



Department of Psychology
The University of Hong Kong
香港大學心理學系

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Departmental Seminar

Similarities and differences in the responsiveness to a phonological intervention in Chinese children and adults with reading disability



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11:00a.m. – 12:00n.n.

Room 715, 7/F

The Jockey Club Tower

Centennial Campus

The University of Hong Kong

Abstract

Reading disability (RD) is a persistent difficulty in acquiring fluent and accurate reading skills despite adequate intelligence and learning opportunities. Although phonological intervention has been shown to improve reading in children with RD, most evidence comes from alphabetic languages, and its benefits for adults remain unclear. We compared Chinese children and adults with RD following four weeks of phonological training. Both groups improved in reading and phonological awareness, but their time courses differed. Adults showed more immediate gains from pre- to post-intervention, whereas children tended to show delayed gains at the three-month follow-up. Baseline neural differences were age specific, involving reduced activation in the left inferior frontal gyrus and precuneus in children, but in the left superior and inferior temporal gyri in adults. Following intervention, children showed stronger functional connectivity between the left precuneus and frontal regions, whereas adults showed stronger connectivity between the left superior temporal gyrus and occipitotemporal regions. These findings indicate that phonological intervention can benefit readers with RD beyond childhood, while revealing age-dependent pathways of neural plasticity.

About the Speaker

Ms. Hua is an MPhil student in Professor Cao Fan's laboratory at the University of Hong Kong, where she also earned her bachelor's degree in Psychology. Her research lies at the intersection of neuroscience, cognition, and behavior, with a particular focus on reading development and reading disorders. She investigates the neural mechanisms underlying developmental and learning disorders, as well as the relationships between brain structure, brain function, and behavioral performance. Her work also examines how behavioral interventions may alter these neural systems.

Zoom Meeting (For participants who couldn't attend the Seminar in person)

<https://hku.zoom.us/j/96139448713?pwd=IeK34iIePMvSNRaQuDNaBm7FYIjh.1>

Meeting ID: 961 3944 8713 | Password: 483723

~ All are Welcome ~

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