POKFULAM ROAD
HONG KONG
CHINA
中國香港
薄扶林道

THE UNIVERSITY OF HONG KONG
Faculty of Education
香港大學教育學院

Ms Emily Cheung
Tel: (852) 3917 4270
Fax: (852) 2517 0075
Email: emchy@hku.hk

Press Release

Learning to Read Chinese Characters through Repeated Exposure:
The HKU Speech, Language and Reading Lab is recruiting Hong Kong children with and without dyslexia from Grades 3 to 6

The Speech, Language and Reading Lab (SLR Lab) in the Division of Speech and Hearing Sciences at the Faculty of Education, the University of Hong Kong (HKU) is recruiting children with and without dyslexia from Grades 3 to 6 to participate in a research project on statistical learning of Chinese characters (HREC Reference No.: EA1512026). This project is funded by the Hong Kong Research Grants Council (RGC)/General Research Fund.

Dyslexia is a common specific learning difficulty characterized by a failure to acquire reading and spelling skills that is not the result of low intelligence, unequal educational or social opportunities, or any sensory damage. It is estimated that 10% to 12% of Hong Kong school-age children have dyslexia. Despite this prevalence, a surprising lack of information regarding the sources of dyslexic difficulties is available to Hong Kong teachers and parents.

Over the last six years, our SLR lab has worked closely with children with developmental dyslexia in order to discover the mechanisms underlying dyslexics' word reading difficulties. Our research consistently suggests that statistical learning - or the ability to detect the hidden structural and distributional patterns of visual or auditory input through extensive repeated exposure - plays an important role in Chinese word reading. For example, we demonstrated that even kindergartners were able to learn and apply untaught positional regularities of stroke patterns to construct novel characters. Furthermore, typically developing Hong Kong Chinese children were able to statistically learn positional, phonological and semantic regularities of an artificial orthography (He & Tong, 2017a). Additionally, children with dyslexia showed impaired statistical learning after a small number of exposures to a sequence, but intact statistical learning after a large number of exposures. In contrast, the age-matched and reading level–matched control groups showed intact statistical learning after both small and large numbers of exposures. Children with dyslexia also exhibited a slower learning rate (He & Tong, 2017b). These findings imply that Chinese children with dyslexia are able to learn hidden regularities of Chinese characters, but they do so relatively slowly and need more exposure than typically developing children. Thus, children with dyslexia need more patience and attention from teachers and parents.

On the basis of our previous research, this current study further examines whether Chinese children with dyslexia demonstrate different degrees of strengths and weaknesses across different aspects of statistical learning of Chinese characters. We aim to recruit 500 children with dyslexia and 500 typically developing children across Grades 3 through 6 to join the study. The results of this study will advance our understanding of the role that statistical learning plays in Chinese reading development.

This experiment consists of two sections: (1) standardized Chinese literacy and cognitive tests; and (2) animated test of statistical learning. The children will participate in a 2.5-hour one-on-one testing session conducted by trained research assistants. Participants will respond to symbols, pictures, and sounds verbally and through key pressing. The tasks will not cause any discomfort to participants. Prior

to testing, parents need to complete a language and social background questionnaire for their children.

Upon completion of the experiment, participants and/or their guardians will:
• Receive a $100 HKD book coupon as a token of appreciation;
• Receive an individual performance report and certificate of participation;
• Be invited to join our free parent-teacher workshops.

To join this study, please complete the online application form (https://goo.gl/forms/OdyFYnheOaQRtgXp2). Eligible participants will receive further notification regarding the testing date and time.

For application enquiries, please contact Mr Joseph Lam or Ms Cecilia Fung, research assistants of HKU SLR Lab (Tel: 2241-5984 / Email: slrlab.mlam@gmail.com).

About the Speech, Language and Reading Lab
The SLR Lab was established and is led by Dr Shelley Tong, Associate Professor in the Division of Speech and Hearing Sciences at the Faculty of Education, HKU. We unify three psycholinguistic areas: speech perception and production, language learning, and reading acquisition. We focus on (1) the mechanism underlying suprasegmental speech and orthographic processing in bilingual children to formulate speech-print associations; (2) uncovering the links between oral language skills and literacy outcomes; and (3) promoting an integration of speech-language-literacy in clinical and educational practice for bilingual children. We aim to understand the prerequisite skills underlying rapid language and literacy acquisition, and to further explore specific language and literacy disorders at the cognitive, linguistic, and social-behavioural levels.

For further details, please visit: http://slrlab.wixsite.com/slrlab.

For media enquiries, please contact Ms Emily Cheung, Senior Manager (Development and Communications) (Tel: 3917 4270 / E-mail: emchy@hku.hk).

June 26, 2018