.

In competency-based *Employee Development* systems, the training and development programs, curricula, and activities are built around the competencies required for effective performance in specific functions or job roles. Employees participate in development programs to build required competencies for which they lack proficiency, or to further build already strong competencies to add additional value to the organization.

In competency-based *Career Planning and Development* systems, organizations design career paths that designate an upward sequence or lateral network of career moves. The competencies required for each step of the career path or network are identified. Employees and their supervisors then use the lists of required competencies to prepare employees for career movement.

The objective of *Succession Planning* is to ensure that several employees are prepared to assume each critical position when it becomes vacant. The competencies needed for each critical position are identified. These competency profiles are then used to nominate and rank employees with high potential for succeeding in each position. The profiles may also be used to identify external candidates.

Competency-based *Compensation Systems* reward employees for the development and application of the competencies the organization has identified as important for success. In these systems, employees' competencies can affect their assigned base pay grade, as well as pay increases and bonus incentive pay.

Competency-based *Reward and Recognition Programs* identify and reward employees based upon the demonstration of competencies that the organization highly values. An organization identifies the competencies it prizes, such as leadership, and establishes award programs to recognize employees who demonstrate high levels of these competencies in their work (Marrelli, 2001b).

## IMPLICATIONS FOR BEHAVIORAL HEALTH

This review of the history and fundamentals of the concept of competency lead to a series of recommendations regarding workforce development efforts in behavioral health. An understanding of the foundations of the concept and its definition can ground and advance efforts to build competencies in the fields of mental health and substance use disorders treatment. This understanding has the potential to move the field beyond the compilation of required knowledge and skills to more thorough models of competency, and to more effective use of these models. Ten recommendations are offered below.

1. *Dedicate a greater proportion of the behavioral health field's investment in human resources to developing those resources.* Mental healthcare and substance use disorders treatment are labor-intensive endeavors. It is estimated that up to 75% of expenditures in behavioral health organizations are for human resources, while a very small percentage of the expenditures are used to develop that resource. The comprehensive use of competency-based approaches in business and industry to select, develop, and promote employees stems from a broad recognition of the payoff from investing in the individual human resources that comprise any organization.

2. *Adopt and integrate sophisticated methods for competency development and application that are readily available from business and industry.* Too a large extent, behavioral health has pursued an "armchair approach" to competency modeling, where a list of competencies is created based on the opinion of a panel of experts without empirical validation. As a first step, the field could benefit from employing a sound Industrial/Organizational Psychology approach that specifies job duties and tasks and then empirically identifies the knowledge, skills, abilities, and personal charac-

teristics (KSAPs) required to effectively perform each duty and task. A next step would be to follow the common practice in Human Performance Technology and cluster long lists of KSAPs into a limited number of essential competencies that can be more easily understood by employees and supervisors, and will be more manageable guides in workforce development efforts. Following the traditions of Educational Psychology, the field should also employ a variety of training and staff development practices to build the competencies needed by employees. Examining the differences between employees, as embodied in the Differential Psychology and Human Performance Technology approaches, will illuminate the competencies demonstrated by high achievers in the field, so that these can be incorporated into our competency models. Using these multiple approaches will yield more robust competency models, and will position the field to apply those models *comprehensively* in workforce planning, employee selection, performance management, development, career planning, succession planning, compensation, and employee reward and recognition systems.

3. *Observe “exemplary” employees in order to identify and describe essential competencies.* To date, this basic strategy has been used infrequently in behavioral health. Instead, it appears that expert opinion, as outlined in the published literature or in the recommendations of expert panels, has been the principal source of information about competencies. While the opinions of individual experts or panels of experts can be of significant value, observation of the actual behavior of highly effective practitioners may offer the most accurate blueprint of the range of competencies required for practice, and help identify the specific behaviors that comprise each of those competencies. This strategy guards against the development of competency models that are detached from the practical realities of delivering care.

4. *Provide detailed information about required competencies to direct care staff, supervisors, and trainers.* Historically, treatment in the behavioral health field has been largely driven by theory. Individuals entering the field have been taught the theory and accompanying principles that should guide therapeutic action. However, instruction has been light on guidelines or detail that trainees need in order to understand the specific behaviors expected of them. In a recent study, psychology interns lamented the lack of “road maps” in their attempts to learn how to treat individuals with serious mental illness (Hoge, Stayner, & Davidson, 2000). As the field now moves from teaching “schools of thought” to teaching “bodies of evidence,” the opportunity exists to develop and use competency models to make the expected behaviors more visible among different types of providers and for different types of practice. Students, trainers, direct care staff, and supervisors need “user-friendly” competency models that clearly

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define the competencies needed for a particular job role, and provide specific behavioral examples at several levels of proficiency. Anecdotal case studies that illustrate the application of a competency or competency model in a realistic work situation would also be helpful.

5. *Increase the emphasis on developing skills and abilities in training.* While current educational efforts incorporate skill development, much of the actual activity in training and education programs revolves around didactic efforts to impart knowledge. Building a professional knowledge base is an important part of an education for behavioral health providers, but we must ensure that the knowledge taught is directly relevant to common work requirements and skills and abilities needed to provide effective care. For supervisors, it is also essential to build the leadership abilities necessary to successfully manage employees' performance.

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***Largely unaddressed are questions regarding what constitutes a competency and how it can be reliably assessed.***

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6. *Performance in "real world" settings should constitute the ultimate criterion of competency.* Formally assessing an individual's knowledge or proficiency in a skill or ability constitutes one criterion of competency. The formal assessment of proficiency, however, is an imprecise proxy for whether one *actually* demonstrates the competency on the job in a consistent fashion. Thus, the optimal criterion in efforts to build and assess competencies should be their demonstration in routine practice.

7. *Link competencies to outcomes.* Whether identified through expert opinion or the observation of exemplary practitioners, competencies outline behaviors that are *presumed* to have some link to desired outcomes. Since the behavioral healthcare field is in an early phase of evidence-based practice, the demonstrated links between specific practices and outcomes are fairly rare. Examining and establishing such links must be a priority in order to validate the competencies that are considered essential elements of evidence-based practice, and to ensure that these competencies constitute more than the opinions of experts or the common practices of those working in the field. This is a challenging and difficult objective. As such, it must be considered an intermediate and long-term objective.

8. *Teach students and practitioners to be self-directed learners and problem solvers.* Training programs are increasingly overwhelmed with the rapid expansion of knowledge in the field and the burgeoning number of requirements issued by organizations that accredit training programs. A paradigm shift is required that abandons efforts to teach *all* competencies that are required for practice. This approach should be replaced

with an effort to provide training in core competencies and in selected specialty skills. Simultaneously, students should be taught self-directed learning and problem solving techniques that they can apply when faced with novel clinical problems, populations, or treatment interventions. A self-directed learner and problem-solver is better equipped to adapt to the rapidly changing healthcare environment.

9. *Distinguish between difficult-to-develop and easier-to-develop competencies.* In the process of developing competency models for work roles in behavioral health care, it is advisable to distinguish the competencies that are readily amenable to development, such as most knowledge and skills, and those that are difficult to develop, such as many abilities and enabling behaviors. Possession of the difficult-to-develop competencies, such as interpersonal skills and problem-solving abilities, could be increasingly used as selection criteria for entry into educational programs and jobs. The easier-to-develop competencies could then become the focus of training. Among psychologists, there has been much discussion about which abilities and enabling behaviors can and cannot be developed, or cannot be developed within a reasonable span of time (Green, 1999; McClelland, 1973; Spencer & Spencer, 1993; Sternberg, 1998). A relevant question with respect to the behavioral health care workforce is whether a specific competency is worth developing or whether the investment required, in terms of time and costs, will outweigh the benefits derived.

10. *Shape treatment organizations to promote competent behavior.* There is a seemingly natural focus on individuals when attempting to develop competencies. However, initiatives in behavioral health to promote competencies must recognize that organizational variables may be as important as *or even more important* than individual variables, training, and education in producing effective performance. It is imperative to couple advances in behavioral healthcare education with efforts to help the managers of behavioral health organizations provide their employees with an organizational culture and the necessary supports that will foster competent behavior (Marrelli, 2001a).

## CONCLUSION

The Institute of Medicine recently described the chasm that exists between what is optimal and what is routine in the delivery of healthcare in America (Institute of Medicine, 2001). In its call for corrective action, the IOM focused not on individuals, but on the need to reform the programs that educate practitioners and the healthcare systems where these practitioners work.

A similar theme emerges when considering efforts to build competencies in the behavioral health workforce. Without sufficient guidance or direction, providers have been asked to treat individuals with mental illness and substance use disorders. Too often, these providers have been asked to conduct this work in organizations that fail to support or even thwart attempts to engage in “competent” practices. As we strive to improve our systems of care, the burden clearly lies with researchers, educators, and the administrators of healthcare organizations to identify the competencies required for effective practice, to effectively teach these competencies, and to support their application in daily process of caring for those in need.

## REFERENCES

- Aamodt, M. (1991). *Applied industrial/organizational psychology*. Belmont, CA: Wadsworth.
- Addiction Technology Transfer Center. (2002). *Addiction counseling competencies: The knowledge, skills, and attitudes of professional practice*. Addiction Technology Transfer Center with SAMHSA and CSAT.
- American Board of Examiners in Clinical Social Work. (2001). *Professional development and practice competencies in clinical social work*. Author..
- American Managed Behavioral Healthcare Association and American Society of Addiction Medicine (2000). *Addiction guidelines offer much-needed direction on credentialing*. *Behavioral Health Accreditation and Accountability Alert*, 5(4), 1–4.
- American Psychiatric Association. (2000). *Practice guidelines for the treatment of psychiatric disorders: Compendium 2000*. Washington, DC: Author.
- American Psychological Association. (1997). *Changes in the health care delivery system: Recommendations for the education, training, and continuing professional education of psychologists*. Washington, DC: Author.
- American Psychological Association. (1998). *Interprofessional health care services in primary care settings: Implications for the education and training of psychologists*. Washington, DC: Author..
- Anastasi, A. (1968). *Psychological testing*. New York: Macmillan.
- Athey, T.R., & Orth, M.S. (1999). *Emerging competency methods for the future*. *Human Resource Management*, 38(3), 215–225.
- Blumenthal, D., Gokhale, M., Campbell, E.G., & Weissman, J.S. (2001). *Preparedness for clinical practice: Reports of graduating residents at academic health centers*. *Journal of the American Medical Association*, 286, 1027–1034.
- Carling, P.J. (1993). *Training standards for staff who work with serious mental illness in public mental health services*. Waterbury, VT: Vermont: Department of Mental Health and Mental Retardation.
- Casto, R.M., & Julia, M.C. (1994). *Interprofessional care and collaborative practice*. Pacific Grove, CA: Brooks/Cole.
- Chinman, M., Allende, M., Weingarten, R., Steiner, J., Tworowski, S., & Davidson, L. (1999). *On the road to collaborative treatment planning*. *The Journal of Behavioral Health Services and Research*, 26(2), 211–218.
- Corrigan, P., Steiner, L., McCracken, S., Blaser, B., & Barr, M. (2001). *Strategies for disseminating evidence-based practices to staff who treat people with serious mental illness*. *Psychiatric Services*, 52, 1598–1606.
- Coursey, R.D., Curtis, L., Marsh, D.T., Campbell, J., Harding, C., & Spaniol, L., et al. (2000a). *Competencies for direct service staff members who work with adults with severe mental illnesses in outpatient public mental health/managed care systems*. *Psychiatric Rehabilitation Journal*, 23(4), 370–377.

- Coursey, R.D., Curtis, L., Marsh, D.T., Campbell, J., Harding, C., & Spaniol, L., et al. (2000b). Competencies for direct service staff members who work with adults with severe mental illnesses: Specific knowledge, attitudes, skills, and bibliography. *Psychiatric Rehabilitation Journal*, 23(4), 378–392.
- Crits-Christoph, P., Chambless, D.L., Frank, E., Brody, C., & Karp, J.F. (1995). Training in empirically validated treatments: What are clinical psychology students learning?. *Professional Psychology: Research and Practice*, 26, 514–522.
- Davis, D., & Taylor-Vaisey, A. (1997). Translating guidelines into practice: A systematic review of theoretic concepts, practical experience, and research evidence in the adoption of clinical practice guidelines. *Canadian Medical Association Journal*, 157, 408–416.
- Dixon, L., McFarlane, W., Lefley, H., Lucksted, A., Cohen, M., & Falloon, I., et al. (2001). Evidence-based practices for services to families of people with psychiatric disabilities. *Psychiatric Services*, 52(7), 903–910.
- Drake, R.E., Goldman, H.H., Leff, H.S., Lehman, A.F., Dixon, L., & Mueser, K.T., et al. (2001). Implementing evidence-based practices in routine mental health service settings. *Psychiatric Services*, 52(2), 179–182.
- Drotos, C. (2001). Credentials losing credence. *Behavioral Health Management*, 21(4), 1.
- Dubois, D. (1999). Competency modeling. In D. Langdon, K. Whiteside & M. McKenna (Eds.), *Intervention resource guide: 50 performance improvement tools* (pp. 106–111). San Francisco: Jossey-Bass/Pfeiffer.
- Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, Department of Justice (1978). Uniform guidelines on employee selection procedures. *Federal Register*, 43(166), 38295–38309.
- Gilbert, T. (1996). *Human competence: Engineering worthy performance*. Washington, DC: International Society for Performance Improvement.
- Gill, K.J., Pratt, C.W., & Barrett, N. (1997). Preparing psychiatric rehabilitation specialists through undergraduate education. *Community Mental Health Journal*, 33, 323–329.
- Green, P. (1999). *Building robust competencies: Linking human resource systems to organizational strategies*. San Francisco, CA: Jossey-Bass.
- Hartman, M., Young, A., & Forquer, S. (2000). *Core competencies for practitioners providing care to individuals with severe mental illness*. Princeton, NJ: Center for Healthcare Strategies, Inc.
- Harvey, R. (1991). Job analysis. In M. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology*, 2nd ed. (pp. 71–163). Palo Alto, CA: Consulting Psychologists Press.
- Herz, M.I., Liberman, R.P., Lieberman, J.A., Marder, S.R., McGlashan, T.H., Wyatt, R.J. et al. (2002). Practice guideline for the treatment of patients with schizophrenia. In *American Psychiatric Association practice guidelines for the treatment of psychiatric disorders: Compendium* (pp. 349–461). Washington, DC: American Psychiatric Association.
- Hoge, M.A. (2002). The training gap: An acute crisis in behavioral health education. *Administration and Policy in Mental Health*, 29(4/5), 305–317.
- Hoge, M.A., Jacobs, S., Belitsky, R., & Migdole, S. (2002). Graduate education and training for contemporary behavioral health practice. *Administration and Policy in Mental Health*, 29(4/5), 335–357.
- Hoge, M.A. & Morris, J.A. (Eds.). (2002). *Behavioral health workforce education and training*. [Special issue]. *Administration and Policy in Mental Health*, 29(4/5).
- Hoge, M.A., Stayner, S., & Davidson, L. (2000). Psychology internships in the treatment of severe mental illness: Implications for training in academic medical centers. *Journal of Clinical Psychology in Medical Settings*, 7, 213–222.
- Hoge, M.A., Thakur, N., & Jacobs, S. (2000). Understanding managed behavioral health care. *Managed Care and Mental Health*, 23(2), 241–253.
- Institute of Medicine (2000). *To err is human: Building a safer health system*. Washington, DC: National Academy Press.
- Institute of Medicine (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington: National Academies Press.
- Institute of Medicine (2003). *Health professions education: A bridge to quality*. Washington, DC: The National Academies Press.
- Joint Commission on Accreditation of Healthcare Organizations (2000). *Meeting the competency challenge in behavioral healthcare: The resource tool for behavioral healthcare human resource professionals who must meet the rigorous requirements of JCAHO*. Washington, DC: C & R Publications, Inc.
- Joint Commission on Accreditation of Healthcare Organizations (2002). *Hospital accreditation standards*. Oakbrook Terrace, IL: Joint Commission Resources, Inc.
- Kuehnel, T.G., & Liberman, R.P. (1997). *Competencies for psychiatric rehabilitation workers*. Camarillo, CA: Psychiatric Rehabilitation Consultants.
- Langdon, D. (2000). *Aligning performance: Improving people, systems and organizations*. San Francisco: Jossey-Bass/Pfeiffer.

- Lehman, W., Greener, J., & Simpson, D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*, 22, 197–209.
- Lehman, A.F., Steinwachs, D.M., Dixon, L.B., Goldman, H.H., Osher, F., & Postrado, L., et al. (1998). Translating research into practice: The schizophrenia patient outcomes research team (PORT) treatment recommendations. *Schizophrenia Bulletin*, 24(1), 1–10.
- Lucia, A., & Lepsinger, R. (1999). *The art and science of competency models: Pinpointing critical success factors in organizations*. San Francisco, CA: Jossey-Bass/Pfeiffer.
- Marrelli, A. (1998). An introduction to competency analysis and modeling. *Performance Improvement*, 37(5), 8–17.
- Marrelli, A. (2001). How to implement performance improvement step-by-step. In M. Silberman (Eds.), *The consultant's tool kit* (pp. 210–218). New York: McGraw-Hill.
- Marrelli, A. (2001). *Introduction to competency modeling*. New York: American Express.
- McClelland, D. (1973). Testing for competence rather than intelligence. *American Psychologist*, 28, 1–14.
- McEvoy, J.P., Scheifler, P.L., & Frances, A. (1999). Treatment of schizophrenia 1999. *Journal of Clinical Psychiatry*, 60(11), 4–80.
- McLagan, P. (1997). Competencies: The next generation. *Training and Development*, 40–47.
- Milner, K., & Valenstein, M. (2002). A comparison of guidelines for the treatment of schizophrenia. *Psychiatric Services*, 53(7), 888–890.
- Mirabile, R. (1997). Everything you wanted to know about competency modeling. *Training and Development Journal*, 73–78.
- Moffic, H.S. (2000). Training psychiatric residents in managed care. *The Psychiatric Clinics of North America*, 23, 451–459.
- Morris, J.A., & Stuart, G. (2002). Training and education needs of consumers, families, and front-line staff in behavioral health practice. *Administration and Policy in Mental Health*, 29(4/5), 377–402.
- J.P. Pickett(Ed.) (2000). *American Heritage Dictionary of the English Language (4th ed.)*. Boston: Houghton Mifflin.
- Prahalad, C.K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 79–91..
- R.R. Richards(Ed.) (1996). *Building partnerships: Educating health professionals for the communities they serve*. New York: Jossey-Bass.
- Rosenheck, R. (2001). Organizational process: A missing link between research and practice. *Psychiatric Services*, 52(12), 1607–1612.
- Rummler, G. (2004). Serious performance consulting. Tampa, FL: Presentation at the annual conference of the International Society for Performance Improvement.
- Rummler, G., & Brache, A.P. (1995). *Improving performance: Managing the white spaces on the organization chart (2nd ed.)*. San Francisco: Jossey-Bass.
- Shippmann, J., Ash, R., Battista, M., Carr, L., Eyde, L., & Hesketh, B., et al. (2000). The practice of competency modeling. *Personnel Psychology*, 53(3), 703–740.
- Society for Education and Research in Psychiatric-Mental Health Nursing (SERPN). (2002). Educational preparation for psychiatric-mental health nursing practice. Philadelphia: Author.
- Spencer, L., McClelland, D., & Spencer, S. (1994). *Competency assessment methods: History and state of the art*. Hay/McBer Research Press.
- Spencer, L., & Spencer, S. (1993). *Competence at work: Models for superior performance*. New York: John Wiley & Sons.
- Sternberg, R. (1998). Abilities are forms of developing expertise. *Educational Researcher*, 27(3), 11–20.
- Trochim, W., & Cook, J. (1993). *Workforce competencies for psychosocial rehabilitation workers: A concept mapping project*. Linthicum, MD: The International Association of Psychosocial Rehabilitation Services.
- Yager, J., Zarin, D.A., Pincus, H.A., & McIntyre, J.S. (1997). Practice guidelines and psychiatric education: Potential implications. *Academic Psychiatry*, 21, 226–233.
- Young, A., Forquer, S., Tran, A., Starzynski, M., & Shatkin, J. (2000). Identifying clinical competencies that support rehabilitation and empowerment in individuals with serious mental illness. *Journal of Behavioral Health Services & Research*, 27(3), 321–334.