

# Memory, thinking and intelligence

[Experience](#), [Memories](#)



Early researchers believed intelligence was a general or unitary trait because scores on diverse measures of intelligence including verbal ability, numerical competence and abstract reasoning were highly correlated (Spearman, 1972). However, modern theories of intelligence have defined intelligence in terms of multiple dimensions. Two of the most known intelligence theories are that of Gardner's multiple intelligence and Sternberg's triarchic model. The two theories are similar in that they posit that intelligence is not a single trait but rather is made up of subcomponents, however distinct differences exist between them.

Gardner (1983) argues for the notion of multiple intelligences and proposes eight relatively independent types of intelligence which include linguistic, logical-mathematical, spatial, bodily kinesthetic, musical, interpersonal, intrapersonal, and naturalist intelligences. He also says that we can develop these intelligences through environmental enrichment, the strength of our intelligences on the eight types lies in a continuum, that there are different ways of demonstrating our proficiency in intelligence and that they work together in complex ways. Gardner defines intelligence as the human ability to solve problems or to make something that is valued in one or more cultures.

Sternberg (1990) had proposed a triarchic theory of intelligence. According to Sternberg, intelligence is made up of subcomponents that include the processes that underlie behavior or the componential intelligence, the ability to relate to novel tasks or new ideas in one's environment or experiential intelligence, and the ability to adapt, select or shape one's environment or contextual intelligence. For Sternberg, intelligence is purposive adaptation

to, selection of and shaping of real-world environment relevant to one's life and abilities (Sternberg, 1989).

In comparing multiple intelligence to the triarchic theory of intelligence, we can observe that MI has emphasized the content and construct of intelligence while Sternberg focused on the way people gather and use information. Multiple intelligence theory identified eight types of intelligence and has encouraged the educational community to think of student intelligence in these terms and that each of the types should be enriched and developed. While Sternberg, stresses the process by which a student acquire, learn and use information and knowledge and these abilities are intelligences that is always present in all of us and can be enhance by further training and education.

I believe that Sternberg's triarchic model of intelligence is more relevant in psychology today than multiple intelligence. The theory holds that intelligence is made up of componential, experiential and contextual abilities which are reflective of the traditions of psychology, to understand behavior, to learn through experience and to be masters of our environment. Thus the model has wider implication in the field of psychology, at present it has been used to understand the intellectual abilities of racial and minority groups in school (Suzuki & Aronson, 2005).

It has also been applied extensively by a gifted and talented school and has yielded positive results such as improved test scores and teacher morale (English, 1998). The theory has also been applied to adult education (Sharan & Rosemary, 1998). Moreover, the theory is built upon a solid tradition of

scientific rigor and academic discourse, it has been supported by researches along the years although it has been surpassed in popularity by MI.

## References

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