XINRU YAO PH.D.

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EDUCATION

Department of Psychology, University of Tuebingen

Tuebingen, Germany

Ph.D. in Cognitive Psychology

2021 - 2025 (expected)

- Advisor: Prof. Hans-Christoph Nuerk
- Research area: Numerical cognition, math anxiety, educational neuroscience, developental psychology

Institute of Psychology, Chinese Academy of Sciences

Beijing, China

M.Sc. in Neurocognitve Psychology

2016 - 2019

- Advisor: Prof. Li Hu
- Research area: Neuroscience, pain perception, analgesia

Department of Psychology, China Women's University

Beijing, China

B.Sc. in Psychology

2011 - 2015

PUBLICATIONS

- 1. Yao, X., Artemenko, C., He, Y., Nuerk, H.-C. (2025). Arithmetic is not arithmetic: Paradigm matters for arithmetic effects. *Cognition*, 256, 106060.
- 2. Yao, X., Huber, J.F., Li, Z., Findik, Y., Nuerk, H.-C., Artemenko, C. The dynamics of state math anxiety vary by paradigm and timing during arithmetic. (submitted)
- 3. Wang, J., Yao, X., Ji, Y., Li, H. (2024). Cognitive potency and safety of tDCS treatment for major depressive disorder: a systemtic review and meta-analysis. *Frontiers in Human Neurosicence*, 18, 1458295.
- 4. Loenneker, H.D., Cipora K., Artemenko, C., ..., Yao, X., Nuerk, H.-C., Huber, J.F. (2024). Math4Speed a freely available measure of arithmetic fluency. *Canadian Journal of Experimental Psychology*, Advance online publication.
- 5. Lu, X., Yao, X., Thompson, W.F., Hu, L. (2021). Movement-induced hypoalgesia: Behavioral characteristics and neural mechanisms. *Annals of the New York Academy of Sciences*, 1497(1), 39-56.
- 6. Zhou, L., Yao, X., Tang, Z., Ren, Q., Hu, L. (2017). Neural mechanisms of tactitle information processing (in Chinese). *Science Technology Review*, 35(19).
- 7. Yao, X., Barth, B., Artemenko, C.. Neurocognitive correlates of multi-digit airthmetic: An fNIRS study. (preregistered, in preparation, DOI 10.17605/OSF.IO/EF3AW)
- 8. Yao, X., Avcil, M., Nuerk, H.-C., Artemenko, C. Math self-concept increases over lifespan. (preregistered, in preparation)

Conferences and Presentations

Mathematical Cognition and Learning Society Conference, Washington D.C., USA

Neurocognitive correlates of multi-digit arithmetic: An fNIRS study. (talk) 2024

Mathematical Cognition and Learning Society Conference, Loughborough, UK

Does the math anxiety-performance link depend on the paradigm? (poster) 2023

Mathematical Cognition and Learning Society Conference, Antwerp, Belgium

Do arithmetic effects depend on the paradigm? (poster) 2022

The 21th National Academic Congress of Psychology, Beijing, China

Temporal and spatial effects of movement-induced analgesia and its cerebral mechanisms (poster) 2018