

**TRILOGY OF THE LEADER'S MIND:
EMOTIONAL, CULTURAL AND SPIRITUAL INTELLIGENCES**

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ABSTRACT

A tripartite classification of the leader's mind is presented here to include emotional, cultural and spiritual intelligences as key elements of leadership effectiveness. This paper traces the intelligence – leadership relationship from early conceptualization of intelligence as an analytical ability through Gardner's model of multiple intelligences to the current proposal of a tripartite model of the leader's mind that combines traditional analytic ability with three different non-IQ intelligences – emotional intelligence, cultural intelligence, and spiritual intelligence. The proposed model lends itself to empirical testing since all constructs have been operationalized using standardize, reliable and valid instruments.

INTRODUCTION

No subject in psychology has provoked more intense public controversy than the study of human intelligence, partly because, as Judge, Colbert & Ilies (2004) noted, few characteristics in Western society are more valued, or valuable, than intelligence. For example, in a recent Gallup poll before the 2000 presidential election, 90% of Americans responded that understanding complex issues was extremely to very important in determining which candidate they would vote for. Similarly, Lord, Foti, & Vadar (1994) found that of 59 attributes such as honesty, charisma, and kindness, intelligence was the most prototypical of a leader.

From its beginnings, research on how and why people differ in overall mental ability has fallen prey to political and social agendas that obscure or distort even the most well-established scientific findings. As Sternberg (2000) is fond of saying, “Looked at it one way, everyone knows what intelligence is; looked at it the other way, no one does.” For these and other reasons, public understanding of intelligence falls far short of public concern about it. The IQ experts discussing their work in the public arena often feel as though they have fallen down the rabbit hole into Alice’s Wonderland (Gottfredson, 1998).

Thinking in threes is a practice with a long historical tradition positioned in a multitude of worldviews – the Greek tripod virtues of goodness, beauty, and truth, the Christian trinity, the Roman triumvirate, 18th century German psychology comprised of cognition, affection, and conation (will or motivation), Wagner’s trilogy of the Ring, Freud’s id, ego, superego, or the almost universal trilogy of mind, body, and spirit. Sternberg (1988) thought in threes when he posited a theory of the triachic mind based on his definition of intelligence as a kind of mental self-management – the mental management of one’s life in a constructive, purposive way. According to Sternberg, intelligence as mental management consists of three basic elements: (1) *environmental adaptation*; (2) *environmental selection* which occurs when an environment is unsatisfactory or attempts at adaptation may be dysfunctional; and (3) *environmental shaping*. Sometimes neither adaptation nor selection is the preferred course of action. In these cases, Sternberg argues, one might consider environmental shaping which is called for when an individual’s attempts to adapt have failed or when it is impractical or undesirable to select a new

environment. Whereas adaptation involves fitting oneself to the environment, shaping involves fitting the environment to oneself.

What this means is that there is no single set of behaviors that is intelligent for everyone; people react to their environments in different ways. Nevertheless what does appear to be common among successful people is the ability to capitalize on their strengths and compensate for their weaknesses. Successful leaders and followers are not only able to adapt well to their environment but also to modify this environment in order to increase the fit between the setting they find themselves in and their adaptive skills (Sternberg, 1988, pp.11-17).

In this paper, I continue the practice of thinking in threes by offering a tripartite classification of the leader's mind that builds on early conceptualizations of analytic intelligence, extends the current debate over emotional intelligence manifested in the regulation of emotions, and includes two additional non-analytic intelligences, namely cultural and spiritual intelligence. More specifically, I suggest here that emotional, cultural and spiritual intelligence combine with cognitive and metacognitive constructs such as sensemaking, transformation and change to determine the leader's effectiveness.

Early Conceptualizations and Definitions of Intelligence

Perhaps the most famous or infamous definition of intelligence, depending on one's point of view, was proposed by Boring (1923) who suggested that intelligence is what intelligence tests measure. However, the author was not foolish enough to believe that this operational definition was the end of the line for understanding intelligence. On the contrary, he saw it as "a narrow definition, but a point of departure for a rigorous discussion... until further scientific discussion allows us to extend it" (p. 35). Since then, definitions of intelligence captured convergent and divergent themes and several foci were prominent in the ensuing years. For example, the issue of one versus many – is intelligence one thing or is it manifold – is evident in discussions of a general factor on which other intelligences such as practical or social intelligence converge as opposed to the existence of distinctive intelligences such as emotional intelligence. Some scholars have defined intelligence quite narrowly in terms of biological or cognitive elements, whereas others included a broader array of elements, including motivation and personality. The

issue of breadth, like that of one versus many, in many ways remains unresolved (Sternberg, 2000).

The conceptualization of intelligence as a single cognitive ability has had a long history that can be traced back to Sir Francis Galton's pioneering studies of historical creators, leaders and celebrities published in 1869 in *Hereditary Genius*. Fifty years later Charles Spearman (1927) proposed the idea of a general intelligence or "g" factor as the single dimension of cognitive ability. Embedded in this work was the notion that a person's intellectual potential is a fixed, genetically determined trait which can be measured early in life and determines an individual's success later in life. For many years, psychologists have devoted much effort to isolating 'g' from other aspects of cognitive ability thereby revolutionizing research on general intelligence. It allowed investigators to show that the predictive value of mental tests derives almost exclusively from this general factor rather than from the more specific aptitudes measured by intelligence tests. The evidence, summarized by Carroll (1993) puts g at the apex with more specific aptitudes arranged at successively lower levels. These so-called group factors, such as verbal ability, mathematical reasoning, spatial visualization, and memory, are just below g; below these are skills that are more dependent on knowledge and experience, such as the practices of a particular profession.

The main objective of these efforts was the development of a large number of standardized instruments with which to assess interindividual differences in cognitive functioning. In the 20th century the intelligence quotient (IQ) test eventually became the dominant determinant in decisions involving school admission or job selection. Although mental tests are often designed to measure specific domains of cognition such as verbal fluency, mathematical skills, spatial visualization or memory, people who do well on one kind of test tend to do well on the others. This overlap suggests that all such tests measure some global element of intellectual ability as well as specific cognitive skills.

IQ and Leadership

Leadership researchers have long been interested in the relationship between intelligence commonly measured by IQ tests and various leadership outcomes such as follower

satisfaction, group performance or leadership effectiveness. Reviews of the literature on the traits of effective leaders have reinforced the importance of intelligence to leadership (e.g., House & Aditya, 1997). Work on the relationship between IQ and leadership effectiveness or success has been conducted for over 100 years with much of the scientific research on the role of intelligence in leadership dating back to the 1920s and 1930s. This research suggested that intelligence does indeed contribute to leadership. For example, leaders were found to be more intelligent than their followers, and intelligence was consistently correlated with perceptions of leadership (see Bass, 1990, & Lord, DeVader, & Alliger, 1986 for reviews). Bass (1990) reports that general or abstract intelligence is perhaps the individual characteristic that has been most consistently associated with leader emergence and effectiveness with correlations hovering around .40 after correcting for statistical and methodological artifacts (Lord, et al., 1986). Other reviews of this literature though, have been more equivocal. For example, Fiedler (2002) concluded ...”Intellectual abilities. . do not predict leadership performance to any appreciable degree” (p. 92). Thus, whereas intelligence has proven indispensable in many areas of psychology (Schmidt & Hunter, 2000), its overall relationship to leadership is neither strong nor trivial.

Taken together, this research indicates that effective leadership requires a certain level of general intelligence; however, highly intelligent leaders are not necessarily more effective. In fact, this same body of studies also showed that large discrepancies between the intelligence of leaders and followers mitigated against the exercise of effective leadership. However, these early studies, however, did not take into account that intelligent behavior occurs in a social context that includes expectations, demands, and a history of prior experience (Glynn, 1996). Many intelligence experts (e.g., Hedlund & Sternberg, 2000; Kihlstrom & Cantor, 2000) believe that intelligence is context specific. Contextualists (e.g., Sternberg, 1988) point out that in order to understand intelligence, we need to recognize that human adaptation often takes the form of selecting or transforming the environment in which we live. This has resulted in more divergent approaches to intelligence beyond the cognitive or psychometric perspective, which characterized earlier conceptualizations found in IQ theory. Because intelligence is defined relative to a particular context, researchers have shifted the focus from the emphasis on individual traits to

broader frameworks which acknowledge that intelligence is not only embedded in individuals but in organizational contexts as well. For example, Microsoft is known as an intelligent enterprise and intentionally selects employees using mental abilities as a predictor of performance.

From IQ to Multiple Intelligences

In the early 1980s, the time had come to throw a monkey wrench into our cogitations of viewing intelligence as a single cognitive ability. Although verbal and performance IQ and other more 'academic' abilities have taken us far, there also has been dissatisfaction with such limited conceptions of mental abilities (Bar-On, 1997; Cooper & Sawaf, 1007; Mayer & Salovey, 1997). The theory of multiple intelligences (MI) was first described by Howard Gardner (1993) who defines intelligence a set of abilities that allow a person to solve a problem or fashion a product that is valued in one or more cultures. The author does not dispute the existence of g but treats it as a specific factor primarily relevant to academic achievement. Gardner's definition is in sharp contrast to intelligence as defined by the intelligence quotient, which is solely based on verbal and logical-mathematical intelligence. Unlike Spearman and other advocates of general intelligence, Gardner has proposed that intelligence is not a unitary cognitive ability but that there are seven (and perhaps more) quite different kinds of intelligence, each hypothetically dissociated from the others, and each hypothetically associated with a different brain system. Not only does Gardner's model push beyond the traditional concept of IQ as a single, immutable factor but the author also acknowledges the extent to which tests of traditional analytic intelligence tyrannize and pigeonhole people.

Gardner originally postulated seven relatively autonomous "intelligences" in different domains of achievement: *linguistic*, *musical* (as seen in musical geniuses like Stravinsky and the Bach family), *logical-mathematical* (exemplified by Einstein), *spatial* (as seen in the works of Swiss architect Le Corbusier), and *bodily-kinesthetic* (captured in the fluid movements of Martha Graham). In addition, Gardner postulated two forms personal intelligence, one directed toward oneself known as *intrapersonal* intelligence (expressed in Freud's psychoanalytic theory of personality and found in individuals with keen introspective skills) and the other directed toward others or *interpersonal* intelligence (evident in Gandhi's public life or in the occupations of sales

persons and therapist). In his more recent work, Gardner added naturalistic as the eighth intelligence and suggested that people possess all eight intelligences but in varying degrees of strength and skill. Each intelligence is a system in itself, distinct from g. Gardner argues that these separate intelligences exist on the basis of their cultural significance and their correspondence to underlying neural structures.

In sum, Gardner's treatment of cognitive ability in terms of a number of seven intelligences represents a more sustainable conceptualization of human intelligence compared to definitions of intelligence as a single factor. Most leadership theorists agree that multiple intelligences play a part in leadership and organizational effectiveness. Bass (2002), for example, asserts that multiple intelligences contribute to transformational leadership. More specifically, the author suggested that cognitive intelligence is linked to the intellectual stimulation, one of the four Is of transformational leadership.

EMOTIONAL INTELLIGENCE

The recent explosion of interest in emotional intelligence (EI) has largely been fueled by the success of Golman's (1995) book *Emotional Intelligence*. EI refers to an individual's ability to to understand and accurately interpret his or her own emotions as well as those of others. It is a relatively new construct intended to complement the traditional view of intelligence by emphasizing the emotional, personal, and social contributions to intelligent behavior (Gardner, 1983; Mayer & Salovey, 1993; 1995). The key difference between analytical and emotional intelligence is that emotional intelligence involves the integration of emotion with thought, enabling one understand what others are feeling, while analytical intelligence involves the integration, organization, and ordering of thoughts (Goleman, 2001). The EI construct was first discussed by Salovey and Mayer (1990) and had its roots in Gardner's concepts of intra- and interpersonal intelligences, and in Thorndike's (1930) concept of social intelligence.

The current widespread interest in EI has undoubtedly spurred by Goleman's work, which has lead to a range of books and articles which examine EI applications in the context of both individuals and organizations. Part of the popular excitement surrounding EI is due to Goleman's claims of the predictive validity of his EI model. The author asserts that EI accounts for success at

home, at school, and at work and goes on to say that EI will confer "an advantage in any domain in life, whether in romance and intimate relationships or picking up the unspoken rules that govern success in organizational politics" (Goleman, 1995, p. 36).

This is a very tall order which is not quite congruent with the existing research base. For instance, Goleman (1995) referred to a study of Bell Laboratory engineers in which the top performers were equivalent in IQ to other engineers. The key difference, the author claims, is that top performers were more emotionally intelligent than their peers. Unfortunately, the engineers were not tested for EI using one of the several measures used in EI research. Likewise, despite its popularity, many EI measures have received surprisingly little scientific support (Davies, Stankov, & Roberts, 1998). Critics point to a series of studies conducted by Davies et al. (1998) who administered emotional intelligence, personality and cognitive measures to students and military personnel. These authors found a high correlation between all three batteries of tests, suggesting that EI is an aspect of personality rather than a separate intelligence.

This does not mean, however, that EI is not worth getting excited about. EI measures can distinguish between people who truly understand their emotions from those who get lost in them. Often great leaders move followers through emotions and establish a deep emotional connection with those they lead. Their level of understanding of their own emotions allows them to create and nurture resonant relationships with their followers. Unfortunately, in much of the popular literature on EI, the significance of the claims is obscured by rhetoric (e.g., Hein, 1997; O'Brien, 1996), which encouraged the emerging view that EI is more important *per se* than IQ (Dulewicz & Higgs, 2000).

Mayer and Salovey (1997) are the leading proponents of a more limited definition of EI. They treat EI as "thinking with a heart". According to Mayer's four-branch model (Mayer, Caruso, & Salovey, 1999), EI is defined as the ability to perceive emotions, access and generate emotions so as to clarify thoughts, understand emotions and process emotional knowledge, and regulate emotions reflectively to promote emotional and intellectual growth. More specifically, the authors state:

Emotional intelligence refers to an ability to recognize the meanings of emotions and their relationships, and to reason and problem-solve on the basis of them. Emotional intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them (p. 267).

The authors offered two EI models. The first model represents an **ability** approach to EI (Mayer et al., 1999), which is conceived as the ability to solve emotional problems and focuses on the interplay of emotion and intelligence as traditionally defined. Mayer and his associates (2003) clarified the cognitive component in EI by stating, "Emotional intelligence involves problem solving with and about emotions. Current research suggests that mental ability models of EI can be described as a standard intelligence and empirically meet the criteria for a standard intelligence (Mayer, Caruso, & Salovey, 1999, p. 267). More specifically, according to Sternberg (1985), three criteria are needed for an intelligence to exist it: (1) should reflect behavior in the real world, (2) should be purposive or directed toward goals, and (3) should involve either adaptation to the environment (fluid intelligence) or the automation of high-level cognitive processes (crystallized intelligence). Based on this definition and what we know about the construct to date, EI, according to Mayer, Salovey, & Sitaramneious (2001) fits this definition of a traditional intelligence

The second model, known as the **mixed model** (Bar-On, 1997; Goleman, 1995), defines EI as a mixture of abilities and other personality dispositions and traits. This model is substantially different from the ability model by freely describing personality characteristics that might accompany EI including achievement motivation, openness, practical intelligence, self-esteem and subjective well being. However, as Mayer and Salovey (1993,1997) argue, although these personality characteristics may be important elements in EI, they are better addressed directly and as distinct from emotional intelligence. While emotions have gravitationally been thought of as disruptive to one's ability to solve problems, the Mayer et al. model suggests that emotions can and do provide additional richness and clarity to problem solving and decision making processes. Thus, according to Mayer et al., the mixed model incorporates a wide range of personality variables as opposed to Mayer and Salovey's earlier model, which offers a cognitive definition of EI.

In addition to the conceptual issues that have been raised, the measurement of EI also causes concerns. Davies et al. (1998) in their comprehensive review of EI measures that existed at the time found that most EI instruments generally “exhibited low reliability and indicated a lack of convergent validity (p. 989). Further, factor analyses demonstrated that nearly all of the self-report measures that had satisfactory reliabilities loaded on well-known personality factors (e.g., extraversion, agreeableness). Their final conclusion was that, after taking into account general intelligence and personality, “little remains of emotional intelligence that is unique and psychometrically sound” (p. 1013).

The ability and mixed models of EI have generated assessment devices that are based upon self-report, yield self-and other perceptions of EI attributes rather than an estimate of a person’s actual emotional ability. The **Multi-factor Emotional Intelligence Scale** (MEIS) (Mayer, Caruso, & Salovey, 1999), for example, is a performance measure of EI (i.e., ability based) that demonstrated moderate correlations with one measure of general intelligence and small correlations with measures of the Big Five personality factors. However, serious problems with scoring, reliability, and validity have been reported. Roberts, Zeidner, & Matthews (2001) in their assessment of the MEIS pointed out that even the modest validity coefficients found for EI may not be maintained if personality and ability are statistically controlled. One of their conclusions was that “it remains to be seen whether EI, like the canals of Mars, is the product of the tendency of even expert observers to see, in complex data, patterns that do not exist (Roberts et al., 2001, 227). Their most recent measure, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT, 2002) requires the participant to view a series of faces and report how much of each of six emotions is present, answer questions about emotional scenarios (e.g., judge how much joy one might experience while planning a party), and solve emotional problems (e.g., decide what response is appropriate when a friend calls you upset over losing her job). The MSCEIT has solved some of the earlier measurement problems that plagued the MEIS and has reasonable reliability, convergent, and divergent validity. Further, a confirmatory factor analysis provided

support for the proposed four-branch factor structure (Mayer et al., 2003). However, these results have yet to be replicated by independent researchers.

If traditional paper and pencil tests and non self-report measures appear unlikely to provide an appropriate vehicle for operationalizing the EI construct as a number of investigators postulated (e.g., Cooper, 1997; Fineman, 1997; Steiner, 1997) alternative, context specific measures are needed as long as the purported measures of EI are unreliable, invalid or both.

Emotional Intelligence and Leadership

A number of studies have reported positive relationships between EI and various measures of leadership (e.g. Sosik & Megerian, 1999; Gardner & Stough, 2002). Early research on emergent leaders suggests that they are skilled in taking in and understanding emotional information. This research revealed that emergent team leaders were socially perceptive and uniquely able to identify and understand unstated team needs (Chowdhry & Newcomb, 1952). The popularity of EI would suggest that emotionally intelligent leaders bring important competencies to the leadership role that enhance their leadership effectiveness. And indeed, several studies have provided support for the relationship between EI and leadership outcomes. For example, Goleman, Boyatzis and McKee (2002) established the link between emotional intelligence and leadership and described this link between emotional intelligence and leadership as **primal** because: (1) leaders throughout history served as emotional guides, and (2) creating positive outcomes remains the most important responsibility of leaders. Resonant leaders (i.e., leaders with deep emotional connections to followers) generate positive feelings in followers that enhance collective performance, use leadership styles that are visionary, rely on coaching instead of coercion, build harmony and value input and participation.

Nevertheless, the claim that EI is the key to effective leadership continues to rest on somewhat shaky foundations. Some definitions of EI beg the question why EI cannot simply be seen as general intelligence directed at emotional phenomena. And, if it can, do we really need to treat it as a separate entity? A definite link between EI and leadership performance cannot be established since there is no consensus about the existence or definition of EI. Even more troubling is the fact that many of the primal leadership competencies identified by Goleman et al.

(2002) seem to fall outside of intelligence. Transparency or integrity is a character trait demonstrated through consistent behavior, not a psychological ability as advocates claim. Moreover, the “everything but IQ” approach to emotionally intelligent leadership makes it nearly impossible to disprove the assertion that 80-90% of a leader’s success rests upon her or his emotional ability. If EI is everything but cognitive intelligence, then it seems logical to assume that EI skills and abilities beyond IQ contribute more to a leader’s success than mental ability. Self-confidence, integrity, inspirational leadership, persuasion, collaboration, and interpersonal communication all appear to be more important to leaders than cognitive ability alone

These conceptual and logical difficulties do not mean that leadership scholars and practitioners should abandon EI. Emotional characteristics have long occupied a central place in leadership studies and are experiencing a revival in the current literature (e.g., Ashkanasy, Härtel & Zerbe, 2000; Ashforth & Humphrey, 1995). Feelings play an important role in such leadership tasks as motivating followers, decision-making, developing interpersonal relationships and shaping culture (George, 2000). Some practitioners and researchers alike view organizations as emotional, not rational arenas. Some feminist organizations like The Body Shop make the expression and acknowledgment of emotion a central value (Martin, Knopoff & Beckman, 1996). These various strands attest to the important role emotions play in organizations and leadership.

CULTURAL INTELLIGENCE

In the last decade, the world has witnessed a rapidly increasing pace of globalization in businesses and organizations characterized by the formation of international collaborations, mergers, joint ventures, interorganizational partnerships and alliances and the opening up of new markets such as China and India. As Bass (1990) notes, the industrialized societies of Europe, Japan, and the Anglo-American world are converging. As managers and leaders are increasingly exposed to global work assignments and to a culturally diverse workplace both internationally and domestically, organizations that proactively address the question of national and global culture will gain substantial advantages (Smith, 1992). A major challenge posed by this landscape is the need to understand the cultural assumptions and rationale underlying the thoughts and actions of

culturally dissimilar others. As the global network of corporate businesses becomes increasingly accessible, we interact more and more with people from different cultures.

If culture is considered the collective mental programming that distinguishes members of one human group from another (Hofstede, 1980), then cultural intelligence is the ability to successfully function in environments where individuals have experienced different programming (Offerman & Phan, 2002). Within any culture, intelligence can be defined as the possession of key valued skills and behaviors in the eyes of the members of that culture. According to the authors, cultural intelligence is what allows us to transcend our cultural programming and function effectively in cross-cultural situations. For example, in the U.S. speed of processing information and ideas is labeled "intelligent", while careful and deliberate thought is considered intelligent in Uganda. Similarly, many leaders in the United States believe that the majority of the people who work for them want to develop interpersonal relationships characterized by collaboration, trust and open communication. Leaders in the People's Republic of China act similarly, but for very different reasons. Chinese leaders advocated an egalitarian workplace in which all employees could improve their lot together, both economically and culturally. They encouraged collaboration and broad participation in decision-making by replacing individual rewards with collective rewards. Thus both American and Chinese leaders agree, but for very different reasons, that democratic organizations can perform effectively and productively (Offerman & Phan, 2002). The authors argued that understanding oneself and other in terms of cultural conditioning is the foundation of successful leader adaptation. And it is leader adaptation that is at the heart of cultural intelligence.

As the global network of corporate businesses becomes more and more accessible, we interact more and more with people from different cultures. This requires cultural intelligence (CI) which is broadly defined as the capability to deal effectively with people from different cultures (Earley, 2003; Earley & Ang, 2003) which allows leaders and followers to transcend their cultural programming and function effectively in cross-cultural settings. CI is treated here as an important competence of 21st century leaders. CI measured as CQ, is a new domain of intelligence which

is relevant to the increasingly global workplace of multinational (MNC) organizations as well as the diversity that characterizes domestic organizations.

In contrast to other types of intelligences such as EI and social intelligence which lack attention to cross-cultural contexts and are relatively void of multicultural richness, CQ reflects a person's capability of developing entirely novel behavior (speech sounds, gestures) required in a different culture (Earley & Peterson 2004). Flexibility of self-concept and ease of integrating new facets into it are associated with high CQ. Having high CQ also means that a person is capable of reformulating conceptions of self and others as new information is received. Ng and Earley (2006) argued that CQ is both emic and etic. An emic perspective of intelligence examines what constitutes intelligence in a particular culture, and its relationships with other constructs in that culture. The etic perspective on the other hand takes the notion of intelligence to a more general level – it views intelligence as an ability that transfers across cultures. Thus CQ is the capability to be effective across, and not just within cultures.

Earley (2003) introduced a conceptual framework that identifies the specific capabilities of an individual based on a **facet model of cultural adaptation**. The model proposed by Earley and his associates (Earley, 2003; Earley & Ang, 2003; Ng & Earley, 2006) posits a three facet model that includes (1) a **metacognitive**, (2) **motivational** and (3) **behavioral** components of cultural intelligence operationalize as the cultural quotient or CQ. The **cognitive facet** involves **cognitive** and metacognitive processes and refers to information processing aspects of intelligence and it is conceptualized using self-concept theory. It can be viewed as the total knowledge and experience concerning cultural adaptation of an individual stored in memory. Metacognition or thinking about thinking is further broken down into two complementary elements: metacognitive knowledge (what and how to deal with knowledge gained under a variety of circumstances) and metacognitive experience (what and how to incorporate relevant experiences as a general guide for future interactions. According to Early (2003), metacognition is a critical aspect of CQ because much of what is being required in a new culture is putting together patterns into a coherent picture, even if one does not know what this coherent picture might look like. Earley and

Modakowski (2004) refer to the cognitive facet as the “head of CQ” implying what leaders know and how they can gain new knowledge; it is strategically thinking about thinking.

The second facet of CQ refers to its **motivational aspect**. Knowledge of another group’s way of dealing with the world is not sufficient. One must also be motivated to use this knowledge and produce a culturally appropriate response. This CQ directs and motivates adaptation to new cultural surroundings. Motivational CQ refers to an individual’s extent of interest and drive to adapt to new cultural surroundings (Ang, Van Dyne, Koh, & Ng, 2004). It is conceptualized as intrinsic motivation and specific self-efficacy to engage in cross-cultural experiences and master its nuances. Individuals with high motivational CQ are intrinsically motivated to experience new and varied cross-cultural encounters (Early & Ang, 2003). They value novel cultural experiences and enjoy interacting with people from different cultural backgrounds. The motivational facet, according to Earley and Mosakowski (2004) is the “heart of CQ” which energizes leaders’ actions and builds personal confidence. Motivation is based on personal efficacy, values congruence, and goal focus (p. 155). Motivational CQ triggers attention and effort, stimulates and channels an individual’s cultural knowledge and strategies into guide interactions in novel cultural experiences. Hence, motivational CQ should influence the extent of an individual’s cross-cultural adjustment.

The third component of CQ, the **behavioral facet**, refers to the behaviors a person engages in when interacting with members of a different culture. The behavioral aspect of CQ suggests that cultural adaptation is not only knowing (cognitive) and having the ability to persevere (motivational) but also having the responses needed in one’s behavioral repertoire. Even if leaders have the strategic thinking and knowledge (head) and energy (heart), they may not be able to act appropriately. The behavioral facet is the “body of CQ” (Earley & Mosakowski, 2004). It is the action component of CI through which intentions and desires are translated into actions. Although these three facets of CQ are presented as if they were independent factors, they are, in fact, highly interrelated. For example, a high motivational CQ means that a leader is willing to engage in strategic thinking which, in turn, has a positive impact on behavioral manifestations of CQ and cultural adaptation.

As noted earlier, in accordance with traditions established for analytical intelligence measured as IQ, EI measured as EQ, cultural intelligence is measured as EQ, measurement of CQ may be characterized into psychometric as well as nonpsychometric methods. Ang et al. (2004) developed and validated a multi-dimensional, four-factor instrument of CQ comprised of (1) meta-cognition, (2) cognition, (3) motivation, and (4) behavior. Metacognitive CQ, according to the authors, refers to an individual's level of cultural mindfulness during cross-cultural interactions which involve higher level cognitive strategies that allow individuals to develop new heuristics and rules for adapting to novel cultural environments. Cognitive CQ is defined by the authors as an individual's level of cultural knowledge or knowledge of the cultural environment. Motivational CQ was conceptualized as a specific form of self-efficacy and refers to the extent to which individuals have the interest and drive to adapt to new cultural surroundings. Finally, behavioral CQ is defined as the ability to act appropriately and adjust one's behaviors to the specifics of each cultural interaction.

Based on these definitions, the authors developed an initial item pool consisting of 53 items (about 13 for each of the four factors). After exploratory and confirmatory factor analyses, the final scale consists of 20 items with separate factors for meta-cognition, cognition, motivation, and behavior. The scale was cross-validated with two Singapore samples and demonstrated equivalence between the US and Singapore samples. The authors concluded that the 20-item CQ measure can provide insights about current levels of intercultural capabilities and allow individuals to focus on particular aspects of cultural intelligence for training and self-development.

Research on CQ is still in the early stages of development and many unresolved issues remain. For example, it has yet to be determined if CQ can be distinguished from other types of intelligences such as social or practical intelligence. Similarly, whether or not the theoretical dimensions of CI can be empirically confirmed remains an important issue. Research on the psychometric measure developed by (Ang et al., 2004) is just beginning with promising evidence of the factor structure, reliabilities, cross-cultural equivalence, as well as discriminant validity of the scale. Other methods of assessing CQ using nonpsychometric approaches such as an assessment center or clinical assessment through participant observation and interview have yet

to be developed. These approaches represent a rigorous way of providing an alternative assessment of CQ but, at the same time, present many challenges to the design of appropriate exercises and assessment techniques.

Cultural Intelligence and Leadership

Research studies in diverse areas as overseas effectiveness (e.g., Landis & Bhagat, 1996), international management (e.g., Adler, 1991), international transfer (e.g., Kealey, 1996), the work of Hofstede (1980) and the GLOBE (House, Hanges, Javidian, & Dorfman, 2004) project have identified cross-cultural competence as central in increasing understanding and improving relations across nations. In cross-cultural research on leadership it has been found that there are systematic differences in terms of what is important for effective leadership. For example, in collectivistic cultures leadership is imbedded in a cultural matrix of beliefs about the important relations between members of a group. In individualistic societies, on the other hand, leadership resides within individuals, leaders and followers. These different cultural orientations affect a variety of leadership processes such as decision-making, communications and negotiations. Although some research suggests that American approaches to leadership apply abroad, most leaders believe that they must adapt their leadership style to the cultures of followers; that is, they believe that culturally intelligent leadership is culturally contingent. For example, in American business deeply held values refer to matters such as excellence, fulfilling one's potential and allowing other to do so, achievement, and the quality of products and services. By contrast, traditional Eastern values center on characteristics such as compassion, humility, gratitude and service to one's family. We live in an increasingly shrinking world where globalization is bringing us into closer contacts with one another. Understanding other peoples and developing sensitivity to their ways of life are not only crucial to the success of or social and business interactions but also dependent upon that special ability known as CQ.

SPIRITUAL INTELLIGENCE

Corporations and their leaders have begun to recognize the importance of the workplace in promoting spiritual growth. Tapping the human soul at work has become a flourishing business.

When God makes the front page of *Fortune Magazine* (Conlin, 2001), it is indicative that spirituality and the role of spiritual growth at work can no longer be ignored. Stephen Covey (1994) talks about the spiritual renaissance in the business world, the World Bank launched the Spiritual Unfoldment Society, Zohar & Marshall (2000) created the concept of spiritual intelligence, Vaill (1989) sees spirituality as a requisite of visionary leadership and Hawley (1993) stated that spirituality is at the very core and base of leadership.

As a result, tapping the human soul at work has become a flourishing business. The burgeoning interest in spirituality is reflected in a flood of books, foundation of journals, and the proliferation of conferences, workshops and seminars on the topic. Business periodicals are filled with articles heralding both a renewed interest in religion and the growing emphasis on spirituality in the workplace. Religious radio stations have quadrupled over the past 25 years, while religious television shows have increased fourfold in the 1980s (Cash & Gray, 2000). Conlin (1999) concluded “a spiritual revival is sweeping across corporate America as executives of all stripes are mixing mysticism into their management, importing into office corridors the lessons usually doled out in churches, temples, and mosques “(p. 150). A common theme in these publications is the notion that the workplace has helped transforming spirituality from a personal pursuit into a business practice. Leadership researchers, practitioners, and educators are participating in the dialogue and bring a diversity of approaches and viewpoints to the discussion. Thus, spirituality is beginning to be recognized as being important in the overall development of a leader since spiritually anchored leadership can add value to the organization by helping workers and managers to align personal and organizational values around their understanding of spirituality.

Recently, Zohar and Marshall (2000) proposed that in addition to IQ and EQ, there is another type of intelligence the authors called spiritual intelligence measured as SQ. The authors define SQ as the intelligence with which we address and solve problems of meaning and argue it is the transformative power of SQ that sets it apart from EQ. Like Goleman, Zohar and Marshall make some interesting claims. For example, they assert that SQ is the intelligence with which we heal ourselves and with which we make ourselves whole. Further, these authors propose that IQ and EQ are subsidiary to and supported by SQ and that SQ is the highest intelligence.

Other scholars have formulated conceptualizations of SQ as well. For example, according to Wolman (2001), spiritual intelligence refers to one's ability to ask ultimate questions about God, the meaning of life, and to experience the connections about individuals on earth, and the relationships between individuals and the world. Emmons (1999, 2000) defines spiritual intelligence (SI) as the degree to which a person has the mental and emotional properties that lead to see an overall, guiding purpose, see mid- and short-term tasks that are subgoals that are connected to a higher purpose, and sustain behaviors in order to serve them.

Three prominent frameworks of SI have recently been proposed: Emmons (1999, 2000), Zohar and Marshall (2000), and Wolman (2001). Zohar and Marshall built their framework of SI on a foundation of physiological development, located among neural systems in the brain. According to these authors, SI becomes a form of "hyperthinking giving rise to "meaning-giving, contextualizing, and transformative intelligence (Zohar & Marshall, 2000, p. 59). Within the Zohar and Marshall framework, SI is a "way of knowing, a way of being, that utterly transforms our understanding and our lives (p. 66), offering a "foundation for effective functioning of both IQ [mental] and EQ [emotional] (p. 4). Zohar and Marshall's framework consists of distinct categories of human activity, each providing a path to increased SI: duty, nurturing, knowledge, personal transformation, brotherhood, and servant leadership.

Wolman's (2001) framework is empirically derived, emerging from a factor analysis of data gathered from individuals who were taking part in conferences oriented toward and focused on mind/body awareness, healing, spiritual practices, and consciousness and self-empowerment. Each of Wolman's participants completed the PschoMatrix Spirituality Inventory (PSI), the only available measure of SI at this time which consists of 114 items that the author gathered during his consulting engagements. Wolman's analyses revealed seven factors of SI: divinity, mindfulness (pertains to alternative or integrative health practices), extrasensory perception, community, intellectuality (a desire to study, read and/or discuss spiritual material or sacred texts), trauma and childhood spirituality.

Working more in the tradition of research on analytic intelligence and the work of Mayer, Salovey and their associates, Emmons (2000, p. 10) postulated that there are at least five core

abilities that define spiritual intelligence which are conceptualized in adaptive, cognitive-motivational terms, and, as such, may underlie a variety of problem solving skills relevant to everyday life situations. These core abilities are:

1. the capacity to transcend the physical and material; themes of transcendence figure prominently in definitions of spirituality (e.g. Piedmont, 1999)
2. the ability to enter into heightened states of consciousness;
3. the ability to invest in everyday activities, events, and relationships with a sense of the sacred; i.e. the ability to sanctify everyday experience. For example, when work is seen as a calling or parenting as a sacred responsibility, it is likely to be approached differently than when viewed in purely secular terms.
4. the ability to utilize spiritual resources to solve problems in living;
5. the capacity to engage in virtuous behaviors or be virtuous (to show forgiveness; to express gratitude, to be humble; to display compassion)

These virtues are included under the rubric of SQ because of the salience of these concepts in virtually all major religious traditions. For example, gratefulness is a highly prized disposition in Jewish, Christian, Muslim, Buddhist, and Hindu thought (Paloutzin, Emmons & Keortge (2003). SI is what allows people to be sensitive to transcendent realities and perceive sacredness in everyday objects, places, relationships, and roles. It is the flexible use of spiritual information applied to solving real life problems and thus has relevance for understanding manifestations of spirituality in workplace settings.

Like Mayer and his collaborators, Emmons (2000) set out to demonstrate that spirituality is a set of related abilities and competencies that meet Gardner's criteria of a new intelligence. Like Gardner (1983), Emmons (2000) looked at behavior genetics and quoted findings from neuroscientists who have begun to investigate the neural bases of spiritual and religious experiences. For example, it has been known for quite some time that individuals prone to epileptic seizures in the temporal lobes of the brain report a much greater than usual tendency to have profound spiritual experiences. Likewise, in controlled laboratory settings, 'spiritual experiences' (reported as having a sense of light, forms of elation or high degree of being) have

been created by artificially stimulating the temporal lobes. Similarly, the alteration of religious-mystical experiences in certain brain disorders has been cited as additional evidence for the existence of spiritual capabilities (Saver & Rabin, 1997).

Emmons also followed Mayer and his associates by examining the psychometric evidence to support spiritual intelligence as being of the type that meets the Gardner criteria and quoted several psychometric studies that revealed that measures of spirituality and religious attitudes are statistically independent of general intelligence. For example, Piedmont (1999) developed a scale of spiritual transcendence, a multidimensional instrument which reportedly is independent of the dimensions that make up the Five-Factor Model of Personality (FFM, McCrae & Costa, 1996). The author conceptualized transcendence as a fundamental, intrinsic motivation to find a deeper sense of meaning by subjecting one's needs to those of a larger group or cause. Spirituality is viewed as one of many ways to express this innate need for transcendence. Moreover, Piedmont (1999, 2000) also defines a hierarchy of three related but distinct constructs. Transcendence is the most general construct; spiritual transcendence and spirituality seem to be used interchangeably; and finally, religion is presented as the most specific as a socially contextualized form of spirituality. Finally, the author argued that spirituality is a 6th factor of personality.

Addressing the validity of SI, Emmons (1999) states:

“Viewing spirituality as intelligence enlarges the concept of spirituality to encompass meanings typically not associated with it. SI enhances the plausibility of a scientific spirituality by locating spirituality within an existing acceptable psychological framework, one that has proven to be extremely useful in understanding the common ground between personality and behavior. It allows spirituality to become anchored to rational approaches that emphasize goal attainment and problem solving (p. 174).

Emmons' position was rebutted by Gardner (2000) who wrote specifically that SI is not an intelligence. However, at one time he did consider evidence for spirituality as the ninth (after naturalistic) intelligence but then changed it in favor of existential intelligence to capture spiritual concerns. Gardner's counterarguments are based on the notion that “core” to the intellectual realm is the capacity to carry out certain kinds of computations. The author provided examples of

how linguistic intelligence, for example, computes the sounds and sights of language; spatial intelligence computes positions and perspectives of entities in space. Each intelligence, accordingly, evolved because of the desirability of performing these computations efficiently which cannot be done on elements that transcend normal sensory perception. Finally, Gardner points out that SI as a construct makes it difficult to distinguish between those who use their spiritual intelligence in a creative, as opposed to destructive, manner.

As noted earlier, according to Mayer (2000) three stringent criteria must be met for a candidate intelligence to be judged a true intelligence. First, intelligence must reflect mental performance rather than just preferred ways of behaving. Presently, we cannot judge SQ on this criterion since we only have one measure of spiritual abilities. Additional measures are needed to establish convergent and divergent validities of the SI construct. Second, the intelligence should be defined as a set of abilities that are moderately intercorrelated with one another. Third, the intelligence develops with age and experience, from childhood to adulthood. In support of the second and third criteria, it has been argued that spiritual capacities are highly interdependent and the development of one fosters the other (Walsh & Vaughn, 1993), and that spiritual capacities are age-related (Weibust & Thomas, 1994). In order to validate this criterion, we need longitudinal studies of SI that trace its development over the lifespan.

Mayer (2000) expressed his concern with the possible conflation of spirituality (or spiritual consciousness) with spiritual intelligence and for good reason. If spiritual intelligence were nothing more than spirituality, then nothing would be gained by invoking the language of intelligence. Emmons defined spiritual intelligence as the adaptive use of spiritual information to facilitate everyday problem solving and goal attainment. Spirituality, on the other hand, is a broader, more encompassing construct that has as its focus a search for the sacred. Spiritual intelligence is largely a positive, adaptive construct whereas spirituality may be positive or negative depending on how it is expressed in particular contexts. As Gardner suggested in his description of charismatic religious leaders (Jim Jones, for example), those same skills might be applied inappropriately in a destructive manner.

Finally, Mayer (2000) questioned the spiritual abilities Emmons conceptualized as virtues – to show forgiveness, express gratitude, be humble, display compassion. According to Mayer, they belong in a domain of personality and are fundamentally different from cognitive competencies and abilities. The author argues that virtues can be practiced; they are skill-like competencies or capacities that can be strengthened and cultivated. They are spiritual in that they are viewed as highly prized possessions in all of the major religions of the world. Retaining them in a model of spiritual intelligence results in what Mayer, Caruso and Salovey (1999) have characterized as a mixed model of intelligence, where mental abilities, dispositions and traits are included in a compound collection of ingredients.

Cowan (2005) suggested that emerging frameworks of SI provide substantive leverage points for developing legitimate connections to organizational effectiveness and leadership development. Although none of these authors ground their frameworks in a leadership and organizational context, Emmons' framework (1999) is arguably the most inclusive of dimensions that imply linkages to leadership. While Emmons defines core components of SI, it remains the task of organizational scholars to translate these ideas into organizational contexts and leadership competencies. The works of Zohar and Marshall and Wolman (2001) offer useful insights for enriching and refining leadership connections, but neither provides a full array of leadership-relevant dimensions as does Emmons'.

Although there are well over 150 instruments of spirituality and religiosity and the development of instrumentation continues at what some consider an alarming rate, at this time, there is no measure of spiritual intelligence per se. Instead of continuing with the development of additional scales, several scholars (e.g., Slater, Hall & Edwards, 2001) have pointed out that researchers need to take care of some basic issues such as the lack of precision in definitions of spirituality, religiosity, and related constructs, ceiling effects, bias (many of the instruments have been developed within a denomination or particular theological orientation, and the possibility of bias against other groups has not been investigated and social desirability).

CONCLUSIONS

Research on traditional analytic intelligence has set the stage for the search of other, non-IQ intelligences that presumably play an important role in leadership research. Unlike academic intelligence, which is highly verbal in nature, emotional, cultural, and spiritual intelligences have cognitive and affective components which manifest themselves nonverbally as well. What sets the newer conceptualizations of intelligence apart from the earlier IQ as a stable trait is the view of intelligence as a process of adaptation. Multimodal intelligence which is the term I prefer means that the human mind, heart and spirit contain the full palette of intelligences – emotional, analytic, intuitive, kinesthetic, narrative, collaborative, machine, collective, cultural, moral. Yet conceptualization of the newer intelligences continue to remain tied to IQ theory which provides the conceptual framework in terms brain functions, psychometric evidence, and developmental history that are the most frequently used standards for an intelligence.

Although research on EQ, CQ, and SQ remains vibrant and diverse, the relationship of these constructs to leadership effectiveness remains an important agenda for leadership research. Scholars continue to divide and subdivide intelligence in many ways and attempt to reduce EQ, CQ and SQ to a set of cognitive abilities and capacities. In the mind of the public some of these concepts, particularly EQ have become popularized and marketed over the past few years so that they barely resembles the original formulation but nevertheless have resulted in the current groundswell of interest in predicting leadership outcomes from measures of EQ, CQ and spirituality. Since in the models EQ, CQ, and SQ discussed here, cognition, affect, motivation, personality, and morality mix, the interrelationships between these constructs remain a contested terrain. While some cognition (and therefore intelligence) is present in all mental life, research on multimodal intelligences may be better served by a search for a different superordinate construct. As individuals create mental models of their reality that integrate spirituality, emotions, cognitions and culture and the meaning they ascribe to these constructs that transcend immediate experiences, they search for a more integrative, synthetic understanding of themselves as leaders and followers. The model of the trilogy of the leader's

mind proposed here lends itself to empirical testing since all constructs have been operationalized using standardize, reliable and valid instruments.

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