

MAGDALENA KACHLICKA

The Auditory, Language, Perception, Hearing and Attention Lab
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EDUCATION

- 2023 *PhD in Psychology*, Birkbeck University of London
Thesis: Perceptual strategies underlying second language acquisition
Supervisors: Prof Adam Tierney, Prof Kazuya Saito, and Prof Fred Dick
Examiners: Dr Emma Holmes (UCL) and Prof Sven Mattys (University of York)
- 2020 *MPhil in Cognitive Science*, University College London
Thesis: Mapping acoustic and semantic dimensions of auditory perception
Supervisors: Prof Jian Kang and Prof Fred Dick
Examiners: Prof Maria Chait (UCL) and Dr Pyoung-Jik Lee (University of Liverpool)
- 2018 *MSc in Psychological Research Methods (Distinction)*, Birkbeck University of London
Thesis: Individual differences in auditory processing in second language learning
Supervisor: Prof Adam Tierney
- 2017 *BSc in Psychology (First Class)*, University of Nicosia
Thesis: Adaptation of the BHI-R questionnaire from Polish to Greek and English languages
Supervisor: Dr Marios Adonis

RESEARCH POSITIONS

- Jul–Sep 2025 *Wellcome Trust IFRC Research Fellow*
School of Psychological Sciences, Birkbeck University of London
Project: Foundations of environmental sound perception in healthy listeners and cochlear implant users (as a PI)
- 2023–2025 *Postdoctoral Researcher*
School of Psychological Sciences, Birkbeck University of London
Project: Dimension-selective attention and second language acquisition
- Jul–Oct 2022 Research Collaborator
University of Social Sciences and Humanities (Poznan, Poland)
Project: Speech acoustics and contents of narrative reconstructions of past events as indicators of cognitive processing of trauma and posttraumatic growth
- 2020–2023 *Research Assistant*
Institute of Education, University College London, UK
Project: Does having a good ear promote successful second language speech learning
- 2020–2023 *PhD Researcher*
School of Psychological Sciences, Birkbeck University of London
- 2018–2020 *MPhil Researcher*
University College London, Institute for Environmental Design and Engineering
Project: Soundscape Indices (SSID)
- Jan–Apr 2017 *Research Intern*
Experimental Psychology Lab at University of Cyprus (Nicosia, Cyprus)
Project: The impact of visual imagery on the experience of pain: a comparison between altered visual feedback and distraction strategy
- 2015–2020 *Research Collaborator*
University of Social Sciences and Humanities (Poznan, Poland)
Project: Meaning of life and personal growth as a result of trauma: a longitudinal study.

PUBLICATIONS

- [16] Correia S, dos Santos Rato AA, Fernandes JD, Ge Y, **Kachlicka M**, Saito K, & Rebuschat P (2025) Effects of implicit perceptual training and cognitive aptitude on the perception and production of non-native contrasts. *Studies in Second Language Acquisition*, 47, 440-457.
- [15] **Kachlicka M***, Symons AE*, Saito K, Dick F, Tierney AT (2024) Tone language experience enhances dimension-selective attention and subcortical encoding but not cortical entrainment to pitch. *Imaging Neuroscience*, 2, 11-19.
- [14] **Kachlicka M**, Tierney AT (2024) Voice actors show enhanced neural tracking of pitch, prosody perception, and music perception. *Cortex*, 178, 213-222.
- [13] **Kachlicka M**, Patel AD, Liu F, Tierney AT (2024) Weighting of cues to categorization of song versus speech in tone language and non-tone-language speakers. *Cognition*, 246, 105757.
- [12] Saito K, **Kachlicka M**, Suzukida Y, Mora-Plaza I, Ruan Y, Tierney AT (2024) Auditory processing as perceptual, cognitive, and motoric abilities underlying successful second language acquisition: Interaction model. *Journal of Experimental Psychology: Human Perception and Performance*, 50(1), 119–138.
- [11] Saito K, Petrova K, **Kachlicka M**, Suzukida Y, Tierney A (2022) Training auditory processing promotes second language speech acquisition. *Journal of Experimental Psychology: Human Perception and Performance*, 48(12), 1410-1426.
- [10] Saito K, **Kachlicka M**, Suzukida Y, Petrova K, Lee BJ, Tierney AT (2022) Auditory precision hypothesis-L2: Dimension-specific relationships between auditory processing and second language segmental learning. *Cognition*, 229, 105236.
- [9] Saito K, Hanzawa K, Petrova K, **Kachlicka M**, Suzukida Y, Tierney AT (2022) Incidental and multimodal high variability phonetic training: Potential, limits, and future directions. *Language Learning*, 72(4), 1049-1091.
- [8] **Kachlicka M**, Laffere A, Dick F, Tierney A (2022) Slow phase-locked modulations support selective attention to sound. *NeuroImage*, 252, 119024.
- [7] Saito K, Macmillan K, **Kachlicka M**, Kunihara T, Minematsu N (2022) Automated assessment of second language comprehensibility: Review, training, validation, and generalization studies. *Studies in Second Language Acquisition*, 45(1), 234-263.
- [6] Saito K, Macmillan K, Kroeger S, Magne V, Takizawa K, **Kachlicka M**, Tierney AT (2022) Roles of domain-general auditory processing in spoken second language vocabulary attainment in adulthood. *Applied Psycholinguistics*, 43(3), 581-606.
- [5] Saito K, Sun H, **Kachlicka M**, Alayo J, Nakata T, Tierney AT (2022) Domain-general auditory processing explains multiple dimensions of L2 acquisition in adulthood. *Studies in Second Language Acquisition*, 44(1), 57-86.
- [4] Mitchell A, Oberman T, Aletta F, **Kachlicka M**, Lionello M, Erfanian M, Kang J (2021) Investigating urban soundscapes of the COVID-19 lockdown: A predictive soundscape modeling approach. *The Journal of Acoustical Society of America*, 150, 4474–4488.
- [3] Saito K, **Kachlicka M**, Sun H, Tierney AT (2020) Domain-general auditory processing as an anchor of post-pubertal second language pronunciation learning: Behavioural and neurophysiological investigations of perceptual acuity, age, experience, development, and attainment. *Journal of Memory and Language*, 115, 104168.
- [2] Mitchell A, Oberman T, Aletta F, Erfanian M, **Kachlicka M**, Lionello M, Kang J (2020) The Soundscape Indices (SSID) protocol: A method for urban soundscape surveys – questionnaires with acoustical and contextual information. *Applied Sciences*, 10(7), 2397.
- [1] **Kachlicka M**, Saito K, Tierney AT (2019) Successful second language learning is tied to robust domain-general auditory processing and stable neural representation of sound. *Brain & Language*, 192, 15-24.

SUBMITTED OR UNDER REVIEW

- [8] **Kachlicka M**, Symons AE, Dick F, Saito K, Tierney AT. (2025, August) Early neural encoding of pitch drives cue weighting during speech perception. Submitted to *Imaging Neuroscience*.
- [7] **Kachlicka M**, Jasmin K, Symons AE, Saito K, Dick F, Tierney AT. (2025, July) English Prosody Database for investigating English prosody acquisition. Submitted to *Studies in Second Language Acquisition*.
- [6] Symons AE*, **Kachlicka M***, Dick F, Saito K, Tierney AT. (2025, July) Strong primary cue weighting is linked to robust dimension-selective attention. Submitted to *Cognition*.
- [5] Saito K, Suzukida Y, Hu R, Hosaka I, Magne V, **Kachlicka M**, Argyri, F, Tierney AT. (2025, April) The bilingual advantage hypothesis revisited: Exploring the auditory processing abilities and executive function of bilingual and monolingual children with diverse biographical backgrounds. Submitted to *Language Learning*.
- [4] Saito K, Tierney AT, Takizawa K, Dardon D, Li C, **Kachlicka M**, Sugiura M, & Jeong H (2025, March). Individual difference in motor and auditory activation in L2 speech learning: Roles of domain-general auditory processing. Under review in *Journal of Experimental Psychology: General*.
- [3] **Kachlicka M**, Symons AE, Ruan, Y., Saito K, Dick F, Tierney AT (2025, February). Effects of targeted perceptual training on L2 prosodic cue weighting strategies. Under review in *Bilingualism: Language and Cognition*.
- [2] Ghooch Kanloo AH, **Kachlicka M**, Saito K, Tierney AT (2024, December). Individual differences in perception of prosody in Mandarin-accented speech are linked to pitch perception, melody memory, musical training, and neural encoding of sound. Under review in *Brain and Language*.
- [1] Ge Y, Monaghan P, **Kachlicka M**, Saito K, Rebuschat P (2024, December) Auditory ability predicts implicit learning of segmental and suprasegmental features in L2 word acquisition. Under Review in *Language Learning*.

MANUSCRIPTS IN PREPARATION

- [5] **Kachlicka M**, Jasmin K, Saito K, Dick F, Tierney AT. Cue weighting and frontotemporal connectivity during speech perception in tonal and non-tonal language speakers. (Expected submission: Mid-2026)
- [4] **Kachlicka M**, van den Bosch J, Dick F. Representations of natural sound categories. (Expected submission: Early-2026)
- [3] Symons AE, **Kachlicka M**, Wright E, Razin R, Dick F, Tierney AT. Dimensional salience varies across verbal and nonverbal domains. (Expected submission: End-2025)
- [2] Nash M*, **Kachlicka M***, Pearce M, Pathirana P, & Tierney AT. Attention is required for prediction from short-term but not long-term learning of musical structure. (Expected submission: End-2025)
- [1] **Kachlicka M**, van den Bosch J, Kang J, Dick F. A selection of environmental sounds for behavioural and neuroimaging research: Introducing EnviSounds dataset. (Expected submission: Mid-2025)

CONFERENCE POSTERS & PRESENTATIONS

- [5] **Kachlicka M***, Jasmin K, Saito K, Dick F, Tierney AT. Neural mechanisms of pitch and prosody perception in tonal and non-tonal language speakers. *8th International Conference on Auditory Cortex* (14-18 Sept 2025, Maastricht, Netherlands)
- [4] **Kachlicka M***, van den Bosch J, Kang J, Dick F. A selection of environmental sounds for behavioural and neuroimaging research: Introducing EnviSounds dataset. *8th International Conference on Auditory Cortex* (14-18 Sept 2025, Maastricht, Netherlands)
- [3] **Kachlicka M***, Symons AE, Ruan Y, Saito K, Dick F, Tierney AT (2024) Effects of targeted perceptual training on L2 suprasegmental cue weighting strategies. *33rd Conference of the European Second Language Association* (3-6 July 2024, Montpellier, France)
- [2] **Kachlicka M***, Symons AE, Saito K, Dick F, Tierney AT (2023) Effects of first language background and musical experience on cue weighting, attention and dimensional salience in speech and music.

Society for the Neurobiology of Language 15th Annual Meeting (23-26 October 2023, Marseille, France)

- [1] Kachlicka M*, van den Bosch J, Kang J, Dick F (2022) Representations of natural sound categories. *FENS Summer School 'Artificial and natural computations for sensory perception'* (22-28 May 2022, Bertinoro, Italy)

CONFERENCE ABSTRACTS

- [2] Mitchell A*, Oberman T, Aletta F, Erfanian M, Kachlicka M, Lionello M, Kang J (2020) Making cities smarter with new soundscape indices. *The Journal of the Acoustical Society of America*, 146, 2873.
- [1] Aletta F*, Oberman T, Mitchell A, Erfanian M, Lionello M, Kachlicka M, Kang J (2019) Associations between soundscape experience and self-reported wellbeing in open public urban spaces: a field study. *The Lancet*, 394(S17).

TALKS

- [6] *Can you hear what I hear*, Institute of Sound Recording, University of Surrey (September 2025)
- [5] *EEG in educational neuroscience research*, the ENCoRe (Educational Neuroscience Collaboration and Research UK) pre-conference workshop (April 2025)
- [4] *Dimensionality in auditory perception*, University of Oxford (October 2024)
- [3] *How does prior experience change the way we listen to sounds and learn new languages*, UCL Institute of Education (September 2024)
- [2] *How does prior experience change the way we listen to sounds and learn new languages*, University of Miami, US (June 2024)
- [1] *Auditory processing in second language learning*, Brain & Language Seminar, University of Helsinki, Finland (February 2019)

GRANTS

- 2025 *British Academy/Leverhulme Small Research Grant* (as a PI), £9918
‘Encoding of acoustic and linguistic information during language learning’
- 2025 *Birkbeck’s Wellcome Trust IFRC salary extension*, £18231
‘Foundations of environmental sound perception in healthy listeners and cochlear implant users’
- 2022 *Language Learning Dissertation Award*, research grant from *Language Learning* journal, \$2000
‘Perceptual strategies underlying second language acquisition’
- 2021 *Student Project Fund* research grant, University College London, £1120
‘Representations of natural sound categories’
- 2020 *Student Project Fund* research grant, University College London, £530
‘Perception of natural sound categories’

AWARDS

- 2022 *Albert Valdman Award* for outstanding publication in *Studies in Second Language Acquisition*

TRAVEL AWARDS

- 2025 *Scholarship*, Virtual Acoustics for Immersive Audio, CCRMA, Stanford University
- 2022 *Travel Award*, Computational Cognitive Modelling for Language, University of California Irvine
- 2019 *JUCE Diversity Scholarship*, Audio Developers Conference
- 2018 *Student Travel Award*, Real World Communication Workshop, University of Connecticut

SCHOLARSHIPS

- 2020–2023 *Bloomsbury Graduate Research Studentship*, Birkbeck University of London and UCL IOE

- 2018–2020 *ERC Graduate Research Studentship*, ERC Advanced Grant to Prof J Kang No. 740696
- 2017–2018 *Kenway Legacy Scholarship*, Birkbeck University of London
- 2016–2017 *Scholarship Based on Academic Performance*, University of Nicosia

TEACHING EXPERIENCE

- 2024–2025 *Mentor*, Polonium Foundation
- 2024 *Research design workshop tutor*, the IMPRS Cognitive Neuroimaging Summer School (PG), Faculty of Brain Sciences, University College London
- 2023–2024 *Guest lecturer*, Birkbeck Department of Psychological Sciences
PSYC034H6 Language (UG) – lecture on Speech Production
PSYC007H7 Neuroimaging Methods (PG) – lecture on EEG data processing and analysis
- 2020–2022 *Supervisor and project coordinator*, UCL Psychology and Language Sciences Department
PSYC0012 Research Methods in Psychology (2UG)
- 2019–2024 *Teaching assistant*, UCL Psychology and Language Sciences Department
PSYC0046 Introduction to Statistics with R (1UG & 2UG)
PSYC0005 Introduction to Psychological Experimentation (1UG)
- 2019–2023 *Teaching assistant*, UCL Interaction Centre, Department of Computer Sciences
COMP0016 Systems Engineering (2UG)
COMP0067 App Design and Engineering (PG)

EVENT ORGANIZING

- 2024–Present *Cognition and Natural Sensory Processing Initiative (CNSP)* – member of the organizing committee for the CNSP online workshop and hackathon
- 2019–2021 *Methods for Dummies Course*, Wellcome Centre for Human Neuroimaging, UCL Institute of Neurology – course organizer and content coordinator

PROFESSIONAL DEVELOPMENT

- 2025 Virtual Acoustics for Immersive Audio, CCRMA, Stanford University
- 2025 Siemens 3T MR Scanner operator training, Birkbeck/UCL Centre for Neuroimaging (BUCNI)
- 2024 Introduction to Bayesian Mixed-Effects Models, University of Reading
- 2024 BCI & Neurotechnology Spring School, g.tec Medical Engineering GmbH
- 2024 AFNI Bootcamp on fMRI Data Processing and Quality Control and Visualization, NIH, Bethesda, MD
- 2023 7th Summer School on Statistical Methods for Linguistics and Psychology, Universität Potsdam
- 2022 Computational Cognitive Modelling for Language Summer School, University of California Irvine
- 2022 Cognition and Natural Sensory Processing Workshop (CNSP)
- 2022 Artificial and Natural Computations for Sensory Perception Summer School, FENS
- 2021 Cognition and Natural Sensory Processing Workshop (CNSP)
- 2019 Visceral Mind Summer School, Bangor University
- 2019 SPM for EEG and fMRI Analyses Course, University College London
- 2019 Real World Eye Tracking Course, Royal Holloway University of London
- 2019 EEG Training at Jonas & Silas Lab, Middlesex University
- 2018 TMS for Cognitive Neuroscience Workshop, University College London
- 2017 Human Brain Anatomy Course, Neurocourses UK