ABSTRACT

THE EFFECTS OF SUPPLEMENTAL PINYIN INPUT WORD PROCESSING ON CHINESE CHARACTER RECOGNITION AND REPRODUCTION

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As technology integrates societies and cultures, Chinese teachers and experts speculate about potential advantages of using Pinyin input word processing for learning Chinese characters. The purpose of this study was to explore effects of supplemental Pinyin input word processing on language students’ Chinese character recognition and reproduction.

A within-subject experimental study was conducted. Eight college foreign language students enrolled in the first semester of Elementary Chinese served as participants. All participants were tested under both the handwriting-only and handwriting-plus treatments. After each treatment, an achievement test was administered to all participants to evaluate their knowledge of Chinese character recognition and reproduction. At the conclusion of the eight-week treatment period, participants also completed a questionnaire to determine their attitudes toward the treatments. A one-way repeated-measures analysis of variance was used to test the two null hypotheses. While both null hypotheses were retained, there was an isolated significant difference ($p = .04$) found when comparing participants’ reproduction test scores under the handwriting-only treatment and the repeated handwriting-only treatment.

No significant differences were found regarding Chinese character recognition and reproduction when students used Pinyin input and when they did not. It is possible that effective teaching and learning occurred within class time and supplemental effects did not matter. All participants expressed a positive attitude toward the treatment of Pinyin input. Future researchers
should replicate this study at both intermediate and advanced levels of Chinese language programs. A treatment period longer than eight weeks might maximize experimental conditions. A sample larger than eight participants may also allow researchers to explore other experimental designs.