

## COMMENTARY

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# Spiritual Intelligence or Spiritual Consciousness?

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Emmons's (this issue) thought-provoking article defined a spiritual intelligence that involves five characteristics:

1. The capacity for transcendence.
2. The ability to enter into heightened spiritual states of consciousness.
3. The ability to invest everyday activities, events, and relationships with a sense of the sacred.
4. The ability to utilize spiritual resources to solve problems in living.
5. The capacity to engage in virtuous behavior or to be virtuous (to show forgiveness, to express gratitude, to be humble, to display compassion).

When I think of spirituality, I think less of a heightened intelligence, as Emmons has described it, and more of a heightened consciousness. The idea of spiritual consciousness stems from the possibility of structuring consciousness, through meditation, contemplation, and other means, so that it focuses on oneness, transcendent states, and ultimate concerns. The shift in language from the terminology of mental ability (mentioned earlier) to one of consciousness and awareness yields an interesting revision of Emmons's description. This spiritual consciousness would involve

1. *Attending* to the unity of the world and transcending one's existence.
2. *Consciously entering* into heightened spiritual states.
3. *Attending* to the sacred in everyday activities, events, and relationships.
4. *Structuring consciousness* so that problems in living are seen in the context of life's ultimate concerns.
5. *Desiring* to act, and consequently, acting in virtuous ways (to show forgiveness, to express gratitude, to be humble, to display compassion).

To translate from the language of intelligence to the language of consciousness, it would seem, requires substituting just a few key words for the terms *ability* and *capacity*, that were in the original. So, which conception is right: spiritual intelligence or spiritual consciousness?

If a new intelligence really has been found, it would enrich and broaden our notion of what intelligence may be (e.g., Mayer, Salovey, & Caruso, in press). Labeling something an intelligence also raises its prestige. Scarr (1989) has argued that one reason psychologists and educators are motivated to label something an intelligence is in an attempt to adjust social behavior to value the entity more than before. Although Scarr believes many personality attributes are not valued sufficiently, she is concerned that labeling nonintelligences as intelligences creates a leveling of all qualities, and a diminishment of the concept of intelligence. So, what is the difference between finding an intelligence and simply labeling something an intelligence?

#### WITH WHAT YARDSTICK SHOULD SPIRITUAL INTELLIGENCE BE MEASURED?

To me, the term *intelligence* refers to a capacity or ability that primarily concerns performing valid abstract reasoning with coherent symbol systems. This *abstract reasoning* criterion overlaps only partly with the eight criteria of an intelligence, originally developed by Gardner (1993, pp. 62–68), and used by Emmons to assess spiritual intelligence. The “abstract reasoning” criterion represents a more classical approach to intelligence: Symposia on intelligence over the years repeatedly conclude that the first hallmark of intelligence is the capacity to carry out abstract reasoning (Sternberg, 1997). Such thinking involves the ability to carry out many types of mental transformations, such as identifying similarities and differences, making generalizations, mentally rotating figures, and other tasks, all according to specifiable rules (e.g., Carroll, 1993).

By contrast, only one or two of Gardner's (1993, pp. 62–68) eight criteria, his “core mental operations,” and perhaps his “symbol system” requirement, approximate abstract reasoning. The remaining six criteria are a combination of cultural, empirical, and other characteristics. Because the criteria are each equally

weighted, abstract reasoning is relatively deemphasized. Gardner acknowledged it is unclear how many criteria, and which among them, an entity must meet for it to be labeled an intelligence. Gardner (1993) wrote, “At present the selection (or rejection) of a candidate intelligence is reminiscent more of an artistic judgment than of a scientific assessment” (p. 63).

In this commentary, I focus on how well Emmons’s spiritual intelligence meets the abstract reasoning criterion for intelligence I have described. Emmons’s theory is young enough that his empirical work on the subject requires time to develop. Still, so as to consider its future development, it is worth mentioning it must eventually satisfy empirical criteria as well. For example, new intelligences must be translatable into mental performance, with agreed upon criteria for correct performance. That is, a person possessing the intelligence should be able to solve specifiable problems that someone without it cannot. Such an intelligence must also satisfy a number of correlational criteria. For example, it must encompass a reasonable number of important areas of thought, in the way that verbal intelligence, say, spans vocabulary, reading comprehension, and verbal fluency. A “History of Dinosaurs” intelligence is a nonstarter because it is simply too limited in scope. Other correlational criteria include that the intelligence is similar enough to other intelligences to be recognizable, but different enough to be worth studying. Finally, the intelligence must develop from infancy to adulthood (e.g., Mayer, Caruso, & Salovey, 1999).

To return to the conceptual: Does spiritual intelligence primarily involve abstract reasoning? I begin with an informal concern—that, traditionally, spirituality is viewed as a form of consciousness, and that spiritual intelligence is not highly distinguishable from spirituality itself. Then I will move on to a more formal consideration of Emmons’s five areas of spiritual intelligence and their relation to abstract reasoning and other attributes within personality.

### SPIRITUALITY, SPIRITUAL INTELLIGENCE, AND COGNITION: SOME PRELIMINARY OBSERVATIONS

Spirituality, as traditionally understood, seems better characterized by consciousness than by abstract reasoning. For example, one research group has defined spirituality as “a way of being and experiencing that comes about through awareness of a transcendent dimension and that is characterized by certain identifiable values in regard to self, others, nature, life, and whatever one considers to be the Ultimate” (Elkins, Hedstrom, Hughes, Leaf, & Saunders, 1988, p. 10).

The opening phrase—“a way of being and experiencing” (Elkins et al., 1988, p. 10)—is focused on consciousness. This description also touches three areas of Emmons’s spiritual intelligence: transcendence, sacredness (or the Ultimate), and values. This raises the concern that spiritual intelligence is, perhaps, a relabeling of spiri-

tuality. Consider children who feel spiritual with every part of themselves; who talk to imagined or (some would say) real divine presences far more easily than adults. They have taken a leap of imaginative purity that would confound most adults. Whether such children are intelligent, however, seems irrelevant to their conscious experience of spirituality.

To be sure, some cognition (and therefore, intelligence) is present in all mental life. Praying for the health and welfare of one's family requires knowledge of what "health," "family," and "welfare" are. Cognition is not, however, primary in such instances, and we would expect the person praying to attend to spiritual matters but not necessarily to possess high intelligence in order to pray. My point is that intelligence does not exist simply because some cognition is present, but rather, abstract reasoning must be primary. Consider the realm of artificial intelligence. We usually attribute intelligence to those machines that reach a critical mass of cognitive processing, such as a general-purpose computer that can solve a variety of problems or a computer dedicated to a mentally demanding activity such as playing chess. By comparison, a television is not primarily distinguished by its intelligence, even though it certainly processes information and might even contain a "smart chip" that permits it to solve certain limited problems.

### A MORE FORMAL ANALYSIS OF SPIRITUAL INTELLIGENCE

Perhaps such preliminary objections to spiritual intelligence are insufficiently considered. To find out if that is the case requires a more formal discussion of how basic mental mechanisms are characterized. In the next section, I discuss three types of personality components: (a) a diverse variety of low-level mental mechanisms that include motivations, emotions, cognition, and consciousness; (b) learned models of the world; (c) and traits. I compare Emmons's five parts of spiritual intelligence (e.g., transcendence, coping, etc.) to various personality parts to see the degree each one qualifies as engaging valid abstract reasoning.

### WHERE IS SPIRITUALITY AMONG THE PARTS OF PERSONALITY?

Elsewhere, I have argued that there exists an extremely heterogeneous class of personality parts that include basic, brain-related mechanisms or modes of processing. These are variously called enablers or enabling mechanisms because they enable human personality to operate (e.g., Averill, 1992; Mayer, 1995; Mayer, Chabot, & Carlsmith, 1997). Each class reflects distinct mental operations, as measured by psychometric and experimental methods; moreover, each class roughly corre-

sponds to the excitation of distinct brain regions (see Hilgard, 1980; MacLean, 1973; Mayer, Chabot, & Carlsmith, 1997, for reviews).

These enablers can be divided into four broad categories, which include cognition, motives, emotions, and consciousness. At this near-brain level, it is possible to separate out something like a pure motive (e.g., thirst), a pure feeling (e.g., sadness), a pure mental capacity (e.g., the capacity to remember digits), and pure consciousness (e.g., awareness of being alive). Each one of these areas of function can itself be broken down into a still-heterogeneous area of activity. For example, motives such as hunger and thirst pertain to metabolic function whereas motives such as the need for affiliation or aggression pertain to social function. Similarly, cognition involves both verbal and spatial reasoning, which may involve different areas of the brain (e.g., Kosslyn et al., 1999). As a first approximation, however, it makes sense to talk about the broad, biologically related classes of motives, emotions, cognitions, and consciousness.

Motives, emotions, or cognitions rarely operate on their own, however, but rather blend together to some degree. They join in two ways: first, at the near-biological level itself and then as they are synthesized when a person learns and thinks about the world. At the near-biological level, the four classes of enablers are interconnected and act on one another. Table 1 shows some ways that a given motive, emotion, cognition, or conscious activity (listed down the left-hand side) acts upon another (as listed across the top). For example, we can think of consciousness acting on emotion—to make it felt, attended to, examined. Similarly, we can think of an emotion, such as fear, acting on consciousness to narrow it down to self-preservation.

Enablers stay relatively unchanged in terms of function and purpose throughout the life span. At the same time, by virtue of operating in a changing, growing mind, they can become enhanced, or guided, in some ways. Thus, short-term memory can be enhanced by learning mnemonics (i.e., memory tricks). Consciousness appears able to guide or steer itself through the use of self-suggestion, the influence of current concerns, meditative practices, and other procedures (e.g., Csikszentmihalyi, 1990; Ornstein, 1972). Such directed consciousness seems to describe Emmons's first aspect of spiritual intelligence, transcendence. Transcendence includes such qualities as leaving behind physicality, and sensing bonds with humanity. This seems, to me, close to what psychologists call "structuring," or "developing" consciousness, as opposed to cognition; such structuring guides a person's attention to certain mental phenomena (e.g., breathing, oneness) until the conscious state is altered. Similarly, Emmons's second manifestation of spiritual intelligence, mysticism, seems explicable this way. Mysticism involves entering spiritual states of consciousness in which, through the use of special rituals and prayer, one may become especially contemplative, have flashes of insight, or even see visions. Thus, both transcendence and mysticism appear primarily to involve highly structured con-

TABLE 1  
Potential Actions On One Another of Motives, Emotions, Cognitions, and Consciousness

<i>System That Acts</i>	<i>System That is Acted Upon</i>			
	<i>Motivation</i>	<i>Emotion</i>	<i>Cognition</i>	<i>Consciousness</i>
Consciousness	Awareness of motivation.	Awareness of emotion; structured openness or closedness to emotion.	Awareness of cognition.	<b>Consciousness of consciousness: the structuring of awareness.</b>
Cognition	Motivational intelligence.	Cognitive identification of and understanding of emotion (emotional intelligence-a).	<b>Cognitive intelligence.</b>	Cognitive understanding of consciousness.
Emotion	Emotional amplification of motivation (e.g., happiness and altruism).	<b>Emotional feeling basic feelings: happy, sad, angry, etc.</b>	Emotional facilitation of cognition (emotional intelligence-b) and emotional biasing of cognition (e.g., confusion).	Emotional narrowing and expanding, and/or filtering of consciousness.
Motivation	<b>Motivational direction (e.g., hunger, thirst).</b>	Motivation-triggered emotions (e.g., aggression and anger); motivational need for emotion (e.g., need for emotion).	Motivations of cognition (e.g., need for cognition).	Motivational cuing of consciousness.

scious processes, with cognition providing a supporting role by representing the things that must be transcended or contemplated, but with little requirement for abstract reasoning.

As people learn about themselves and the world, they create mental models of reality that integrate motives, emotions, cognitions, and consciousness in another way. These models form a second broad class of personality components different from the enablers in that they are primarily mental representations rather than operations; they are maps or concepts of the self or the world. For example, a man may develop a mental model of Kalamazoo, Michigan, that includes a need to visit the city (a motive), a love of Kalamazoo's Western Michigan University, his alma mater (an emotion), an understanding of the grid of streets and best places to go (cognition), and attention to articles and news about Kalamazoo that most people do not share (consciousness). These models are learned representations, called by such diverse names as establishments (Mayer, 1995, 1998; Murray & Kluckhorn, 1956); schemas (Markus, 1997); personal constructs (Kelly, 1955); scripts, plans, and goals (Schank & Abelson, 1977); and others.

There certainly is abstract reasoning involved in mental representations of spiritual learning. A person's expert knowledge of religious texts and spiritual practices are involved in any spiritual exercise or experience. Scholarship in religious texts such as the Hebrew Bible and New Testament, the Qu'ran, the Bhagavad Gita, and other similar works may heighten a sense of sacredness and transcendence. The third and fourth aspects of Emmons's spiritual intelligence are sanctification and coping. Sanctification involves joining everyday activities with a sense of the sacred. Spiritual coping involves using sacred meanings to find purposes in setbacks and challenges, and to assist one in moving forward in life. I suspect these two areas of spiritual intelligence come closest to meeting criteria for abstract reasoning. Although attending to the sacred involves structuring consciousness, it is assisted by an understanding and appreciation for religious stories, mythologies, anecdotes, and interpretations. A deep familiarity with such works can connect an everyday family event, such as a meal, with an important story in a spiritual or religious tradition. Similarly, coping in response to a physical illness or frailty may be assisted by consideration of one or another stories from those same spiritual and religious traditions.

Perhaps people higher in the proposed spiritual intelligence would see different, more abstract relationships to the sacred than those lower in intelligence. Whether such abstract connections are unique to spiritual literature or would extend to areas of literary scholarship, knowledge of the visual arts, and others, however, is an empirical question. If the reasoning in spiritual stories is the same as that employed in literary scholarship or the arts, then all that might be present would be verbal intelligence; if spiritual reasoning were distinct from those other areas, however, it would provide a basis for a spiritual intelligence.

Thus far, we have discussed low-level mechanisms (enablers) and learned models (establishments). As these interact, mental life exhibits various patterns or themes. For example, a woman's emotional mechanisms (enablers) might generate love, and this love might enter into mental models of her husband, her children, her neighbors, her city, and her possessions, as well as other loves. These emergent patterns or themes can be viewed as a third broad class of personality parts, variously called traits or themes. In the aforementioned example, we may characterize the woman as loving, or warm.

The fifth aspect of spiritual intelligence involves virtuous traits. These include behaving so as to convey forgiveness, gratitude, humility, and mercy. I greatly admire such qualities, yet there are large noncognitive components to them. For example, it is possible to forgive indiscriminately and to express gratitude inappropriately, or unyieldingly. This happens, for instance, when a person repeatedly expresses gratitude for things done, not on his or her behalf, but out of general necessity, or even without him or her in mind.

I worry that to equate forgiveness or gratitude with intelligence is to blur some important distinctions between intellectual and nonintellectual qualities. For example, I would have some reservations about labeling people with happy, easy-going tem-

peraments as spiritually intelligent, because they inherited a temperament that makes it easy for them to forgive others. Similarly, some lucky individuals may forgive others because they have experienced such good treatment throughout life that a few transgressions are easily overlooked. On the other hand, there are people who may find it quite difficult to forgive others, independent of a spiritual intelligence (as I might conceive of it). I am thinking of people whose biological temperament predisposes them to be unhappy and angry, as well as people who have been victimized by such crimes as child abuse and rape, or who have experienced war or concentration camps. These latter individuals often report that it is next to impossible to forgive those responsible, and yet many of them turn to spirituality in order to live and thrive after such tragedy. To me, intelligence is plastic; it allows a person to consider deeply many lines of thought, and many possible paths of life. Only some of these would include forgiveness or gratitude. Attaching such characteristics together seems to limit the utility and power of intelligence.

### IN SEARCH OF A SPIRITUAL INTELLIGENCE

Emmons's spiritual intelligence and its five aspects seem to cover a variety of parts of mental life: from structured aspects of consciousness to nonintellective personality traits. To me, Emmons's proposed spiritual intelligence does not yet meet the criterion of primarily involving abstract reasoning. This does not preclude some future version of the concept from meeting such a conceptual criterion. Then, one could determine whether the intelligence also satisfies necessary empirical criteria. There is no doubt that some spiritual individuals reason, and often with great sophistication. There exist important philosophies of guilt, loving kindness, mercy, humility, and other feelings and their relation to ultimate issues (e.g., Otto, 1950; Peli, 1984). We would need to know more, however, about the unique features of such reasoning before spiritual intelligence can be better understood.

To illustrate what I mean about understanding the reasoning involved in spirituality, consider the recent case of emotional intelligence (e.g., Mayer & Salovey, 1997; Salovey & Mayer, 1990) as a candidate intelligence. Emotions had been studied for centuries before the concept of an emotional intelligence could be fully developed. The idea of emotional intelligence developed from a centuries-old, philosophical literature on the meaning of emotions (e.g., Calhoun & Solomon, 1984; Frank, 1988). It developed, as well, from several decades of more concerted scientific work on the nature of emotion, its language, and its meanings (e.g., Bower, 1981; Buck, 1984; Ortony, Clore, & Collins, 1988; see Clark & Fiske, 1982; Forgas, in press, for reviews). This work culminated, perhaps, with empirical work in artificial intelligence and computer understanding of emotions (Dyer, 1983; Picard, 1997).

Some flavor of the rules discovered in such work can be obtained from considering the fictional character, Jane, who was angry one afternoon at 2 p.m., and ashamed at 3 p.m. Given such information, one could surmise that, in-between her anger and her shame, she may have expressed anger and then thought the better of it, or discovered new information which rendered the anger unjustified and petty-seeming, or simply felt ashamed she was angry—as she often does. One can see it is less likely that in-between she had a wonderful interview with the Queen of England (Mayer, Caruso, & Salovey, 1999). Reasoning like this, I would argue, concerns how one emotion can change into certain emotions but not others, given a specific circumstance. Understanding such rules is as complex and sophisticated, in its own way, as is syllogistic reasoning.

A similar working out of the rules of spiritual intelligence would provide a firmer basis for such a proposed entity. It seems to me, however, that esoteric practices of spirituality, along with the lengthy training necessary to learn certain spiritual practices, has impeded the study of the reasoning that is a part of spirituality. The rules of spirituality, whatever they may be, remain to be elaborated, codified, and understood. As I review works by more intellectually oriented spiritual writers, I see the possibility of codifying such thought, but, to the best of my knowledge, it has not yet taken place.

A great service could be done in this area by first elucidating the intellectual underpinnings—the abstract reasoning—involved in spirituality. We must understand the symbol system of spiritual and religious writing better to understand the sort of reasoning that takes place within it. What are the mental transformations necessary to think spiritually? Can the rules of such reasoning be made accessible to the scientist, to computer representations? Are there special instances when spiritual thought achieves a critical mass of abstract reasoning, and therefore qualifies as an intelligence? At present, spiritual intelligence, like spirituality itself, remains mysterious in many respects. As Emmons pursues his journey of describing a spiritual intelligence, I look forward to what he will teach us about the quality of thought that accompanies spirituality.

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