

Rachel Ka-Ying TSUI, Ph.D.

Postdoctoral researcher at RIKEN CBS Laboratory for Language Development

Address : Laboratory for Language Development
RIKEN Center for Brain Science
Information Science Building
2-1 Hirosawa Wako City, Saitama 351-0198 JAPAN

Email : rachelkytsui@gmail.com

Website : <https://rachelkytsui.github.io/>

Twitter : [@rachelkytsui](https://twitter.com/rachelkytsui)

RESEARCH EXPERIENCE and EDUCATION

- Feb 2021 – **Postdoctoral researcher**
Present Laboratory for Language Development, RIKEN CBS (Japan)
Supervisor: Dr. Reiko Mazuka
- Sept 2019 – **Postdoctoral fellow in Psychology**
Jan 2021 Concordia University (Montréal, Canada)
Supervisor: Dr. Krista Byers-Heinlein
- Aug 2019 **PhD in Speech and Hearing Sciences**
The University of Hong Kong (Hong Kong)
Supervisors: Dr. Xiuli Tong; Prof. Reiko Mazuka
Thesis: *The role of pitch characteristics on the development of lexical tone perception in the first year of life: Evidence from Cantonese-learning infants*
- Sept 2014 – **Research Assistant (Full-time)**
Aug 2015 Speech, Language and Reading Lab,
Division of Speech and Hearing Sciences, The University of Hong Kong
- Aug 2014 **MA in Linguistics**
The University of Hong Kong (Hong Kong)
Thesis: *Comparing the categorical perception of English tense-lax vow pairs by Cantonese bilinguals and by native English speakers*
- Sept 2013 – **Research Assistant (Part-time)**
Aug 2014 Neurolinguistics Lab,
Department of Linguistics, The University of Hong Kong
- May 2013 **BA in Japanese Language and Linguistics**
University of California, Berkeley (Berkeley, USA)
Double major; Highest Distinction in General Scholarship

RESEARCH INTEREST

- Infant speech perception
- Early language and vocabulary development
- Language dominance / Parental language input
- Lexical tones and intonation
- Bilingualism
- Cross-cultural/Cross-language differences

RESEARCH GRANTS

- 2018 – 2019 **The University of Hong Kong Seed Fund for Basic Research**
Co-Investigator (Principal Investigator: Dr. Xiuli Tong)
“Are all lexical tones perceived equally by Cantonese infants? Tracing the source of difficulty in lexical tone perception and the development of lexical tone perception during the first year of life.”

PUBLICATIONS

Manuscripts [* indicates students under my co-supervision]

8. **Tsui, R. K.-Y.**, Kosie, J. E., Fibla, L., Lew-Williams, C., & Byers-Heinlein, K. (2022). Patterns of language switching and bilingual children’s word learning: An experiment across two communities. *PsyArXiv*.
<https://doi.org/10.31234/osf.io/hpwbr>
7. Choi, W., & **Tsui, R. K.-Y.** (in press). Perceptual integrality of foreign segmental and tonal information: Dimensional Transfer Hypothesis. *Studies in Second Language Acquisition*.
6. **Tsui, R. K.-Y.**, Gonzalez-Barrero, A. M., Schott, E., & Byers-Heinlein, K. (2022). Are translation equivalents special? Evidence from simulations and empirical data from bilingual infants. *Cognition*, 225, 105084.
<https://doi.org/10.1016/j.cognition.2022.105084>
5. Dal Ben, R., Brouillard, M., Gonzalez-Barrero, A. M., Killam, H., Kremin, L. V., Quirk, E., Sander-Montant, A., Schott, E., **Tsui, R. K.-Y.**, Byers-Heinlein, K. (2022). How open science can benefit bilingualism research: A lesson in six tales. *Bilingualism: Language and Cognition*, 25(5), 913–920.
<https://doi.org/10.1017/S1366728922000256>
4. Tong, S. X., **Tsui, R. K.-Y.**, Law, N. S. H., Fung, L. S. C., Chiu, M. M., & Cain, K. (2022). “And this one’s juuust right!”: Prosody Predicts Reading Comprehension in Hong Kong Chinese-English Bilingual Children. *PsyArXiv*.
<https://doi.org/10.31234/osf.io/bs6fa>
3. Mitchell, L.*, **Tsui, R. K.-Y.**, & Byers-Heinlein, K. (2022). *Cognates are advantaged in early bilingual expressive vocabulary development*. *PsyArXiv*.
<https://doi.org/10.31234/osf.io/daktp>
2. Byers-Heinlein, K., **Tsui, R. K.-Y.**, Van Renswoude, D., Black, A. K., Barr, R., Brown, A., ... & Singh, L. (2021). The development of gaze following in monolingual and bilingual infants: A multi-laboratory study. *Infancy*, 26(1), 4–38.
<https://doi.org/10.1111/infa.12360>
1. **Tsui, R. K.-Y.**, Tong, X., & Chan, S-K. (2019). Impact of language dominance on phonetic transfer in Cantonese-English bilingual language-switching. *Applied Psycholinguistics*, 40(1), 29–58. <https://doi.org/10.1017/S0142716418000449>

Manuscripts in preparation

4. Kosie, J., **Tsui, R. K.-Y.**, Martinez, T., Sander-Montant, A., Fibla, L., Potter, C., Byers-Heinlein, K., & Lew-Williams, C. (in preparation). *Cross-community differences in bilingual infants' experience with language switching*.
3. **Tsui, R. K.-Y.**, Mazuka, R., & Tong, X. (in preparation). *Sensitivity to pitch characteristics in the perceptual development of native lexical tones during the first year of life*.
2. Tong, X., **Tsui, R. K.-Y.**, Law, N. S. H., Fung, L. S. C., Cain, K. (2020). *Concurrent and across time relation of prosodic reading and reading comprehension among Cantonese English-learning children*. Manuscript under review.
1. **Tsui, R. K.-Y.**, & Tong, X. (2020). *Production of Cantonese sentence-final particles: A window into the complementary distribution of final rising and global raising in Cantonese intonation*. Manuscript under review.

Peer-reviewed conference proceedings [* indicates students under my co-supervision]

3. **Tsui, R. K.-Y.**, & Tong, X. (2018). An acoustic study on the effect of the interaction between intonation and lexical tones on the realization of Cantonese sentence-final particles. In K. Klessa, J. Bachan, A. Wagner, M. Karpiński, & D. Śledziński (Eds.), *Proceedings of the 9th International Conference on Speech Prosody 2018* (pp. 45-49). <https://doi.org/10.21437/SpeechProsody.2018-9>
2. Tong, X., **Tsui, R. K.-Y.**, & Kan, A. K-K.* (2018). Prosodic reading and reading comprehension in Chinese and English among Cantonese-English Bilingual Children: A longitudinal study. In K. Klessa, J. Bachan, A. Wagner, M. Karpiński, & D. Śledziński (Eds.), *Proceedings of the 9th International Conference on Speech Prosody 2018* (pp. 858-862). <https://doi.org/10.21437/SpeechProsody.2018-173>
1. **Tsui, R. K.-Y.**, Tong, X., & Fung, L. S. C. (2016). The role of prosodic reading in English reading comprehension among Cantonese-English bilingual children. In J. Barnes, A. Brugos, S. Shattuck-Hufnagel, & N. Veilleux (Eds.), *Proceedings of the 8th International Conference on Speech Prosody 2016* (pp. 582-586). <https://doi.org/10.21437/SpeechProsody.2016-119>

PRESENTATIONS

Oral [* indicates students under my co-supervision]

12. **Tsui, R. K.-Y.**, Kosie, J. E., Fibla, L., Lew-Williams, C., & Byers-Heinlein, K. (2022, November). *The effect of language switching on bilingual children's novel word learning*. Paper presented at the 47th Boston University Conference on Language Development (BUCLD), Boston University, Boston, United States.
11. **Tsui, R. K.-Y.**, Mitchell, L.*, Byers-Heinlein, K. (2022, July). *Cross-language cognate advantage in bilingual infants' vocabulary acquisition*. Paper presented at the International Congress of Infant Studies (ICIS), Ottawa, Canada.

10. Kosie, J. E., Fibla, L., **Tsui, R. K.-Y.**, Martinez, T., Sander-Montant, A., Potter, C., Byers-Heinlein, K., & Lew-Williams, C. (2022, July). *Infant's exposure to language switching in bilingual homes across two communities*. Paper presented at the International Congress of Infant Studies (ICIS), Ottawa, Canada.
9. Tong, X., **Tsui, R. K.-Y.**, Law, N. S. H., Fung, L. S. C., Chiu, M. M., & Cain, K. (2022, July). *Prosodic Reading Predicts Chinese and English Reading Comprehension Development for English-Learning Cantonese Children in Hong Kong*. In *The ups and downs of reading: Prosodic sensitivity and reading in different languages and contexts* [Symposium]. Paper presented at the 29th Annual Meeting of the Society for the Scientific Study of Reading (SSSR), Newport Beach, CA, USA.
8. Kosie, J. E., **Tsui, R. K.-Y.**, Martinez, T., Sander-Montant, A., Fibla, L., Potter, C., Byers-Heinlein, K., & Lew-Williams, C. (2022, June). *Children's exposure to language switching in bilingual homes across two communities*. Paper presented at the 3rd biennial Workshop on Infant Language Development (WILD), San Sebastian, Spain.
7. **Tsui, R. K.-Y.**, Gonzalez-Barreo, A. M., Schott, E., & Byers-Heinlein, K. (2021, November). *Translation equivalents are not special in bilingual infant vocabulary development: Evidence from a quantitative model*. Paper presented at the 46th Boston University Conference on Language Development (BUCLD), Boston University, Boston, United States.
6. **Tsui, R. K.-Y.**, (2019, June). *The role of pitch characteristics on the development of lexical tone perception in the first year of life: Evidence from Cantonese-learning infants*. Seminar presented at the Brown Bag Lunch Seminar series at the Division of Speech and Hearing Sciences, The University of Hong Kong, Hong Kong.
5. **Tsui, R. K.-Y.**, & Tong, X., (2018, October). *Production of Cantonese Sentence-Final Particles: The Complementary Distribution of Final Rising and Global Raising in Cantonese Intonation*. Paper presented at the 17th International Conference on the Processing of East Asian Languages (ICPEAL), National Taiwan University, Taipei, Taiwan.
4. **Tsui, R. K.-Y.**, (2018, June). *Are all lexical tones perceived equally by native infants? The effect of similarity in f0 height and f0 contour on development of native lexical-tone perception in Cantonese infants*. Paper presented at the 2018 UCL Institute of Education Doctoral Summer Conference, University College London Institute of Education, London, UK.
3. **Tsui, R. K.-Y.**, (2017, December). *Interaction effects between intonation and lexical tones on the realization of Cantonese sentence-final particles: An acoustic study*. Paper presented at the Postgraduate Research Conference, Faculty of Education, The University of Hong Kong, Hong Kong.
2. **Tsui, R. K.-Y.**, (2017, May). *The role of prosody in reading comprehension among Cantonese-English bilingual children: A cross-language investigation*. Paper presented at the Postgraduate Research Conference, Faculty of Education, The University of Hong Kong, Hong Kong.
1. **Tsui, R. K.-Y.**, & Tong, X., (2016, July). *The role of prosody in reading comprehension among Cantonese-English bilingual children: A cross-*

language investigation. In X. Tong (Chair), *Unravelling the myth of bilingual reading comprehension development: The role of prosody and executive functions* [Symposium]. Paper presented at the 23rd Annual Meeting of the Society for the Scientific Study of Reading (SSSR), University of Porto, Portugal.

Poster [* indicates students under my co-supervision]

12. Fibla, L., Kosie, J., **Tsui, R. K.-Y.**, Martinez, T., Sandee, A., Potter, C., Byers-Heinlein, K., & Lew-Williams, C. (2022, April). *Children's exposure to language switching in bilingual homes across two communities*. Poster presented at the 2022 Cognitive Development Society Conference (CDS2022), Madison, Wisconsin.
11. **Tsui, R. K.-Y.**, Mitchell, L.*, Byers-Heinlein, K. (2022, February). *Cross-language cognate advantage in bilingual infants' vocabulary acquisition*. Poster presented at the RIKEN CBS Retreat 2021, RIKEN CBS, Japan.
10. Kosie, J., **Tsui, R. K.-Y.**, Martinez, T., Sander-Montant, A., Fibla, L., Potter, C., Byers-Heinlein, K., & Lew-Williams, C. (2021, November). *Cross-community differences in bilingual infants' experience with language switching*. Poster presented at the 46th Boston University Conference on Language Development (BUCLD), Boston University, Boston, United States.
9. Mitchell, L.*, **Tsui, R. K.-Y.**, & Byers-Heinlein, K. (2021, November). *Bilingual infants learn cognates more rapidly than non-cognates*. Poster presented at the 46th Boston University Conference on Language Development (BUCLD), Boston University, Boston, United States.
8. **Tsui, R. K.-Y.**, Barr, R., Black, A., Brown, A., Durrant, S., Gampe, A., . . . Byers-Heinlein, K. (2020, July). *A multi-lab study of gaze-following development in monolingual and bilingual infants*. Poster presented at the 2020 Virtual International Congress of Infant Studies (VICIS), virtual conference.
7. **Tsui, R. K.-Y.**, Tong, X., & Mazuka, R., (2018, October). *Native Cantonese-learning infants' discrimination of lexical tones that are similar in pitch onset*. Poster presented at the 1st Asia-Pacific Babylab Constellation (ABC) Conference, Nanyang Technological University, Singapore.
6. **Tsui, R. K.-Y.**, & Tong, X., (2018, June). *An acoustic study on the effect of the interaction between intonation and lexical tones on the realization of Cantonese sentence-final particles*. Poster presented at the 9th International Conference on Speech Prosody 2018, Adam Mickiewicz University, Poznań, Poland.
5. Tong, X., **Tsui, R. K.-Y.**, & Kan, A. K.-K. (2018, June). *Prosodic reading and reading comprehension in Chinese and English among Cantonese-English Bilingual Children: A longitudinal study*. Poster presented at the 9th International Conference on Speech Prosody 2018, Adam Mickiewicz University, Poznań, Poland.
4. **Tsui, R. K.-Y.**, & Tong, X., (2017, February). *The role of prosody in reading comprehension among Cantonese-English bilingual children: A cross-language investigation*. Poster presented at the 1st Association for Reading

and Writing in Asia (ARWA) Conference, The Education University of Hong Kong, Hong Kong.

3. **Tsui, R. K.-Y., & Tong, X.,** (2016, December). *A cross-language comparison of intonation patterns in Cantonese and English among Cantonese-English bilingual children*. Poster presented at the 16th International Conference on the Processing of East Asian Languages (ICPEAL), South China Normal University, Guangzhou, China.
2. **Tsui, R. K.-Y.,** (2016, July). *Infant tone perception*. Poster presented at the RIKEN BSI Summer Internship Poster Presentation, RIKEN Brain Science Institute, Wako-shi, Japan.
1. **Tsui, R. K.-Y., & Tong, X.,** (2016, May). *The role of prosodic reading in English comprehension among Cantonese-English bilingual children*. Poster presented at the 8th International Conference on Speech Prosody 2016, Boston University, Boston, MA, US.

Invited Talks / Outreach

2. **Tsui, R. K.-Y.,** (2020, May). *Babies've got talent for language learning*. Invited talk presented at Pint of Science Canada 2020 (Montréal). Cancelled due to COVID-19.
1. **Tsui, R. K.-Y.,** (2016, June). *Becoming a skilled comprehender in both Chinese and English*. Invited talk presented at the Speech, Language and Reading Lab Parent-Teacher Workshop, Division of Speech and Hearing Sciences, The University of Hong Kong, Hong Kong.

AWARDS and SCHOLARSHIPS

July 2020	CRBLM Online Conference Subsidy Centre for Research on Brain, Language and Music, Concordia University
2019 – 2020	Postdoctoral Fellowship Top-up Award Faculty of Arts and Science, Concordia University
June 2018	UCL Institute of Education-HKU Research Postgraduate Student Exchange Programme Faculty of Education, The University of Hong Kong
June 2018	Conference Support for Research Postgraduate Students The University of Hong Kong
May 2018	Research Postgraduate Student Teaching Award 2017 The University of Hong Kong
Jun – Aug 2016	RIKEN Brain Science Institute Summer Internship Laboratory for Language Development, RIKEN BSI (Host: Professor Reiko Mazuka)
May 2016	Conference Support for Research Postgraduate Students The University of Hong Kong

- Sept 2015 **The Philip K H Wong Foundation Postgraduate Fellowship**
The University of Hong Kong
- 2015 – 2019 **Postgraduate Studentship**
The University of Hong Kong

TEACHING

Experiences

- Fall 2017 **Tutor for Skills Labs (* RPg Student Teaching Award 2017)**
SHSC2032 Statistics and Research Methods for Speech and Hearing
Sciences (Dr. Xiuli Tong)
- Fall 2017 **Teaching Assistant**
SHSC3032 Language Development and Preschool Language Disorders
(Dr. Anita Wong)
- Spring 2017 **Teaching Assistant**
SHSC1035 Phonetics and Phonology (Dr. Pusan Wong)
- Fall 2016 **Teaching Assistant**
SHSC3033 School-aged Language and Literacy Disorders (Dr. Xiuli
Tong)

Training

- Oct – Dec 2015 **Certificate of Teaching and Learning in Higher Education**
Centre for the Enhancement of Teaching and Learning,
The University of Hong Kong (24 hours)

ADIVISING

- 2020 – 2021 **Co-supervisor for undergraduate honour's thesis**
for Lori Mitchell
Department of Psychology, Concordia University
Project: "*Are Similar-Sounding Words Easier for Bilingual Infants to
Learn?*"
- 2018 – 2019 **Co-supervisor for undergraduate final-year dissertation**
for Maegan Kwan Wah So
Division of Speech and Hearing Sciences, The University of Hong Kong
Project: "*Cantonese-learning infants' perception of English stress*"
- 2017 – 2018 **Co-supervisor for undergraduate final-year dissertation**
for Winnie Wing Tung Lau
Division of Speech and Hearing Sciences, The University of Hong Kong
Project: "*Cantonese-learning infants' perception of Mandarin tones*"
- 2016 – 2017 **Co-supervisor for undergraduate final-year dissertation**
for Alvis Ki Fung Kan
Division of Speech and Hearing Sciences, The University of Hong Kong

Project: “*Prosodic reading: A comparison of prosodic production in Cantonese and English among Cantonese-English bilingual children*”

SERVICE ACTIVITIES

Professional

2021 – Present **Reviewer editor**
Frontiers in Psychology

Others

January 2020 **Student poster session judge**
CRDH Annual Conference 2020,
The Centre for Research in Human Development, Concordia University

July 2019 **Facilitator**
“Knowledge exchange parent-teacher workshop: Promoting Cognitive Strengths in Children with Developmental Dyslexia”
Faculty of Education, The University of Hong Kong

March 2018 **Facilitator**
“Knowledge exchange parent-teacher workshop: Becoming a Skilled Comprehender in both Chinese and English”
Faculty of Education, The University of Hong Kong

2016 – 2019 **Student poster session judge**
Annual Dissertation Presentation Day for Bachelor of Science Program in Speech and Hearing Sciences, The University of Hong Kong

2016 – 2019 **Resident tutor**
Chi Sun College, The University of Hong Kong

- Ensuring physical/emotional well-being of students
- Promoting university-community engagement through leading outreach activities, such as visiting homes of senior citizens and offering workshops to senior citizens on a variety of subjects (e.g., basic smartphone skills, craft classes, cultural exchange)

PROFESSIONAL TRAININGS

Research

Jan 2020 **Online Training on LENA (Language Environment Analysis System)**
The LENA Foundation

Oct 2019 **Open Science Practice: Pre-registration of research**
Centre for Research on Brain, Language and Music, Concordia University

May 2019 **Practical Introduction to Phon**
Division of Speech and Hearing Sciences, The University of Hong Kong

Oct 2015 **Automatic Speech Annotation and Analysis with SPPAS**
Department of Chinese and Bilingual Studies, The Hong Kong Polytechnic University

Others

Oct 2018 **Mental Health First Aider**
Counselling and Person Enrichment Section of the Centre of Development
and Resources for Students, The University of Hong Kong

PROFESSIONAL MEMBERSHIPS

Jul 2020 – Present	Cognitive Science Society
Jan 2020 – Present	International Society of Infant Studies
Sept 2019 – Jan 2021	Bilingualism Interest Group Concordia University
Sept 2019 – Jan 2021	Centre for Research in Human Development Concordia University
Sept 2019 – Jan 2021	Centre for Research on Brain, Language and Music Concordia University

LANGUAGES

- Cantonese: Native language
- English: Bilingual
- Japanese: Functional
- Mandarin Chinese: Advanced

RESEARCH and COMPUTER SKILLS

- ELAN (video-coding of infant's looking time; basics of ACLEW coding conventions)
- E-Prime
- Eyetracking: Eyelink, Tobii
- jsPsych: Coding for creating online experiments
- Praat (acoustic analysis, script writing)
- R (ANOVAs, data visualization with ggplot, forest plots, linear/logistics mixed-effects models, meta-analyses, regression, R Markdown)
- SPSS