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Research Article

AN EXAMINATION ON CHINESE CHARACTER EDUCATION AND THE CORRELATION BETWEEN CHINESE CHARACTERS AND THE BRAIN - FROM A METACOGNITIVE PERSPECTIVE

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ABSTRACT

Future development of the human intellect, in contrast with exclusive previous development of the left brain, has been positively linked with the development of both the left brain and right brain together. As can be seen in the precedent academic contributions of Japan, which has an academic curriculum design that strictly includes Chinese Character learning, it has been confirmed that the metacognitive benefits provided by Chinese Character education boost creativity and enable students and professionals to leverage and convert their intellect into meaningful abilities and activities.

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INTRODUCTION

We sometimes come across geniuses with amazing cognitive abilities. But when tracing and monitoring the outcomes of these geniuses 20 to 30 years later, we can see that they live normal lives just like everyone else. Research has concluded that while these geniuses have extremely high levels of intelligence, because their abilities and talents were not able to keep up with this hyper-intelligence, they were not able to properly leverage their high intelligence levels. Because these people could have become world famous for their intelligence and abilities if only they had developed their talents to be at a level on-par with their intelligence, this truly can be considered to be a waste of talent.

In the future, our 'left brain' and also our 'right brain' must continuously be developed together in order to fully leverage our intellectual abilities. While we have previously lived in an age of the left brain, the future is the age of both the left brain and also the right brain. This research paper presented backup evidence and data that support a new index for Chinese Character Learning that was designed to develop both the left brain and also the right brain at the same time. The research results confirmed by the research team at the Gachon University Neuroscience Research Institute are expected to propose a newly created curriculum designed to provide an

education program that is both truly needed and also appropriate for our times that is able to meaningfully connect and associate both the Chinese Character and also the Chinese Language education programs with other academic fields.

DESIGN AND METHODOLOGY

Research studies on Korea Hanja Speed Reading (Chinese Character speed reading) confirm that our brains react differently to the Chinese language when compared to the Korean language. In this research study these differences in activated brain areas and activity were analyzed to examine the exact mechanisms and benefits of Chinese Character education in terms of metacognition. This analysis was conducted against 12 adults proficient at reading Chinese Characters, and by performing fMRIs (Functional magnetic resonance imaging) while the subjects performed a test that measured cognitive memory by reading familiar Chinese words and familiar Korean words, the differences in their cognitive abilities and activated regions in their brain when the Chinese language and when the Korean language were read were examined. Another evaluation related to cognitive memory was conducted against students from the Haneul High School (Incheon, Korea), where students read and memorized word pairs, after which they selfadministered 're-learning' and 'self-directed evaluations.

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FINDINGS/RESULTS

The results from the fMRI and from the cognitive memory tests confirmed that Chinese Language education activated both the left brain and right brain to encourage more creative and active thinking and that engaging in metacognitive processes related to self-directed learning increased the academic and intellectual performance of the children.

Value

This research study was conducted to provide the up and coming generation with a keen sense of awareness regarding the necessity of self-directed learning, such as metacognition, and through research on how the combined education and usage of Chinese Characters and Korean language will be conducted in the future, this research study hopes to serve as the precedent and most relevant reference for follow-up research. This research study also expects to encourage follow up research that examines and develops new educational contents or methods that utilize additional educational references and resources (Chinese Character picture cards or Chinese Character supplementary textbooks etc.).

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