

Prof. Dr. Korbinian Moeller

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Education

- 2006 - 2010 **Ph.D.** in Psychology (Dr. rer. nat.) at University of Salzburg (Austria) and University of Tuebingen, Germany, Department of Psychology
- 2005 - 2006 **M.Sc.** in Psychology at University of Dundee (Scotland/UK)
- 2000 - 2006 **Dipl.Psych.** at Catholic University Eichstaett-Ingolstadt and RWTH Aachen University

Research Experience

- 2012 - today **Professor** of Applied Learning and Knowledge Psychology at the IWM, Tuebingen, Germany
- 2010 - 2012 **Postdoc** Researcher at the IWM, Tuebingen, Germany
- 2008 - 2010 **Research Assistant** and Ph.D. student at University of Tuebingen, Germany
- 2006 - 2008 **Research Assistant** and Ph.D. student at University of Salzburg, Austria

Academic Functions (Selection)

- Deputy Representative of the Leibniz-Institut für Wissensmedien in the Tübingen School of Education
- Faculty member in the LEAD Graduate School, University of Tübingen, funded by the Excellence Initiative of German federal and state governments
- Member of the executive board of the Leibniz-Institut für Wissensmedien
- Associate editor for *Frontiers in Psychology*, Specialty section Developmental Psychology, *Journal of Numerical Cognition*

Third-Party Funding (last 5 years, selection)

Ninaus, Golle, Trautwein, Pinkwart, Butz, & **Moeller** (2018 - 2020), *Coding to foster Computational Thinking through Playing & Creating*, ca. **100,000 EUR**, funded by Hector Stiftung II

Moeller & Roesch (2019 - 2022), *How digits help digitis - Mit Fingern Zahlen begreifen*, ca. **350,000 EUR**, funded by Deutsche Forschungsgemeinschaft (DFG)

Huber & **Moeller** (2018 - 2020), *Influences of task switching on number processing*, ca. **150,000 EUR**, funded by Deutsche Forschungsgemeinschaft (DFG)

Moeller, Huber, & Gawrilow (2017 - 2020), *Digits grasp Digits - Development and Evaluation of a Digital App for Self-Regulated Training of Finger-Based Numerical Strategies*. Ca. **170,000 EUR**, Leibniz-ScienceCampus Tuebingen

Awards and Honors (selection)

- First prize at the 6th International Educational Games Competition, Tsarava, K., Leifheit, L., Moeller, K., & Ninaus, M. "Crabs & Turtles: A Series of Computational Adventures". 4 - 5 October 2018, Sophia Antipolis, France.

- Best Paper Award at the International Games and Learning Alliance (GALA) Conference, Ninaus, M., Kiili, K., McMullen, J., & Moeller, K. "A Game-Based Approach to Examining Students' Conceptual Knowledge of Fractions", 5 - 7 December 2016, Utrecht, Netherlands.
- Representative of the Leibniz-Association at the Science and Technology for Society (STS) forum 2016 in the future leaders of society program, Kyoto, Japan
- Travel grant by Alexander von Humboldt Foundation to Federal Rural University of Pernambuco, Recife, and Federal University of Rio Grande do Norte, Natal, Brazil

10 Most Relevant Publications

- Klein, E., Willmes, K., Bieck, S.M., Bloechle, J., & **Moeller, K.** (2019). White matter neuroplasticity in mental arithmetic: changes in hippocampal connectivity following arithmetic drill training. *Cortex*, *114*, 115-123.
- Hirsch, S., Lambert, K., Koppens, K., & **Moeller, K.** (2018). Basic numerical competences in large-scale assessment data: Structure and long-term relevance. *Journal of Experimental Child Psychology*, *167*, 32-48.
- Dackermann, T., Fischer, U., Nuerk, H.-C., Cress, U., & **Moeller, K.** (2017). Applying embodied cognition: from useful interventions and their theoretical underpinnings to practical applications. *ZDM Mathematics Education*, *49*, 545-557.
- Huber, S., Nuerk, H.-C., Willmes, K., & **Moeller, K.** (2016). A general model framework for multi-symbol number comparison. *Psychological Review*, *123*, 667-695.
- Moeller, K.**, Shaki, S., Goebel, S. M., & Nuerk, H.-C. (2015). Language influences number processing - a quadrilingual study. *Cognition*, *136*, 150-155.
- Link, T., Nuerk, H.-C., & **Moeller, K.** (2014). On the relation between the mental number line and arithmetic competencies. *Quarterly Journal of Experimental Psychology*, *67*, 1597-1613.
- Moeller, K.**, Fischer, U., Link, T. S., Wasner, M., Huber, S., Cress, U., & Nuerk, H.-C. (2012). Learning and development of embodied numerosity. *Cognitive Processing*, *13*, 271-274.
- Moeller, K.**, Pixner, S., Zuber, J., Kaufmann, L., & Nuerk, H.-C. (2011). Early place-value understanding as a precursor for later arithmetic performance - a longitudinal study on numerical development. *Research in Developmental Disabilities*, *32*, 1837-1851.
- Domahs, F., **Moeller, K.**, Huber, S., Willmes, K., & Nuerk, H.-C. (2010). Embodied numerosity: Implicit hand-based representations influence symbolic number processing across cultures. *Cognition*, *116*, 251-266.
- Moeller, K.**, Pixner, S., Kaufmann, L., & Nuerk, H.-C. (2009). Children's early mental number line: Logarithmic or rather decomposed linear? *Journal of Experimental Child Psychology*, *103*, 503-515.

Teaching / Supervisor Experience

- I have (co) supervised more than 15 Ph.D. students, 30 Diploma/Master theses, and 20 Bachelor theses
- I am regularly lecturing on topics of organizational psychology, psychological diagnostics, and general psychology
- I have held seminars on different topics, including personality and performance diagnostics, biological psychology, personality psychology, coaching, etc.