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### **Title**

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# **Visual Statistical Learning Contributes to Word Segmentation during Reading of Unspaced Chinese Sentences**

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## **Abstract**

We investigated whether Chinese readers learn to segment words automatically while reading unspaced sentences through statistical learning. Experiment 1 replicated Saffran et al.s (1997) study using Chinese monosyllables presented auditorily to foreign learners of Chinese. The learning outcome was .57 on a two-alternative forced-choice test, statistically better than guessing (.5). Experiment 2 repeated Experiment 1 but presented the Chinese monosyllable string visually as a character string. Experiment 3 repeated Experiment 2 but doubled the exposure. Experiment 4 repeated Experiment 2 with characters of fewer numbers of strokes. The learning outcomes were .53, .52, and .52., not significant when tested individually, but was significant when the data were combined. At least 60% of the participants in each experiment showed the effect. We conclude that visual statistical learning does contribute to automatic word segmentation in Chinese reading.