

## Chanyuan Gu (古婵媛)

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### **EDUCATION & CERTIFICATE**

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**The Hong Kong Polytechnic University (PolyU)** 2020.09 - Present  
Ph.D. Student Department of Chinese and Bilingual Studies  
Dissertation: Neurocognitive Basis of Naturalistic Reading Comprehension in Second Language

**Chinese Academy of Sciences (CAS)** 2017.09 - 2020.08  
Applied Psychology M.S. Institute of Psychology  
Curriculums (3.55/4.0): multivariate statistical analysis, cognitive science and brain mapping, psychological assessment, specialized English, research methods of psychology, advanced topics in applied psychology

**Southwest Jiaotong University (SWJTU)** 2013.09 - 2017.06  
Applied Psychology B.A. Department of Psychological Education  
Curriculums (3.77/4.0): developmental psychology, educational psychology, statistical analysis, social psychology, emotional psychology, physiological psychology, cognitive psychology

### **RESEARCH INTERESTS**

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Second Language Reading, Neuro-Cognitive Mechanisms, Language Acquisition and Development, Individual Differences, Naturalistic Neuroimaging, Neural Coupling, Structural MRI

### **PUBLICATIONS (Peer-reviewed)**

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**Gu, C., & Bi, H. Y.** (2020). Auditory Processing Deficit in Individuals with Dyslexia: A Meta-Analysis of Mismatch Negativity. *Neuroscience & Biobehavioral Reviews*, 116, 396-405.

**Gu, C., & Bi, H. Y.** (2021). The effect of subjective phonetic-radical neighborhood on character naming in developing children. *Psychological Development and Education*. 37(01), 68-75. [in Chinese]

**Ma, X., Liu, Y., Clariana, R., Gu, C., & Li, P.** (2022). From eye movements to scanpath networks: A method for studying individual differences in expository text reading. *Behavior research methods*, 1-21.

Yang, Y., Zuo, Z., Tam, F., Graham, S. J., Li, J., Ji, Y., Meng, Ze., **Gu, C.**, ... & Xu, M. (2022). The brain basis of handwriting deficits in Chinese children with developmental dyslexia. *Developmental Science*, 25(2), e13161.

Yang, Y., Tam, F., Graham, S., Sun, G., Li, J., **Gu, C.**, ... Bi, H-Y., Zuo, Z. (2020). Men and women differ in the neural basis of handwriting. *Human Brain Mapping*, 41(10), 2642-2655.

### **CONFERENCE PRESENTATIONS (Peer-reviewed)**

**Gu, C.**, & Li, P. (July 2022). The Neurocognitive Bases of Word Identification and Word-to-Text Integration: Expository Text Reading in L1 and L2. Oral presentation at the 32nd Annual Meeting of the Society for Text and Discourse (virtual meeting).

**Gu, C.**, & Li, P. (March 2022). Lexical processing in L1 and L2 naturalistic reading: Evidence from neural connectivity and network science. Oral presentation at the 6th Conference of Association for Reading and Writing in Asia (virtual meeting).

**Gu, C.**, & Li, P. (Oct 2021). How bilinguals dynamically comprehend words in the text: Evidence from neural connectivity and network science. Slide Slam Presentation at the 2021 SNL Annual Meeting (virtual meeting).

**Gu, C.**, & Bi, H. Y. (Oct 2021). Categorical Perception of Mandarin tones in Children with Developmental Dyslexia. Slide Slam Presentation at the 2021 SNL Annual Meeting (virtual meeting).

**Gu, C.**, & Bi, H. Y. (Sep 2020). Auditory Processing Deficit in Individuals with Dyslexia: A Meta-Analysis of Mismatch Negativity. Oral presentation at the 4th Conference of Association for Reading and Writing in Asia (virtual meeting).

**Gu, C.**, & Bi, H. Y. (Nov 2018). The effect of subjective phonetic-radical neighborhood on character naming in developing children. Oral presentation at the 21th National Academic Congress of Psychology, Beijing, China.

### **RESEARCH EXPERIENCE**

Reading Brain

Leader (dissertation) 2020.11 – Present

Multimedia Learning

Leader 2020.10 – Present

Reading-related abilities in twins

Assistant 2019.04 – 2019.12

Cognitive neural mechanism and intervention of Chinese developmental dyslexia with writing deficit

Assistant 2018.09 – 2019.12

The function of visual macro-cell pathway in Chinese Developmental dyslexia

10/10/22

Assistant 2018.09 - 2018.11

The audiovisual integration ability in Chinese children with developmental dyslexia  
Assistant 2018.09 - 2019.02

The brain function and structural connection of Chinese character writing  
Assistant 2018.09 - 2019.02

Investigation of AIDS KAP among college students and its influential factors  
Leader 2015.04 - 2016.04

## **TRAINING**

### **Experimental Data**

Behavioral, eye-tracking, EEG, and fMRI data

### **Experimental skills**

Data Collection: E-prime (familiar), DMDX (basic)

Data Analysis: Matlab (eeglab, SPM, CONN, and basic programming), Python (basic programming), R (basic programming), DSI Studio, FSL (preprocessing and structure), DataViewer (beginner)

Data Statistics: SPSS (familiar), Python (basic programming), R (basic programming), and Stata (meta-analysis)

Others: Praat (beginner)

### **Languages**

Mandarin Chinese (native), Sichuan Dialect (native), English (fluent), Cantonese (beginner)

### **Certificates**

Psychological Consultant (level 3)

Human Resource Certificate (level 3)

Psychological Teacher Qualification Certification in High School

## **SELECTED AWARDS AND HONORS**

National Scholarship (2015-2016)

Good reporter (2014-2015)

Miyoshi students (2014-2015)

Comprehensive scholarship (2013-2017)

Simulated psychological consultation contest in Sichuan province (the first prize)

## **TEACHING EXPERIENCE**

Teaching assistant (2021 and 2022)

Courses: Description of Chinese II: Sounds and script

## **SCHOOL EXPERIENCE**

10/10/22

Summer teaching (2015)

Psychological consultation room (2013-2017)

Student park self-management committee, ministry of rights and interests (2013-2014)

Psychological press corps (2013-2014)

Chinese youth volunteers (2016)