

Working memory deficits in Chinese developmental dyslexia of ethnic minority children in China

Fang Liu

Capital Normal University, Beijing, China

Yun Tao

Yunnan Normal University, Kunming, China

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Abstract: This study examined the Dai, Wa, Jino ethnic minority Chinese developmental dyslexia children's processing defects of linguistics cognitive level and non-linguistic cognitive level by two experiments. Experiment 1 used the pronunciation repeat, orthography true and false judgment and sentence comprehension tasks to investigate the linguistic cognitive processing defects of different ethnic Chinese Developmental Dyslexia children. We found the formation of Chinese dyslexia is not affected by ethnic mother tongue. A dual-task for working memory, calculation as task one and speech pronunciation as task two, was employed in experiment 2. When the Chinese developmental dyslexia children did the two tasks simultaneously, their performances were significantly lower than the normal children. The results indicate that all ethnic Chinese developmental dyslexic children have working memory defects. The central executive system of working memory defects may be the Chinese developmental dyslexia underlying causes.