

Caicai Zhang
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Biography

Dr. Caicai Zhang is an Associate Professor in the Department of Chinese and Bilingual Studies and Director of the Neurocognition of Language, Music and Learning Lab. She is also a member of the Research Centre for Language, Cognition and Neuroscience, and an affiliated member of the Speech Therapy Unit.

Her work broadly concentrates on how language is processed and represented in the human brain, and how it interacts with other cognitive domains such as music and memory. At a more specific level, her research focuses on: (1) the relationship of language, music and brain, investigated from the perspective of how congenital amusia (commonly known as tone deafness), an innate musical pitch disorder, affects speech processing from behavioral to neural levels; (2) how sleep contributes to the consolidation of speech sound categories in the brain of L2 learners; and (3) the neurocognitive mechanisms of learning and memory problems in children with developmental disorders of speech and language. She uses a broad range of tools including behavioral methods, electroencephalograph (EEG) and functional MRI (fMRI) to study these questions. She is currently an Associate Editor/Academic Editor for *Scientific Reports*, *PLOS ONE*, and *Frontiers in Psychology*.

Qualifications

Bachelor of Arts, Fudan University

Doctor of Philosophy, The Chinese University of Hong Kong

Master of Philosophy in Humanities, The Hong Kong University of Science and Technology

Employment

Associate Professor

Associate Professor

Department of Chinese and Bilingual Studies

The Hong Kong Polytechnic University

1 Jul 2021 → present

Visiting Research Fellow

Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences

China

1 Jan 2017 → 1 Jan 2018

Visiting Associate Research Fellow

Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences

China

1 Jan 2014 → 1 Jan 2016

Research outputs

Daytime naps consolidate Cantonese tone learning through promoting cross-talker perception: The role of prior knowledge
Qin, Q. Z. (Corresponding Author), Wu, R. & Zhang, C., 13 Mar 2025, In: *Brain and Language*. 265, 105568.

Setting the “tone” first and then integrating it into the syllable: An EEG investigation of the time course of lexical tone and syllable encoding in Mandarin word production

Chen, X. & Zhang, C. (Corresponding Author), Feb 2025, In: *Journal of Memory and Language*. 140, 104575.

The combined effects of bilingualism and musicianship on listeners' perception of non-native lexical tones
Zhang, L., Zhu, J., Shao, J. & Zhang, C., 5 Nov 2024, In: *Speech Communication*. 165, 103147.

An investigation of the functional neuroanatomy of lexical tone encoding in overt Mandarin word production with functional near-infrared spectroscopy (fNIRS)
Chen, X., Yuan, T., Huang, F. & Zhang, C., Oct 2024, (Not published / presented only).

Methodological insights into declarative memory assessment: Investigating the impact of familiarity and visual complexity in picture recognition tests
Lu, J., Lin, J., Chen, X., Li, L., Huang, F. & Zhang, C., Oct 2024, (Not published / presented only).

Reduced white matter integrity in Cantonese-speaking children with developmental language disorder: Preliminary evidence supporting the Procedural Circuit Deficit Hypothesis
Chen, X., Lin, J., Chan, A., Ullman Michael T., Wong, M. N. & Zhang, C., Oct 2024, (Not published / presented only).

Is procedural learning enhanced in children with developmental stuttering?
Bakhtiar, M., Lin, J., Wong, M. N., Ullman, M. T. & Zhang, C., 16 May 2024, (Not published / presented only).

Talker normalisation of prosodic cues in non-native speakers.
Li, B., Wang, B. X., Chen, S., Zhang, C., Lau, P. Y. & Yang, Y., 1 Dec 2023, (Not published / presented only).

Benefits of targeted memory reactivation in perceptual learning of non-native tones are associated with slow-oscillation phase and delta-theta power
Chen, X., Lu, J., Qin, Z., Hu, X. & Zhang, C., Nov 2023, *Proceedings of the Second International Conference on Tone and Intonation (TAI 2023)*. Singapore, p. 17-18

Daytime Naps Consolidate Cantonese Tone Learning Through Talker Generalization
Wu, R., QIN, Z. & Zhang, C., Nov 2023, *Proceedings of the Second International Conference on Tone and Intonation (TAI 2023)*. Singapore, p. 19-20

Setting the "tone" first and integrating into the syllable later: An EEG study of lexical tonal encoding in Mandarin word production
Chen, X. & Zhang, C., Nov 2023, *Proceedings of the Second International Conference on Tone and Intonation (TAI 2023)*. Singapore, p. 80-82 2 p.

Statistical Information Affects Spoken Word Recognition of Tone Languages in Stutterers: Evidence From an Auditory-Perceptual Gating Study
Zhu, J., Shao, J., Zhang, C., Chen, F. & Wiener, S., 13 Sept 2023, In: *Journal of Speech, Language, and Hearing Research*. 66, 9, p. 3382-3398 17 p.

An acoustic study of tone sandhi in Lishui Wu
Lan, W., Chen, X. & Zhang, C., Aug 2023, *Proceedings of the 20th International Congress of Phonetic Sciences, Prague 2023*. Skarnitzl, R. & Volín, J. (eds.). Prague, Czech Republic: Guarant International, p. 1945-1949 542

Encoding of contextual sandhi tonal variants in Chaoshan Min: An implicit priming study
Chen, X. & Zhang, C., 19 Jul 2023, *Inspirations from a Lofty Mountain: Festschrift in Honor of Prof. William S-Y. Wang on his 90th Birthday*. Peng, G., Kong, J., Shen, Z. & Wang, F. (eds.). Hong Kong: City University of Hong Kong Press, p. 216-250

Tone Deafness in Music Does Not Preclude Distributional Learning of Nonnative Tonal Languages in Individuals With Congenital Amusia
Zhu, J., Chen, X., Chen, F., Zhang, C., Shao, J. & Wiener, S., 12 Jul 2023, In: *Journal of Speech, Language, and Hearing Research*. 66, 7, p. 2461-2477 17 p.

Distributional learning of musical pitch despite tone-deafness in individuals with congenital amusia

Zhu, J., Chen, X., Chen, F., Zhang, C., Shao, J. & Wiener, S., 26 May 2023, In: Journal of the Acoustical Society of America. 153, 5, p. 3117-3129 13 p.

Modelling representations in speech normalization of prosodic cues

Si, C., Zhang, C., Lau, P., Yang, Y. & Li, B., Dec 2022, In: Scientific Reports. 12, 1, 14635.

Encoding category-level and context-specific phonological information at different stages: An EEG study of Mandarin third-tone sandhi word production

Chen, X., Zhang, C., Chen, Y., Politzer-Ahles, S., Zeng, Y. & Zhang, J., 10 Oct 2022, In: Neuropsychologia. 175, 108367.

The Effects of Training Variability and Pitch Aptitude on the Overnight Consolidation of Lexical Tones

Qin, Z., Jin, R. & Zhang, C., 12 Sept 2022, In: Journal of Speech, Language, and Hearing Research. 65, 9, p. 3377-3391 15 p.

Perceptual normalization of lexical tones: Behavioral and neural evidence

Zhang, C. & Wang, W.S.-Y., 4 Aug 2022, *The Cambridge Handbook of Chinese Linguistics*. Huang, C.-R., Lin, Y.-H., Chen, I.-H. & Hsu, Y.-Y. (eds.). Cambridge University Press, p. 383-404 22 p. (Cambridge Handbooks in Language and Linguistics).

Relationship of language and music, ten years after: Neural organization, cross-domain transfer and evolutionary origins

Lee, C. Y., Zhang, C., Wang, W. S. Y. & Waye, M. M. Y., 28 Jul 2022, In: Frontiers in Psychology. 13, 990857.

The effects of alphabetic literacy, linguistic-processing demand and tone type on the dichotic listening of lexical tones

Shao, J., Zhang, C., Zhang, G., Zhang, Y. & Pattamadilok, C., 26 Jul 2022, In: Frontiers in Psychology. 13, 877684.

Impaired Categorical Perception of Speech Sounds Under the Backward Masking Condition in Adults Who Stutter

Shao, J., Bakhtiar, M. & Zhang, C., 18 Jul 2022, In: Journal of Speech, Language, and Hearing Research. 65, 7, p. 2554-2570 17 p.

The neural encoding of productive phonological alternation in speech production: Evidence from Mandarin Tone 3 sandhi

Zhang, J., Zhang, C., Politzer-Ahles, S., Pan, Z., Huang, X., Wang, C., Peng, G. & Zeng, Y., May 2022, In: Journal of Neurolinguistics. 62, 101060.

The Perception of Lexical Tone and Intonation in Whispered Speech by Mandarin-Speaking Congenital Amusics

Zhang, G., Shao, J., Zhang, C. & Wang, L., 4 Apr 2022, In: Journal of Speech, Language, and Hearing Research. 65, 4, p. 1331-1348 18 p.

Categorization of tailored tones in whispered speech: Differential weighting of amplitude and duration cues

Wang, S., Zhang, C. & Chen, X., Dec 2021.

Encoding of contextual tonal alternations in word production in Teochew

Chen, X. & Zhang, C., Dec 2021, *Proceedings of the 1st International Conference on Tone and Intonation (TAI 2021)*.

Encoding of underlying and surface tones in Mandarin third tone sandhi occurs at different stages in word production: New evidence from an EEG study

Chen, X. & Zhang, C., Dec 2021.

Neural responses in novice learners' perceptual learning and generalization of lexical tones: The effect of training variability

Qin, Z., Gong, M. & Zhang, C., Dec 2021, In: Brain and Language. 223, 105029.

Differential effects of temporal and spectral degradation on onset and lexical tone recognition: Evidence from Mandarin Chinese

Wu, R., Lin, J. & Zhang, C., Oct 2021.

Different time-course of activating tonal alternations in the production of Mandarin Tone 3 sandhi words: Evidence from reaction time survival analysis

Chen, X., Zhang, C. & Chen, Y., Oct 2021.

Neural responses to explicit processing and implicit representation of lexical tones in Mandarin speakers with Amusia

Novitskiy, N., Zhang, C., Liu, F., Wong, P. C. M. & Chan, A. H. D., Oct 2021.

Early Auditory Event-Related Potentials Are Modulated by Alphabetic Literacy Skills in Logographic Chinese Readers

Zhang, Y., Pattamadilok, C., Lau, D. K. Y., Bakhtiar, M., Yim, L. Y., Leung, K. Y. & Zhang, C., 29 Jul 2021, In: *Frontiers in Psychology*. 12, 663166.

The Effect of Orthographic Transparency on Auditory Word Recognition Across the Development of Reading Proficiency

Bakhtiar, M., Mokhlesin, M., Pattamadilok, C., Politzer-Ahles, S. & Zhang, C., 27 Jul 2021, In: *Frontiers in Psychology*. 12, 691989.

Dissociation of tone merger and congenital amusia in Hong Kong Cantonese

Zhang, C., Ho, O. Y., Shao, J., Ou, J. & Law, S.-P., 1 Jul 2021, In: *PLoS ONE*. 16, 7, e0253982.

Sandhi-tone words prolong fixation duration during silent sentence reading in Chinese

Pan, J., Zhang, C., Huang, X. & Yan, M., Apr 2021, In: *Reading and Writing*. 34, 4, p. 841-857

The effect of Mandarin listeners' musical and pitch aptitude on perceptual learning of Cantonese level-tones

Qin, Z., Zhang, C. & Wang, W. S. Y., 21 Jan 2021, In: *Journal of the Acoustical Society of America*. 149, 1, p. 435-446 12 p.

Emotion processing in congenital amusia: the deficits do not generalize to written emotion words

Cheung, Y. L., Zhang, C. & Zhang, Y., 2021, In: *Clinical Linguistics and Phonetics*. 35, 2, p. 101-116 16 p.

Phonetic structure in Yoloxóchitl Mixtec consonants

Dicano, C. T., Zhang, C., Whalen, D. H. & García, R. C., Dec 2020, In: *Journal of the International Phonetic Association*. 50, 3, p. 333-365 33 p.

Categorical perception of speech sounds in adults who stutter

Bakhtiar, M., Shao, J., Cheung, M. N. & Zhang, C., 12 Aug 2020, In: *Clinical Linguistics and Phonetics*. 35, 6, p. 560-576

Dichotic Perception of Lexical Tones in Cantonese-Speaking Congenital Amusics

Shao, J. & Zhang, C., 7 Jul 2020, In: *Frontiers in Psychology*. 11, 1411.

Talker processing in Mandarin-speaking congenital amusics

Shao, J., Wang, L. & Zhang, C., 22 May 2020, In: *Journal of Speech, Language, and Hearing Research*. 63, 5, p. 1361-1375 15 p.

How sleep-mediated memory consolidation modulates the generalization across talkers: evidence from tone identification

Qin, Z. & Zhang, C., May 2020, *Proceedings of Speech Prosody 2020*. International Speech Communication Association, p. 459-463 5 p. (Proceedings of the International Conference on Speech Prosody).

Categorical Perception of the Speech Sounds in Adults who Stutter

Zhang, C., Bakhtiar, M., Cheung, M. N. & Shao, J., 2020.

The effect of overnight consolidation in the perceptual learning of non-native tonal contrasts

Qin, Z. & Zhang, C., 12 Dec 2019, In: *PLoS ONE*. 14, 12, e0221498.

A quantitative model of talker normalization by native and non-native speakers

Chen, S., Zhang, C., Lau, P., Yang, Y., Li, B. & Fung, W. K., Nov 2019.

How the overnight consolidation process modulates the perceptual learning of novel tonal contrasts

Qin, Z. & Zhang, C. (Corresponding Author), Nov 2019, *Proceedings of Seoul International Conference on Speech Sciences 2019 (SICSS 2019), Seoul, South Korea, 15-16 November 2019 Conference paper, 2019* . p. 62

Congenital amusia and tone merger: Perception and production of lexical tone in Hong Kong Cantonese

Ho, O. Y., Shao, J., Ou, J., Law, S.-P. & Zhang, C., 9 Aug 2019, *Proceedings of the 19th International Congress of Phonetic Sciences*. Calhoun, S., Escudero, P., Tabian, M. & Warren, P. (eds.). Australasian Speech Science and Technology Association Inc., p. 177-181

Impaired talker recognition in Mandarin-speaking congenital amusics

Shao, J., Wang, L. & Zhang, C., 9 Aug 2019, *Proceedings of the 19th International Congress of Phonetic Sciences*. Calhoun, S., Escudero, P., Tabian, M. & Warren, P. (eds.). Australasian Speech Science and Technology Association Inc. , p. 1808-1812

Seven-year-olds reach an adult-like productivity in the application of Mandarin tone sandhi

Huang, X., Zuo, Y. & Zhang, C., 9 Aug 2019, *Proceedings of the 19th International Congress of Phonetic Sciences*. Calhoun, S., Escudero, P., Tabian, M. & Warren, P. (eds.). Australasian Speech Science and Technology Association Inc. , p. 3125-3129

The perception of lexical tone in whispered speech by Mandarin-speaking congenital amusics

Zhang, G., Shao, J., Wang, L. & Zhang, C., 9 Aug 2019, *Proceedings of the 19th International Congress of Phonetic Sciences*. Calhoun, S., Escudero, P., Tabian, M. & Warren, P. (eds.). Australasian Speech Science and Technology Association Inc., p. 3872-3876 5 p.

Impaired processing speed in categorical perception: Speech perception of children who stutter

Bakhtiar, M., Zhang, C. & Ki, S. S., 26 Apr 2019, In: PLoS ONE. 14, 4, e0216124.

Talker normalization in typical Cantonese-speaking listeners and congenital amusics: Evidence from event-related potentials

Shao, J. & Zhang, C., 3 Apr 2019, In: NeuroImage: Clinical. 23, 101814.

Tone and music processing in chinese

Zhang, C., 11 Mar 2019, *The Routledge Handbook of Chinese Applied Linguistics*. Huang, C.-R., Jing-Schmidt, Z. & Meisterernst, B. (eds.). Taylor and Francis - Balkema, p. 673-688 16 p.

The effects of acoustic variation on the perception of lexical tone in Cantonese-speaking congenital amusics

Shao, J., Lau, R. Y. M., Tang, P. O. C. & Zhang, C., 25 Jan 2019, In: Journal of Speech, Language, and Hearing Research. 62, 1, p. 190-205 16 p.

Normal pre-attentive and impaired attentive processing of lexical tones in Cantonese-speaking congenital amusics

Zhang, C. & Shao, J., 1 Dec 2018, In: Scientific Reports. 8, 1, 8420.

Context integration deficit in tone perception in Cantonese speakers with congenital amusia

Shao, J. & Zhang, C., 1 Oct 2018, In: Journal of the Acoustical Society of America. 144, 4, p. EL333-EL339

Development of Cantonese Nominal Structure in a Bilingual Child: Some Preliminary Findings

Yang, Y., Zhang, C., Hu, Y., Lau, Y. P. H. & Li, B., Oct 2018, *The 2018 International Conference on Bilingual Learning and Teaching*. The Open University of Hong Kong, p. 109-115

Effect of medication on lexical tone production in Cantonese patients with Parkinson's Disease. International Congress of Parkinson's disease and movement disorders.

Chan, W. S. A., Chen, S., Shao, J., Zhang, C., Lam, H. C., Pang, S., Ngan, V., Tam, K. Y., Yang, W., Ngan, J. & Pinto, S., Oct 2018.

Impaired perceptual normalization of lexical tones in Cantonese-speaking congenital amusics

Zhang, C., Shao, J. & Chen, S., 1 Aug 2018, In: Journal of the Acoustical Society of America. 144, 2, p. 634-647 14 p.

Lexical tone is perceived relative to locally surrounding context, vowel quality to preceding context

Sjerps, M. J., Zhang, C. & Peng, G., 1 Jun 2018, In: Journal of Experimental Psychology: Human Perception and Performance. 44, 6, p. 914-924 11 p.

A Preliminary Study on the Productivity of Mandarin T3 Sandhi in Mandarin-speaking Children

Huang, X., Zhang, G. & Zhang, C., Jun 2018, p. 88-92.

Extrinsic normalization of lexical tones and vowels: Beyond a simple contrastive general auditory mechanism

Zhang, K., Sjerps, M. J., Zhang, C. & Peng, G., Jun 2018, *Sixth International Symposium on Tonal Aspects of Languages*.

The relationship between speech production and perception - perceptual experiments based on modeling of corpora

Chen, S., Zhu, Y., Wayland, R. & Zhang, C., Jun 2018.

A Corpus-Based Analysis on Code-Mixing Features in Mandarin-English Bilingual Children in Singapore

Huang, X. & Zhang, C., May 2018, In: International Journal of Cognitive and Language Sciences. 12, 4, p. 540-544

Online adjustment of phonetic expectation of lexical tones to accommodate speaker variation: a combined behavioural and ERP study

Zhang, C., 7 Feb 2018, In: Language, Cognition and Neuroscience. 33, 2, p. 175-195 21 p.

The effect of syllable variation on the perception of lexical tones in cantonese speaking amusics

Shao, J., Tang, P. O. C. & Zhang, C., 1 Jan 2018, In: Proceedings of the International Conference on Speech Prosody. 2018-June, p. 148-152 5 p.

Unequal impairment of native and non-native tone perception in cantonese speakers with congenital amusia

Zhang, G., Shao, J., Huang, X., Wang, L. & Zhang, C., 1 Jan 2018, In: Proceedings of the International Conference on Speech Prosody. 2018-June, p. 562-566 5 p.

Phonetic constancy in the perception of Chinese tones

Zhang, C., 2018, The Chinese University of Hong Kong Press.

Neural encoding of T3 sandhi in Mandarin Chinese speakers in speech production

Zhang, C., Huang, X., Politzer-Ahles, S. J., Zhang, J. & Peng, G., Nov 2017.

Is congenital Amusia a disconnection syndrome? A study combining tract-and network-based analysis

Wang, J., Zhang, C., Wan, S. & Peng, G., 29 Sept 2017, In: Frontiers in Human Neuroscience. 11, 473.

Deficits of congenital amusia beyond pitch: Evidence from impaired categorical perception of vowels in Cantonese-speaking congenital amusics

Zhang, C., Shao, J. & Huang, X., 1 Aug 2017, In: PLoS ONE. 12, 8, e0183151.

Effects of preceding vocabulary context on the perception of Mandarin vowels

Huang, X., Zhang, C., Chen, F., Sieg, J., Wang, L. & Shi, F., 2 May 2017, *Proceedings of 2016 10th International Symposium on Chinese Spoken Language Processing, ISCSLP 2016*. IEEE, 7918487

Statistical modelling of phonetic and phonologised perturbation effects in tonal and non-tonal languages

Chen, S., Zhang, C., McCollum, A. G. & Wayland, R., 1 Apr 2017, In: *Speech Communication*. 88, p. 17-38 22 p.

Neural bases of congenital amusia in tonal language speakers

Zhang, C., Peng, G., Shao, J. & Wang, W. S. Y., 1 Mar 2017, In: *Neuropsychologia*. 97, p. 18-28 11 p.

The role of talker similarity in the perceptual learning of L2 tone categories

Shao, J., Mak, J. C. Y. & Zhang, C., 2017, *CogSci 2017 - Proceedings of the 39th Annual Meeting of the Cognitive Science Society: Computational Foundations of Cognition*. The Cognitive Science Society, p. 3125-3130 6 p. (CogSci 2017 - Proceedings of the 39th Annual Meeting of the Cognitive Science Society: Computational Foundations of Cognition).

Toward an integrative model of talker normalization

Zhang, C. & Chen, S., 1 Aug 2016, In: *Journal of Experimental Psychology: Human Perception and Performance*. 42, 8, p. 1252-1268 17 p.

Effect of noise on lexical tone perception in Cantonese-speaking amusics

Shao, J., Zhang, C., Peng, G., Yang, Y. & Wang, W. S. Y., 1 Jan 2016, In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH*. 08-12-September-2016, p. 272-276 5 p.

Functionally integrated neural processing of linguistic and talker information: An event-related fMRI and ERP study

Zhang, C., Pugh, K. R., Mencl, W. E., Molfese, P. J., Frost, S. J., Magnuson, J. S., Peng, G. & Wang, W. S. Y., 1 Jan 2016, In: *NeuroImage*. 124, p. 536-549 14 p.

Impaired vowel discrimination in Mandarin-speaking congenital amusics

Huang, X., Zhang, C., Shi, F., Yan, N. & Wang, L., 2016.

Cumulative effects of phonetic context on speech perception

Zhang, C., Peng, G., Wang, X. & Wang, W. S. Y., Sept 2015, *[Missing Source Name from PIRA]*. University of Glasgow

Mandarin third tone sandhi requires more effortful phonological encoding in speech production: Evidence from an ERP study

Zhang, C., Xia, Q. & Peng, G., 1 Feb 2015, In: *Journal of Neurolinguistics*. 33, p. 149-162 14 p.

Cumulative effects of phonetic context on speech perception

Zhang, C., Peng, G., Wang, X. & Wang, W.S.-Y., 2015, *ICPHS*.

Neural bases of the context-dependent talker normalization mechanism

Zhang, C., Peng, G. & Wang, W. S. Y., 2015.

Neural impairment of tone language speakers with congenital amusia : an fMRI study

Zhang, C., Peng, G. & Wang, W. S. Y., 2015.

Tone perception

Peng, G. & Zhang, C., 2015, *The Oxford handbook of Chinese linguistics*. Oxford University Press, p. 516-530 15 p.

Effect of classifier system on object similarity judgment: A cross-linguistic study

Zhang, C. & Wang, R., 1 Jan 2014, In: *Journal of Chinese Linguistics*. 42, 1, p. 188-217 30 p.

The influence of tone inventory on ERP without focal attention: A cross-language study

Zheng, H. Y., Peng, G., Chen, J. Y., Zhang, C., Minett, J. W. & Wang, W. S. Y., 1 Jan 2014, In: *Computational and Mathematical Methods in Medicine*. 2014, 961563.

Adjust the Expectation of the Phonetic Form of Words according to a Talker's Voice: A Phonological Mismatch Negativity Study

Zhang, C., Magnuson, J., Landi, N., Peng, G. & Wang, W. S. Y., 2014, *5th Annual Meeting of the Society for the Neurobiology of Language*.

Mandarin Tone 3 sandhi : productivity and online encoding

Zhang, C., 2014.

Neural processing of phonetic and talker information in a tone language: An fMRI study.

Zhang, C., Pugh, K. R., Mencl, W. E., Molfese, P. J., Frost, S. J., Magnuson, J. S., Peng, G. & Wang, W.S.-Y., 2014, *The 21st Annual Meeting of the Cognitive Neuroscience Society*.

Temporal locus of interaction of phonetic and talker processing in speech perception : an ERP study

Zhang, C., Pugh, K., Mencl, W., Molfese, P., Frost, S., Magnuson, J., Peng, G. & Wang, W. S. Y., 2014.

Left hemisphere lateralization for lexical and acoustic pitch processing in Cantonese speakers as revealed by mismatch negativity

Gu, F., Zhang, C., Hu, A. & Zhao, G., 1 Dec 2013, In: *NeuroImage*. 83, p. 637-645 9 p.

Achieving constancy in spoken word identification: Time course of talker normalization

Zhang, C., Peng, G. & Wang, W. S. Y., 1 Aug 2013, In: *Brain and Language*. 126, 2, p. 193-202 10 p.

Effects of long-term acoustic experience and local context information on the perceptual accommodation of talker variability

Zhang, C., Peng, G. & Wang, W. S. Y., 19 Jun 2013, In: *Proceedings of Meetings on Acoustics*. 19, 060090.

Interaction of long-term acoustic experience and local context information on the perceptual accommodation of talker variability

Zhang, C., Peng, G. & Wang, W.S.-Y., 2013, *21st International Congress on Acoustics, organized by the Acoustical Society of America (ASA) and the Canadian Acoustical Association (CAA) , Montreal, Canada*.

Acoustic characteristics and distribution of variants of /l/ in the Nanjing Dialect

Li, B., Zhang, C. & Wayland, R., 26 Dec 2012, In: *Journal of Quantitative Linguistics*. 19, 4, p. 281-300 20 p.

Unequal effects of speech and nonspeech contexts on the perceptual normalization of Cantonese level tones

Zhang, C., Peng, G. & Wang, W. S. Y., 1 Aug 2012, In: *Journal of the Acoustical Society of America*. 132, 2, p. 1088-1099 12 p.

The effect of intertalker variations on acoustic-perceptual mapping in Cantonese and Mandarin tone systems

Peng, G., Zhang, C., Zheng, H. Y., Minett, J. W. & Wang, W. S. Y., 1 Apr 2012, In: *Journal of Speech, Language, and Hearing Research*. 55, 2, p. 579-595 17 p.

Extrinsic context is crucial for talker normalization in Cantonese tone perception

Zhang, C., Peng, G. & Wang, W. S., 2012, In: *The Journal of the Acoustical Society of America*. 131, 4, p. 3273-3273 1 p.

Normalizing talker variation in the perception of Cantonese level tones: Impact of speech and nonspeech contexts

Zhang, C., Peng, G. & Wang, W.S.-Y., 2012, *Tonal Aspects of Languages-Third International Symposium*.

Effect of language experience on the categorical perception of Cantonese vowel duration

Zhang, C., Peng, G. & Wang, W. S. Y., 1 Dec 2011, In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH*. p. 169-172 4 p.

Inter-talker Variation as a Source of Confusion in Cantonese Tone Perception.

Zhang, C., Peng, G. & Wang, W.S.-Y., 2011, *ICPhS*. p. 2276-2279 4 p.

Effects of F0 dimensions in perception of Mandarin tones

Li, B. & Zhang, C., 1 Dec 2010, *2010 7th International Symposium on Chinese Spoken Language Processing, ISCSLP 2010 - Proceedings*. p. 322-325 4 p. 5684878

Report: The ninth Phonetic Conference of China (PCC 2010) And Conference in Evolutionary Linguistics II (CIEL-II), Tianjin, 2010

Zhang, C., Mai, G. & Wong, Y. W., 1 Jun 2010, In: *Journal of Chinese Linguistics*. 38, 2, p. 418-439 22 p.

Contextual information in (non) native speech perception in noise

Li, B., Wayland, R. & Zhang, C., 2010, p. 101-104. 4 p.

Review of the Summer Institute in Cognitive Sciences (2010): The Origins of Language

Tao Gong, Ruoxiao Yang & Ansaldo U., 2010, In: *Biolinguistics*. 4, 4, p. 385-402

Why would aspiration lower the pitch of the following vowel? Observations from Leng-shui-jiang Chinese

Zhang, C., 26 Nov 2009, In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH*. p. 2299-2302 4 p.

A seven-tone dialect in Southern China with falling-rising-falling contour: A linguistic acoustic analysis

Zhu, X. & Zhang, C., 1 Dec 2008, In: *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH*. p. 1113-1115 3 p.

Activities

The International Symposium on Language Sciences (ISLS): Interdisciplinary Research and the Legacy of Yuen Ren Chao

Zhang, C. (Panel Chair), Zhu, X. (Panel Chair), Sheng, L. (Panel Chair), Liu, M. (Panel Chair), Peng, G. (Panel Chair), Hsu, Y. Y. (Panel Chair), Gu, J. (Panel Chair) & Yao, Y. (Panel Chair)

10 May 2024 → 11 May 2024

Neurocognitive bases of developmental disorders of speech, language and literacy: The role of domain-general learning systems

Zhang, C. (Invited speaker)

9 May 2024

The 14th International Conference in Evolutionary Linguistics

Peng, G. (Chair), Zhang, C. (Member of organizing committee), Li, P. (Member of organizing committee), Sheng, L. (Member of organizing committee), Chan, W. S. A. (Member of organizing committee), Chen, S. (Member of organizing committee), Fong, C. M. M. (Member of organizing committee), Tao, R. (Member of organizing committee) & Wong, M. N. (Member of organizing committee)

3 Aug 2023 → 5 Aug 2023

Population pitch knowledge affects speech perception

Zhang, C. (Invited speaker)

26 Jul 2023

University of Edinburgh

Zhang, C. (Visiting researcher)

5 Jun 2023 → 6 Aug 2023

Motor learning, writing skills and reading disability

Zhang, C. (Invited speaker)

25 May 2023

Royal Holloway University of London

Zhang, C. (Visiting researcher)

22 May 2023 → 4 Jun 2023

Scientific Reports (Journal)

Zhang, C. (Special topic editor)

2022 → 2024

World Laureates Forum - Young Scientist Forum–Neuroscience, Psychology and Cognitive Science I

Zhang, C. (Invited speaker)

3 Nov 2021

Scientific Reports (Journal)

Zhang, C. (Editorial board member)

Oct 2021 → ...

Neuroplasticity of the tone-deaf brain

Zhang, C. (Invited speaker)

29 May 2021

Frontiers in Psychology (Journal)

Zhang, C. (Associate editor)

Jun 2020 → ...

Relationship of Language and Music, Ten Years After: Neural Organization, Cross-domain Transfer and Evolutionary Origins (Event)

Zhang, C. (Special topic editor)

2020 → 2022

PLoS ONE (Journal)

Zhang, C. (Editorial board member)

Jun 2019 → ...

Prizes**Associate Fellow**

Zhang, C. (Recipient), Dec 2023

CUHK Young Scholars Thesis Awards 2014

Zhang, C. (Recipient), Jun 2015

Dean's Award for Research Excellence 2016/17

Zhang, C. (Recipient), 2017

Faculty Award for Outstanding Performance Achievement 2023 (Research & Scholarly Activities: Outstanding Young Researcher (Individual))

Zhang, C. (Recipient), Nov 2023

Junior Fellow

Zhang, C. (Recipient), May 2018

RGC-Fulbright Hong Kong Junior Scholar Award
Zhang, C. (Recipient), 2012

Rising Stars (APS 2016)
Zhang, C. (Recipient), Dec 2016

Press/Media

Equity, Diversity and Inclusion in Research

Sanchez Vidana, D. I., Hoorn, J. F., Zhang, C., Maboloc, E. A., Abdoh, D. A. A., Davari, D. & Onwachukwu, C. I.
17/10/24
1 Media contribution

Using Neuroscience to Challenge Our Eyes and Ears: The split-second distinctions made possible by neuroscience challenge common understandings of how we see and hear

Zhang, C.
26/02/21
1 item of Media coverage

唱歌常走音 理大諗計醫

Zhang, C.
9/01/19
1 Media contribution

Awards

Projects

2024	Lorem ipsum dolor sit amet
2023	Lorem ipsum dolor sit amet
2022	Lorem ipsum dolor sit amet
2021	Lorem ipsum dolor sit amet
2020	Lorem ipsum dolor sit amet
2019	Lorem ipsum dolor sit amet