The LEAD Graduate School & Research Network at the University of Tübingen invites you to attend the lecture by

Elisa Filevich, PhD
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Measuring Metacognition
Thursday, 20th January 2022 at 09.30 am (MESZ)

Virtual Lecture via Zoom
(please contact us via E-Mail and we will provide the zoom link)

Abstract

Metacognition is often broadly defined as "cognition about cognition", but different research fields have operationalized it very differently. Specifically, in cognitive science, we often measure metacognitive ability as the relationship between subjective confidence judgements and accuracy in visual discrimination decisions, measured over hundreds of trials. On the other hand, education research focusses on other aspects and measures, for example metacognitive strategy knowledge or metacognitive control. In part, perhaps, due to the different measurement approaches, some findings from education science appear to contradict those from cognitive sciences. These contradictions are problematic because they might point to either a lack of general validity of cognitive science studies, or to confounding factors in measures of metacognitive monitoring in education research. In this talk, I will first present some of my previous work that borrowed the operationalizations from visual tasks to measure meta-cognition of movement (that is, how much we can explicitly report about how our bodies move). Building on this experience of adapting visual tasks to other cognitive domains, I will then suggest ways to investigate some of the apparent contradictions between cognitive and education sciences.

Biography

After studying Biology in Buenos Aires (Argentina), Elisa Filevich did her PhD in Cognitive Neuroscience in University College London (UK), working with Patrick Haggard. In her PhD thesis, she explored differences between executing and inhibiting actions following external instructions vs. following internal decisions. She then moved to Germany, first to Berlin for a postdoc with Simone Kühn in the Max Planck Institute for Human Development, where she worked on the neural correlates of metacognition and introspection; and then worked in the Faculty of Sport Sciences, Leipzig University. Since 2017, she leads a junior research group, funded by a "Freigeist" Fellowship from the Volkswagen Foundation, investigating motor metacognition.

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Important Publications

- Ciston, A. B., Forster, C., Brick, T. R., Kühn, S., Verrel, J., & Filevich, E. (2021). Limited meta-cognitive access to one's own facial expressions (p.2021.03.08.434069). https://doi.org/10.1101/2021.03.08.434069 (BioRXiv preprint)

- Arbuzova, P., Peters, C., Röd, L., Koß, C., Maurer, H., Maurer, L. K., Müller, H., Verrel, J., & Filevich, E. (2021). Measuring metacognition of direct and indirect parameters of voluntary movement. Journal of Experimental Psychology: General. Advance online publication. https://doi.org/10.1037/xge0000892

- Filevich, E., Forlim, C. G., Fehrman, C., Forster, C., Paulus, M., Shing, Y. L., & Kühn, S. (2020). I know that I know nothing: Cortical thickness and functional connectivity underlying meta-ignorance ability in pre-schoolers. Developmental Cognitive Neuroscience, 41, 100738. https://doi.org/10.1016/j.dcn.2019.10073

Further Information

- METAMOR Lab: http://metamotorlab.filevich.com/
- Humboldt Universität zu Berlin: https://www.psychologie.hu-berlin.de/de/mitarbeiter/1689864

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