



The pioneer of the Theory of Multiple
Intelligences explains how it can help organizations
employ human capital more effectively.

Thought Leader Interview:

Howard Gardner

by Karen Christensen

You have referred to intelligence as ‘a biopsychological potential’. Please explain this term.

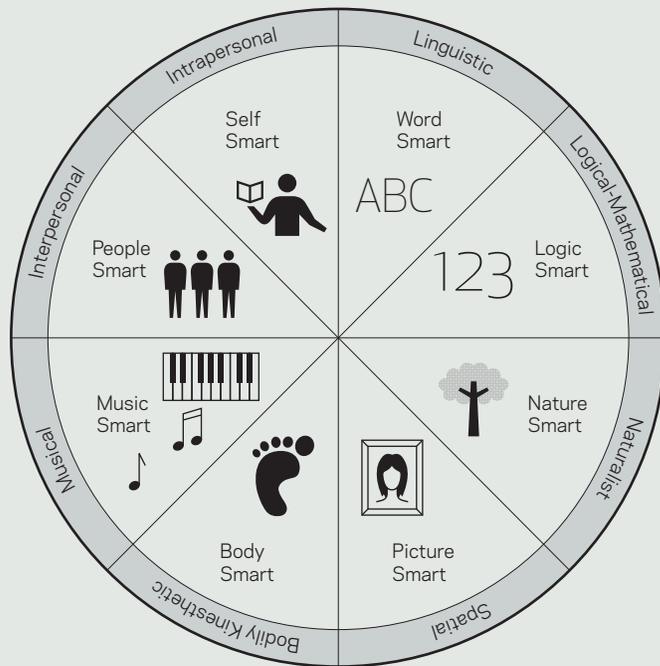
People often use the terms ‘mind’ and ‘brain’ interchangeably, but they are not one and the same. The brain is an organ within the skull, while the mind is a hypothetical construct that includes cultural knowledge, interaction with other people, societal rules etc. By using the term ‘biopsychological’ to describe intelligence, I am straddling the fence between Biology and Psychology, making it clear that the mind and the brain are separate entities. As for the potential part, no form of intelligence expresses itself automatically; it has to be stimulated, guided, nurtured or channeled by the surrounding culture.

Your Theory of Multiple Intelligences defines eight distinct intelligences (see page 12). In your view, which one (or combination thereof) is most lacking in the world today?

It depends on which culture you are looking at. For example, *interpersonal intelligence* is very well developed in Japan, and *musical intelligence* is particularly valued in Finland, Hungary and West Africa – but less so in the United States. In general, while some individuals in every culture have well developed *intrapersonal intelligence* (an understanding of the self), we don’t know much about how to develop it. Two hundred years ago, that didn’t matter – people basically did whatever their forefathers did and married individuals to whom they were ‘assigned.’ But nowadays, when most people have to make



All healthy individuals possess each of these skills to some extent, although individuals differ in the degree of skill and in the nature of their combination.



their own decisions about important matters, a lack of intrapersonal intelligence can be a serious limitation.

You have highlighted the independence of the various intelligences. Why is this so important?

I actually speak of *relative* autonomy between the intelligences, which means that, on average, if a person is strong (or weak) in one intelligence, we cannot predict with any confidence how she will perform with respect to other intelligences. Also, an important part of my Theory is that, in selected cases of brain injury, a particular intelligence can be compromised or spared, independent of what happens to the others. That said, I also believe that intelligences may well draw on some of the same resources – such as *attention* – and so in this sense, they are not completely independent. I like to think of the various intelligences as separate muscles, and it is up to us how we develop and use them.

Describe the difference between intelligences and domains.

This is an important distinction that I wasn't aware of when I first introduced MI Theory nearly 30 years ago. As I have said, each

type of intelligence is a biopsychological potential; to use an analogy with which we are all familiar, it is like we have eight separate 'computers' in our brains that interact with one another. A domain, on the other hand, is an organized body of knowledge and expertise within society. Some *intelligences* and *domains* might have similar names, but one cannot therefore conclude that only that particular intelligence is involved in activities in that domain. For instance, musical performance certainly involves *musical* intelligence, but it just as surely involves others as well, such as *bodily kinesthetic* and *personal* intelligences. Similarly, the fact that one does well in the domain of Mathematics does not mean that one is necessarily using just *mathematical* intelligence; equal levels of success in certain mathematical spheres could be achieved by individuals using *spatial* or *linguistic* intelligence. By the same token, strength in one intelligence doesn't mean that one will necessarily become immersed in that domain. Many individuals with high *mathematical* intelligence might choose to work in domains that seem remote, such as Law.

You believe that our society suffers from three biases: 'Westist,' 'Testist' and 'Bestist.' Please describe them.

Each of us has our own unique profile of strengths and weaknesses, and these are worth knowing about, taking advantage of, and as appropriate, strengthening or combining in new ways.

Being ‘Westist’ involves putting certain Western cultural values – which date back to **Socrates** – up on a pedestal. For example, we tend to believe that logical thinking and rationality are paramount, but clearly, they are not the only important virtues. Being ‘Testist’ suggests a bias towards focusing on those human abilities or approaches that are readily testable. If something can’t be tested, it often seems that it isn’t worth paying attention to. My feeling is that assessment can and should be much broader and much more humane than it currently is, and that psychologists should spend less time ranking people and more time helping them. ‘Bestist’ is a reference to **David Halberstam**’s book *The Best and the Brightest*, which referred ironically to the figures who were brought to Washington to help President **John F. Kennedy** and in the process, inadvertently launched the Vietnam War. Any belief that all the answers to a given problem lie within one particular ‘best approach’ can be very dangerous.

How can MI Theory help organizations use human capital more effectively?

Using myself as an example, at one time I used to hire researchers who mirrored my own spectrum of intelligences. Eventually, I concluded that this was exactly the wrong strategy to use: one of me is plenty! Nowadays I focus on finding people who have complementary skills and can work together in a team. MI theory is also relevant for movement within an organization. Just because someone is good at her current work tasks, that doesn’t necessarily mean she will be a good manager or executive. Different roles require completely different skills sets. Everyone knows this, of course, but MI Theory provides a convenient way to think about which ‘moves’ within an organization make sense and which might be more risky.

You advocate paying attention to the various ways people approach tasks as a way to increase one’s own skill repertoire. Please discuss.

Different individuals will approach the same task using different sets of intelligences – which is totally fine, as long as the task gets performed adequately. But as we work alongside our peers, we can sometimes learn more effective ways of accomplishing a particular task – either by using different sets of intelligences or by employing the intelligences in unaccustomed ways. Workers

themselves – or their supervisors – can and should call attention to these ‘different strokes for different folks,’ both as a means of determining individual strengths and also as a way of broadening skill repertoires.

To develop our intrapersonal intelligence, you recommend ‘keeping an eye on the big picture.’ What sort of things should we be thinking about?

Keeping your eye on the big picture is always a good idea, particularly at a time when we are deluged with so much information and things are changing so quickly. By the way, I don’t believe this is just the province of *intrapersonal* intelligence; it is at least as important for *interpersonal* intelligence. The reason I have related it to *intrapersonal* intelligence is that each of us needs to reflect on what we’re trying to accomplish at any one time, both for the near term and over the long haul – how we are progressing, where we are falling short, and what our best options are. In my view this is primarily the job of *intrapersonal* intelligence, though others might refer to it as our ‘executive function’ or ‘practical intelligence’.

How can leaders cultivate an appreciation of the various intelligences within their organizations?

If a leader is truly interested and attuned to the abilities, personality characteristics and goals of the workers in her organization, this increases the likelihood that others will be, as well. I don’t mean that leaders should walk around with an MI chart or with **Myers-Briggs** reports; rather, in the course of everyday conversations (and when appropriate in more formal communications), they should display a realization that we aren’t all the same, nor are we just different points on the same curve. Rather, each of us has a unique profile of strengths and weaknesses, and these are worth knowing about, taking advantage of, and as appropriate, strengthening or combining in new ways. Anyone who creates such an atmosphere is likely to have an organization where the complementary strengths of individuals have a better chance of working together synergistically.

How does creativity fit into your Theory?

In addition to multiple intelligences, I have also studied creativity, and not surprisingly, I believe that there are many forms of *it* as well. Domains that involve characteristic combinations of intelligences

also exhibit characteristic forms of creativity. For example, creativity in Physics turns out to be quite different from creativity in Poetry, Politics or Psychology. What they all have in common is that one cannot be creative unless one has mastered a domain, and research indicates that this process can take up to ten years.

Overall, creativity probably has more to do with personality than with sheer intellectual power; people who enjoy taking risks, who are not afraid of failure, who are attracted to the unknown or uncomfortable with the *status quo* are likely to make creative discoveries. As stressed by my colleague **Mihaly Csikszentmihalyi**, creativity should not be viewed simply as a characteristic of an individual. Rather, it should be seen as something that emerges from the interaction of three entities: the individual with his given talents, personality and motivation; the individual with his domain – the discipline or craft in which he is working; and the individual with his field – the set of individuals and social institutions that render judgments about quality and originality in that field.

Over the years you have considered the existence of additional intelligences. Have any come close to making the official list?

I don't sit around keeping score on the plausibility of different candidate intelligences, but I have considered a few over the years. For instance, I have been interested in the possibility of a *pedagogical* intelligence. We are a unique species in that we teach one another, and the inclination and capacity for this starts at an amazingly early age – two or three. Some of us are quite good at it, while others – including those who are highly skilled in the area being taught – are sometimes not. I am also interested in the possibility of an *existential* intelligence – one that asks Big Questions, like 'What is life all about?' 'Why do we die?' and 'What is love?' If I found convincing evidence of neural representation of either of these, I would add them to my list. I am much more interested in promoting the idea that we all possess several intelligences, and that we vary in which ones we are good at and how we combine them, than in promoting an 'honour roll' of intelligences that is inviolate and eternal.

How has the growth of Neuroscience affected your work?

I am a passionate student of the latest findings from Biology, Genetics and Neuroscience. Though I trained as a psychologist (and I still think like one), if I were a student today I would probably go into one of those fields. At Harvard, where I've taught for many years, I was the co-founder of the Mind, Brain, and Education Initiative at the Graduate School of Education. I am constantly monitoring the neural and genetics literature for evidence about the viability and independence of the various intelligences. Today, we know far more about the specificity of the nervous system than we did 30 years ago, and the preponderance of evidence from Neuroscience is friendly to the idea of multiple intelligences. Interestingly, biologists have tended to be more sympathetic to MI theory than my fellow psychologists, which

might be because I tend to think about issues in a biological, evolutionary manner.

What are some of the key educational implications of your Theory?

In my mind, two are paramount. First, educators who embrace MI Theory should take differences between individuals quite seriously and should, as much as possible, craft education so that each individual can be reached in an optimal manner. The advent of personal computers makes such 'individuation' easier than ever. What was once possible only for the wealthy – personal tutoring – will soon be available to millions of learners around the world. Secondly, any discipline, skill or concept of significance should be taught in more than one way, to activate different intelligences or combinations of intelligences within individual learners. Such an approach yields two enormous dividends: first, it ensures that the teacher (or material) will reach more students; and second, it signals to learners what it means to have a deep, well-rounded understanding of a topic. The truth is, only individuals who can think about a topic in more than one way have a thorough understanding of it; those whose understanding is limited to a single instantiation have but a fragile grasp on it.

MI Theory has been adopted and implemented everywhere from China to Denmark. Which initiative are you the most excited about?

When I first conceived of MI Theory, I saw it as a contribution to Psychology; I hadn't thought much about its educational implications. But within just a few years, MI-focused schools opened up in the U.S., and now there are educational initiatives all over the world. Each focuses on different implications of the Theory and they have remarkably different formats. For a good description of some of them, 42 authors from 15 countries contributed to a 2009 collection called *Multiple Intelligences Around the World*, which I co-edited with **Jie-Qi Chen** and **Seana Moran**.

In June of 2010 I visited China, where interest in MI Theory is unprecedented. Over 100 books on the topic have been published there, and many educators and parents know about the theory. Interestingly, this doesn't necessarily mean an education based on the eight intelligences: for many Chinese educators, it is instead a shorthand for a new and different kind of education that deviates from the practices of the recent past. I never dreamed that I could become a catalyst for change, and it has been extremely rewarding. **R**

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