

# MAGDALENA KACHLICKA

The Auditory, Language, Perception, Hearing and Attention Lab  
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## PROFILE

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Researcher in the field of auditory cognitive neuroscience and second language learning, experienced in experimental design, in-person and online language, listening and cognitive performance assessments, neuroimaging methods (EEG, FFR, mTRF) and statistical analyses (mixed-effects models, multidimensional scaling, cluster analysis). Interested in understanding the mechanisms of perception and categorization within the auditory world, as well as exploring individual differences in the perceived quality of sensory experience and the use of emerging technologies in research and education.

## EDUCATION

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- 2023 *PhD in Psychology*  
Birkbeck University of London, School of Psychological Sciences  
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, Institute for Environmental Design and Engineering  
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, School of Psychological Sciences  
Thesis: Individual differences in auditory processing in second language learning  
Supervisor: Dr Adam Tierney
- 2017 *BSc in Psychology (First Class)*  
University of Nicosia, Department of Social Sciences  
Thesis: Adaptation of the BHI-R Questionnaire from Polish to Greek and English Languages  
Supervisor: Dr Marios Adonis

## RESEARCH POSITIONS

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- 2023 – Present *Postdoctoral Researcher*  
School of Psychological Sciences, Birkbeck University of London
- 2020 – 2023 *Research Assistant*  
Institute of Education, University College London, UK
- Jul – Oct 2022 *Research Collaborator*  
University of Social Sciences and Humanities (Poznan, Poland)
- 2018 – 2020 *MPhil Researcher*  
University College London, Institute for Environmental Design and Engineering
- 2018 – 2020 *Research Assistant*  
Department of Psychological Sciences, Birkbeck University of London, UK
- Jan – Apr 2017 *Research Intern*  
Experimental Psychology Lab at University of Cyprus (Nicosia, Cyprus)
- 2015 – 2020 *Research Collaborator*  
University of Social Sciences and Humanities (Poznan, Poland)

## 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**, Kuniyama 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

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- [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.
- [4] Saito K, Tierney AT, Takizawa K, Dardon D, Li C, **Kachlicka M**, Sugiura M, & Jeong H (2025, March). Neural mechanisms underlying how domain-general auditory processing promotes or hinders L2 speech learning.
- [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

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- [6] **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: End-2025)
- [5] **Kachlicka M**, van den Bosch J, Kang J, Dick F. Representations of natural sound categories. (Expected submission: End-2025)
- [4] Symons AE, **Kachlicka M**, Wright E, Razin R, Dick F, Tierney AT. Dimensional salience varies across verbal and nonverbal domains. (Expected submission: End-2025)
- [3] **Kachlicka M**, Jasmin K, Symons AE, Saito K, Dick F, Tierney AT. English Prosody Database for investigating English prosody acquisition. (Expected submission: Mid-2025)
- [2] Symons AE\*, **Kachlicka M\***, Dick F, Saito K, Tierney AT. Strong primary cue weighting is linked to robust dimension-selective attention. (Expected submission: Mid-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

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- [3] **Kachlicka M**, Ja Symons AE, Ruan Y, Saito K, Dick F, & Tierney AT (2024) Effects of targeted perceptual training on L2 suprasegmental cue weighting strategies. *33<sup>rd</sup> 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 15<sup>th</sup> 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 PAPERS

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- [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).