



## GUEST EDITORIAL

# Competencies in the 21st century

Competencies in  
the 21st century

Richard E. Boyatzis

*Case Western Reserve University, Cleveland, Ohio, USA*

5

### Abstract

**Purpose** – The purpose of this paper is to show that development of competencies needed to be effective managers and leaders requires program design and teaching methods focused on learning. This is the introductory essay to this special issue of *JMD*.

**Design/methodology/approach** – Competencies are defined and an overview is provided for the eight papers that will follow with original research on competencies, their link to performance in various occupations, and their development.

**Findings** – Emotional, social and cognitive intelligence competencies predict effectiveness in professional, management and leadership roles in many sectors of society. In addition, these competencies can be developed in adults.

**Research limitations/implications** – As an introductory essay, this lays the foundation for the papers in this issue.

**Practical implications** – Competencies needed to be effective can be developed.

**Originality/value** – Despite widespread application, there are few published studies of the empirical link between competencies and performance. There are even fewer published studies showing that they can be developed. This special issue will add to both literatures.

**Keywords** Emotional intelligence, Intelligence, Competences, Assessment

**Paper type** General review

Received 20 April 2007  
Revised 20 August 2007  
Accepted 31 August 2007

The concept of competency-based human resources has gone from a new technique to a common practice in the 35 years since David McClelland (1973) first proposed them as a critical differentiator of performance. Today, almost every organization with more than 300 people uses some form of competency-based human resource management. Major consulting companies, such as The Hay Group, Development Dimensions International, and Personnel Decisions Incorporated and thousands of small consulting firms and independent consultants have become worldwide practitioners of competency assessment and development. And yet, the academic and applied research literature has trailed application. This has resulted in continued skepticism on the part of many academics and some professionals, and less guidance to practitioners from on-going research than is helpful. Some of this is due to the observation that many of the competency validation studies have been done by consultants who have little patience for the laborious process of documenting and getting the results published.

This special issue of the *Journal of Management Development* is devoted to updating our understanding of competencies, how they drive performance and how they are developed. In it, we offer four articles showing the relationship between demonstrated emotional, social, and cognitive intelligence competencies and performance in various occupations, from bank executives to public school principals to R&D managers to military pilots. We also offer four articles showing how these same competencies can be developed in adults. All of the studies in this special issue have been completed by doctoral students as their dissertations or doctoral student/faculty collaborations in the



### **What is a competency?**

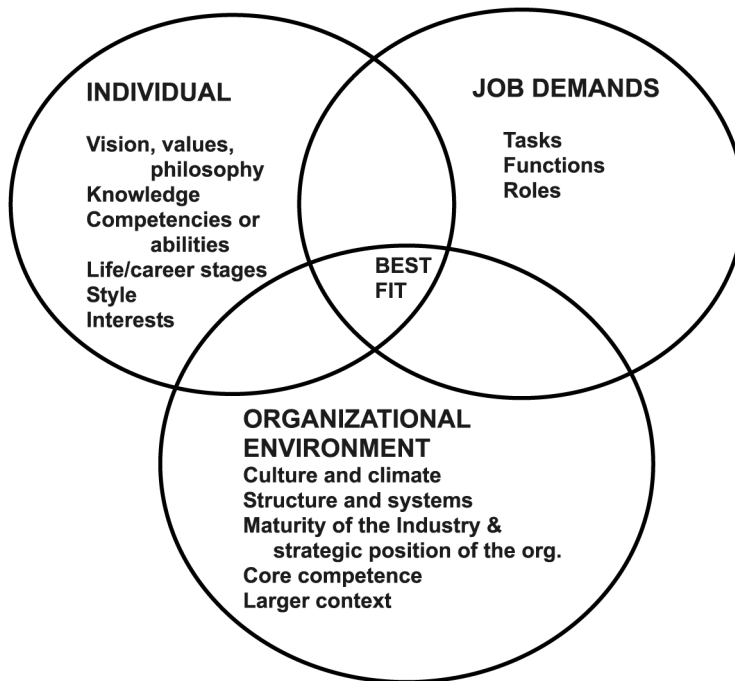
A competency is defined as a capability or ability. It is a set of related but different sets of behavior organized around an underlying construct, which we call the “intent”. The behaviors are alternate manifestations of the intent, as appropriate in various situations or times. For example, listening to someone and asking him or her questions are several behaviors. A person can demonstrate these behaviors for multiple reasons or to various intended ends. A person can ask questions and listen to someone to ingratiate him or herself or to appear interested, thereby gaining standing in the other person’s view. Or a person can ask questions and listen to someone because he or she is interested in understanding this other person, his or her priorities, or thoughts in a situation. The latter we would call a demonstration of empathy. The underlying intent is to understand the person. Meanwhile, the former underlying reason for the questions is to gain standing or impact in the person’s view, elements of what we may call demonstration of influence. Similarly, the underlying intent of a more subtle competency like Emotional Self-Awareness is self-insight and self-understanding.

This construction of competencies as requiring both action (i.e. a set of alternate behaviors) and intent called for measurement methods that allowed for assessment of both the presence of the behavior and inference of the intent. A modification of the critical incident interview (Flanagan, 1954) was adapted using the inquiry sequence from the Thematic Apperception Test and the focus on specific events in one’s life from the biodata method (Dailey, 1971). Later, informant assessment through 360 or assessment center and simulations coded by reliable “experts” are essential. This is a behavioral approach to a person’s talent.

The anchor for understanding which behaviors and which intent is relevant in a situation emerges from predicting effectiveness. The construction of the specific competency is a matter of relating different behaviors that are considered alternate manifestations of the same underlying construct. But they are organized primarily or more accurately initially, by the similarity of the consequence of the use of these behaviors in social or work settings.

A theory of performance is the basis for the concept of competency. The theory used in this approach is a basic contingency theory, as shown in Figure 1. Maximum performance is believed to occur when the person’s capability or talent is consistent with the needs of the job demands and the organizational environment (Boyatzis, 1982). The person’s talent is described by his or her: values, vision, and personal philosophy; knowledge; competencies; life and career stage; interests; and style. Job demands can be described by the role responsibilities and tasks needed to be performed. Aspects of the organizational environment that are predicted to have important impact on the demonstration of competencies and/or the design of the jobs an roles include: culture and climate; structure and systems; maturity of the industry and strategic positioning within it; and aspects of the economic, political, social, environmental, and religious milieu surrounding the organization. The first four articles offered in this special issue are competency validation studies in four different types of professional occupations.

Research published over the last 30 years or so shows us that outstanding leaders, managers, advanced professionals and people in key jobs, from sales to bank tellers,



**Figure 1.**  
Theory of action and job  
performance: best fit  
(maximum performance,  
stimulation, and  
commitment) = area of  
maximum overlap or  
integration

---

appear to require three clusters of behavioral habits as threshold abilities and three clusters of competencies as distinguishing outstanding performance. The threshold clusters of competencies are:

- (1) expertise and experience is a threshold level of competency;
- (2) knowledge (i.e. declarative, procedural, functional and metacognitive) is a threshold competency; and
- (3) an assortment of basic cognitive competencies, such as memory and deductive reasoning are threshold competencies.

There are three clusters of competencies differentiating outstanding from average performers in many countries of the world (Bray *et al.*, 1974; Boyatzis, 1982; Kotter, 1982; Luthans *et al.*, 1988; Howard and Bray, 1988; Campbell *et al.*, 1970; Spencer and Spencer, 1993; Goleman, 1998; Goleman *et al.*, 2002). They are:

- (1) cognitive competencies, such as systems thinking and pattern recognition;
- (2) emotional intelligence competencies, including self-awareness and self-management competencies, such as emotional self-awareness and emotional self-control; and
- (3) social intelligence competencies, including social awareness and relationship management competencies, such as empathy and teamwork.

Competencies are a behavioral approach to emotional, social, and cognitive intelligence.

### **Competencies as behavioral manifestations of talent**

While other interpretations of “intelligence” are offered in the literature, we believe that to be classified as “an intelligence,” the concept should be:

- Behaviorally observable.
- Related to biological and in particular neural-endocrine functioning. That is, each cluster should be differentiated as to the type of neural circuitry and endocrine system involved.
- Related to life and job outcomes.
- Sufficiently different from other personality constructs that the concept adds value to understanding the human personality and behavior.
- The measures of the concept, as a psychological construct, should satisfy the basic criteria for a sound measure, that is show convergent and discriminant validity.

An integrated concept of emotional, social, and cognitive intelligence competencies offers more than a convenient framework for describing human dispositions. It offers a theoretical structure for the organization of personality and linking it to a theory of action and job performance. Goleman (1998) defined an “emotional competence” as a “learned capability based on emotional intelligence which results in outstanding performance at work”. In other words, if a competency is an “underlying characteristic of the person that leads to or causes effective or superior performance” (Boyatzis, 1982), then:

- an emotional, intelligence competency is an ability to recognize, understand, and use emotional information about oneself that leads to or causes effective or superior performance;
- a social intelligence competency is the ability to recognize, understand and use emotional information about others that leads to or causes effective or superior performance; and
- a cognitive intelligence competency is an ability to think or analyze information and situations that leads to or causes effective or superior performance.

If defined as a single construct, the tendency to believe that more effective people have the vital ingredients for success invites the attribution of a halo effect. For example, person A is effective, therefore she has all of the right stuff, such as brains, savvy, and style. Like the issue of finding the best “focal point” with which to look at something, the dilemma of finding the best level of detail in defining constructs with which to build a personality theory may ultimately be an issue of which focal point is chosen. The separate competencies, like the clusters, are, we believe, the most helpful focal point for description and study of performance.

### **Competencies and a holistic theory of personality**

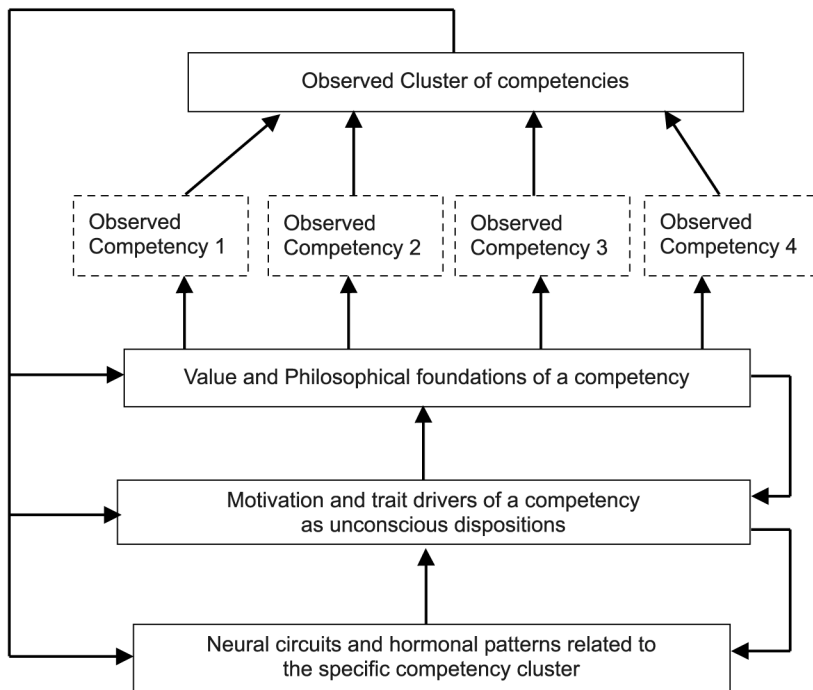
The specification of a competency comes from the personality theory on which this approach is based. McClelland (1951) originally described a theory of personality as comprised of the relationships among a person’s unconscious motives, self-schema, and observed behavioral patterns. Boyatzis (1982) offered this scheme as an integrated system diagram that showed concentric circles, with the person’s unconscious motives

and trait dispositions at the center. These affected, and were affected by, the next expanding circle of the person's values and self-image. The surrounding circle was labeled the skill level. The circle surrounding it included observed, specific behaviors.

The synthesis of Goleman (1995) in developing the concept of emotional intelligence and Goleman (2006) into the concept of social intelligence provided yet another layer to this integrated system view of personality. In particular, Goleman's synthesis introduced the physiological level to this model by relating findings from neuroscience, biology, and medical studies to psychological states and resulting behavior. The result is a personality theory, as shown in Figure 2, that incorporates and predicts the relationship among a person's:

- neural circuits and endocrine (i.e. hormonal) processes;
- unconscious dispositions called motives and traits;
- values and operating philosophy;
- observed separate competencies; and
- competency clusters.

This conceptualization of personality requires a more holistic perspective than is often taken. When integrating the physiological level with the psychological and behavioral levels, a more comprehensive view of the human emerges. The evidence of the causal sequence predicted in this personality theory is emerging but is slow due to the disparate nature of the different fields studying parts of the model. For example,



**Figure 2.**  
Levels within the personality structure

---

arousal of a person's power motive both causes and is affected by arousal of his or her sympathetic nervous system (i.e. SNS) (Boyatzis *et al.*, 2006). When a person's power motive is aroused, he or she is more likely to show behavior associated with a group of competencies called Influence, Inspirational Leadership, or Change Catalyst (Winter *et al.*, 1981; McClelland, 1985). Boyatzis and Sala (2004) showed that these competencies form an empirical cluster of emotional and social intelligence competencies as assessed through the Emotional Competency Inventory and now Emotional and Social Competency Inventory (ECI). These competencies are shown more frequently when a person is operating from a Humanistic versus a Pragmatic Operating Philosophy (Boyatzis *et al.*, 2000). When the power motive is aroused along with a person's self-control at the trait level (McClelland and Boyatzis, 1982; McClelland, 1985), the stressful effects of inhibiting one's urges add to the arousal of the SNS. The result is elevated blood pressure and decreased levels of both immunoglobulin A and natural killer cells (i.e. basic indicators of the immune system). Relatively recent research has shown that arousal of the SNS is associated with neural circuits passing predominantly through the Right Prefrontal Cortex (Boyatzis and McKee, 2005).

Further, it is now the contention of leading researchers in affective neuroscience and genetic expression that experience overtakes genetic dispositions in determining the biological basis of behavior once in adulthood (Williams, 2003). This would suggest that a person's experience, and his or her arousal effect, rewire neural circuits and tendencies to invoke certain neuro-endocrine pathways. Offering support for the observation, or prediction is the proposed personality theory, that use of one's competencies (i.e. behavior in specific settings in life) becomes an arousal that over time creates different dispositions, even at the biological level.

### **Competencies can be developed**

One of the benefits of the competency, or behavioral approach to talent is that we enter a domain of human talent that can be developed in adulthood. Although the understanding of competencies themselves has been extended, perhaps the most important contributions in the last 30 years, has come about primarily in the last 15 years. Decades of research on the effects of psychotherapy (Hubble *et al.*, 1999), self-help programs (Kanfer and Goldstein, 1991), cognitive behavior therapy (Barlow, 1988), training programs (Morrow *et al.*, 1997), and education (Pascarella and Terenzini, 1991; Winter *et al.*, 1981) have shown that people can change their behavior, moods, and self-image. But most of the studies focused on a single characteristic, like maintenance of sobriety, reduction in a specific anxiety, or a set of characteristics often determined by the assessment instrument, such as the scales of the Minnesota Multiphasic Personality Inventory. But there are few studies showing sustained improvements in the sets of desirable behavior that lead to outstanding performance.

The "honeymoon effect" of typical training programs might start with improvement immediately following the program, but within months it drops precipitously (Campbell *et al.*, 1970). Only fifteen programs were found in a global search of the literature by the Consortium on Research on Emotional Intelligence in Organizations to improve emotional intelligence. Most of them showed impact on job outcomes, such as number of new businesses started, or life outcomes, such as finding a job or satisfaction (Cherniss and Adler, 2000), which are the ultimate purpose of development efforts. But showing an impact on outcomes, while desired, may also blur how the

---

change actually occurs. Furthermore, when a change has been noted, a question about the sustainability of the changes is raised because of the relatively short time periods studied. The few published studies examining improvement of more than one of these competencies show an overall improvement of about 10 percent in emotional intelligence abilities three to eighteen months following training (see Boyatzis, 2006 for a review of these studies and their impact).

A series of longitudinal studies underway at the Weatherhead School of Management of Case Western Reserve University have shown that people can change on this complex set of competencies that we call emotional and social intelligence competencies that distinguish outstanding performers in management and professions (Boyatzis *et al.*, 2002). And the improvement lasted for years. The four studies offered in this special issue were part of this stream of research.

We hope you enjoy the research and that it stimulates many ideas for more research as well as application.

### References

- Barlow, D.H. (1988), *Anxiety and Disorders: The Nature and Treatment of Anxiety and Panic*, The Guilford Press, New York, NY.
- Boyatzis, R.E. (1982), *The Competent Manager: A Model for Effective Performance*, John Wiley & Sons, New York, NY.
- Boyatzis, R.E. (2006), "Intentional change theory from a complexity perspective", *Journal of Management Development*, Vol. 25 No. 7, pp. 607-23.
- Boyatzis, R. and McKee, A. (2005), *Resonant Leadership: Sustaining Yourself and Connecting with Others through Mindfulness, Hope, and Compassion*, Harvard Business School Press, Boston, MA.
- Boyatzis, R.E. and Sala, F. (2004), "Assessing emotional intelligence competencies", in Geher, G. (Ed.), *The Measurement of Emotional Intelligence*, Novas Science Publishers, Hauppauge, NY, pp. 147-80.
- Boyatzis, R.E., Murphy, A.J. and Wheeler, J.V. (2000), "Philosophy as a missing link between values and behavior", *Psychological Reports*, Vol. 86, pp. 47-64.
- Boyatzis, R.E., Smith, M. and Blaize, N. (2006), "Sustaining leadership effectiveness through coaching and compassion: it's not what you think", *Academy of Management Learning and Education*, Vol. 5 No. 1, pp. 8-24.
- Boyatzis, R.E., Stubbs, L. and Taylor, S. (2002), "Learning cognitive and emotional intelligence competencies through graduate management education", *Academy of Management Journal on Learning and Education*, Vol. 1 No. 2, pp. 150-62.
- Bray, D.W., Campbell, R.J. and Grant, D.L. (1974), *Formative Years in Business: A Long Term AT&T Study of Managerial Lives*, John Wiley & Sons, New York, NY.
- Campbell, J.P., Dunnette, M.D., Lawler, E.E. III and Weick, K.E. Jr (1970), *Managerial Behavior, Performance, and Effectiveness*, McGraw-Hill, New York, NY.
- Cherniss, C. and Adler, M. (2000), *Promoting Emotional Intelligence in Organizations: Make Training in Emotional Intelligence Effective*, American Society of Training and Development, Washington, DC.
- Dailey, C.A. (1971), *Assessment of Lives: Personality Evaluation in a Bureaucratic Society*, Jossey-Bass, San Francisco, CA.
- Flanagan, J.C. (1954), "The critical incident technique", *Psychological Bulletin*, Vol. 51, pp. 327-35.

- 
- Goleman, D. (1995), *Emotional Intelligence*, Bantam Books, New York, NY.
- Goleman, D. (1998), *Working with Emotional Intelligence*, Bantam Books, New York, NY.
- Goleman, D. (2006), *Social Intelligence*, Bantam Books, New York, NY.
- Goleman, D., Boyatzis, R.E. and McKee, A. (2002), *Primal Leadership: Realizing the Power of Emotional Intelligence*, Harvard Business School Press, Boston, MA.
- Howard, A. and Bray, D. (1988), *Managerial Lives in Transition: Advancing Age and Changing Times*, Guilford Press, New York, NY.
- Hubble, M.A., Duncan, B.L. and Miller, S.D. (Eds) (1999), *The Heart and Soul of Change: What Works in Therapy*, American Psychological Association, Washington, DC.
- Kanfer, F.H. and Goldstein, A.P. (Eds) (1991), *Helping People Change: A Textbook of Methods*, 4th ed., Allyn & Bacon, Boston, MA.
- Kotter, J.P. (1982), *The General Managers*, Free Press, New York, NY.
- Luthans, F., Hodgetts, R.M. and Rosenkrantz, S.A. (1988), *Real Managers*, Ballinger Press, Cambridge, MA.
- McClelland, D.C. (1951), *Personality*, William Sloane Associates, New York, NY.
- McClelland, D.C. (1973), "Testing for competence rather than intelligence", *American Psychologist*, Vol. 28 No. 1, pp. 1-40.
- McClelland, D.C. (1985), *Human Motivation*, Scott, Foresman, Glenview, IL.
- McClelland, D.C. and Boyatzis, R.E. (1982), "The leadership motive pattern and long term success in management", *Journal of Applied Psychology*, Vol. 67 No. 6, pp. 737-43.
- Morrow, C.C., Jarrett, M.Q. and Rupinski, M.T. (1997), "An investigation of the effect and economic utility of corporate-wide training", *Personnel Psychology*, Vol. 50, pp. 91-119.
- Pascarella, E.T. and Terenzini, P.T. (1991), *How College Affects Students: Findings and Insights from Twenty Years of Research*, Jossey-Bass, San Francisco, CA.
- Spencer, L.M. Jr and Spencer, S.M. (1993), *Competence at Work: Models for Superior Performance*, John Wiley & Sons, New York, NY.
- Williams, R. (2003), personal communication.
- Winter, D.G., McClelland, D.C. and Stewart, A.J. (1981), *A New Case for the Liberal Arts: Assessing Institutional Goals and Student Development*, Jossey-Bass, San Francisco, CA.

### Further reading

- Williams, R.B., Barefoot, C., Blumenthal, J.A., Helms, M.J., Luecken, L., Pieper, C.F., Siegler, I.C. and Suarez, E.C. (1997), "Psychosocial correlates of job strain in a sample of working women", *Archives of General Psychiatry*, Vol. 54, pp. 543-8.

### Corresponding author

Richard E. Boyatzis can be contacted at: [richard.boyatzis@case.edu](mailto:richard.boyatzis@case.edu)



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.