

## Curriculum Vitae

### Sabine Schaefer

#### Personal Information

Date of Birth: 9<sup>th</sup> of July 1976

Place of Birth: Gießen

Citizenship: German

#### Education

2002 - 2004    Fellow, International Max Planck Research School  
(IMPRS), „The Life Course: Evolutionary and  
Ontogenetic Dynamics (LIFE)“

1996 - 2001    Free University of Berlin, Psychology

#### Degrees

2005            Dr. phil. (PhD)  
Summa cum laude (highest grade)  
Free University of Berlin  
Members of the dissertation committee: Paul B. Baltes  
(thesis advisor), Nina Knoll, Ulman Lindenberger, Herbert  
Scheithauer, Peter Walschburger  
PhD thesis, „Concurrent cognitive and sensorimotor  
performance: a comparison of children and young adults“

2001            Dipl.-Psych. (MA in Psychology)  
Final grade 1,0 (highest possible grade)  
Free University of Berlin  
Diploma thesis, „Age differences in the regulation of action  
sequences“ (Advisor: Ulman Lindenberger)

## Professional Experience

- April 2016 until today Full Professor (W2) for Human Movement Science (Motor and Cognition), Institute of Sports Sciences, Saarland University
- April 2015 until March 2016 Assistant Professor for Exercise Psychology (tenure track), Department of Sports Sciences, Leipzig University
- 2007-2015 Research scientist and principal investigator, project „Sensorimotor-Cognitive Couplings“, Max Planck Institute for Human Development, Berlin
- 2005 - 2007 Post-doctoral fellow, project „Sensorimotor-Cognitive Couplings“ (PI: Ulman Lindenberger & Martin Lövdén), Max Planck Institute for Human Development, Berlin
- 2001 - 2004 Pre-doctoral student, project „Sensorimotor-Cognitive Couplings“ (PI: Paul B. Baltes & Ralf Krampe), Max Planck Institute for Human Development, Berlin
- 2000 - 2001 Student research assistant, project ”The Interplay of Sensorimotor and Cognitive Functioning” (PI: Paul B. Baltes & Ralf Krampe), Max Planck Institute for Human Development, Berlin
- 1998 - 2000 Student research assistant, project “Memory and Intelligence in Development” (MIND) (PI: Ulman Lindenberger), Max Planck Institute for Human Development, Berlin

## Publications

Leisge, K., Welsch, L., Pitsch, W., & Schaefer, S. (2025). Framing effects and social context as determinants of dishonest behavior. *Discover Psychology, 5*, 186. <https://doi.org/10.1007/s44202-025-00494-6>

Schaefer, S., & Leisge, K. (2025). Who misses the target when thinking? Soccer expertise influences shooting-accuracies under cognitive load. *International Journal of Sport and Exercise Psychology*. <https://doi.org/10.1080/1612197X.2025.2563319>

Pelzer, F., Leisge, K., Kaczmarek, C., & Schaefer, S. (2025). Spectators lead to overconfidence in males in a motor task. *Scientific Reports, 15*, 32449. <https://doi.org/10.1038/s41598-025-18048-0>

Leisge, K., Heggenberger, A., Kaczmarek, C., Pitsch, W., & Schaefer, S. (2025). Tracing the lines of deceit. Male cheating behavior increases in online versus face-to-face environments over time. *Acta Psychologica, 259*, 105373. <https://doi.org/10.1016/j.actpsy.2025.105373>

Heggenberger, A., Vieweg, J., & Schaefer, S. (2025). Age simulation effects on full-body motor sequence learning. *Psychology and Aging, 40*(8), 861-875. <https://doi.org/10.1037/pag0000921>

Schaefer, S., Zentgraf, K., & Steel, K. A. (2025). Editorial: Cognitive and motor skills in sports. *Frontiers in Psychology, 16*, 1629218. <https://doi.org/10.3389/fpsyg.2025.1629218>

Schaefer, S. (2025). Embodied counting: Touching objects reduces errors in counting under cognitive load. *Journal of Cognitive Enhancement*. <https://doi.org/10.1007/s41465-025-00321-9>

Meha, R., Obërtinca, R., aus der Fünten, K., Leisge, K., & Schaefer, S. (2025). A new injury prevention program 'FUNBALL' improves cognitive performance of young football (soccer) players: A cluster randomized controlled trial. *Psychology of Sport and Exercise, 76*, 102743. <https://doi.org/10.1016/j.psychsport.2024.102743>

Leisge, K., Kaczmarek, C., & Schaefer, S. (2024). How often do you cheat? Dispositional influences and intrapersonal stability of dishonest behavior. *Frontiers in Psychology, 15*, 1297058. <https://doi.org/10.3389/fpsyg.2024.1297058>

Monz, A., Morbe, K., Klein, M., & Schaefer, S. (2023). Mutual interference between memory encoding and motor skills: The influence of motor expertise and age. *Frontiers in Psychology, 14*, 1196978. <https://doi.org/10.3389/fpsyg.2023.1196978>

Engler, C., Pelzer, F., Kaczmarek, C., & Schaefer, S. (2023). Effects of spectators on the performance of a dance routine. *German Journal of Exercise and Sport Research*. <https://doi.org/10.1007/s12662-023-00929-z>

Amico, G., Braun, T., & Schaefer, S. (2023). Can acute resistance exercise facilitate episodic memory encoding? *Current Psychology, 42*, 10910–10923. <https://doi.org/10.1007/s12144-021-02352-9>

- Schaefer, S., Riediger, M., Li, C.-S. R., & Lindenberger, U. (2023). Too easy, too hard, or just right: Task-difficulty choices differ by age and gender. *International Journal of Behavioral Development, 47*(3), 253-264. <https://doi.org/10.1177/01650254231160126>
- Vieweg, J., Panzer, S., & Schaefer, S. (2023). Effects of age simulation and age on motor sequence learning: Interaction of age-related cognitive and motor decline. *Human Movement Science, 87*, 103025. <https://doi.org/doi.org/10.1016/j.humov.2022.103025>
- Schaefer, S., Bill, D., Hoor, M., & Vieweg, J. (2023). The influence of age and age simulation on task-difficulty choices in motor tasks. *Aging, Neuropsychology, and Cognition, 30*(3), 429-454. <https://doi.org/10.1080/13825585.2022.2043232>
- Amico, G., & Schaefer, S. (2022). Tennis expertise reduces costs in cognition but not in motor skills in a cognitive-motor dual-task situation. *Acta Psychologica, 223*, 103503. <https://doi.org/10.1016/j.actpsy.2022.103503>
- Schaefer, S., & Amico, G. (2022). Table tennis expertise influences dual-task costs in timed and self-initiated tasks. *Acta Psychologica, 223*, 103501. <https://doi.org/10.1016/j.actpsy.2022.103501>
- Kaczmarek, C., Schmidt, A., Emperle, A.-S., & Schaefer, S. (2022). The influence of social contexts on motor and cognitive performance: Performing alone, in front of others, or co-acting with others. *Journal of Sport and Exercise Psychology, 44*(2), 77-85. <https://doi.org/10.1123/jsep.2021-0101>
- Schaefer, S., Ohlinger, C., & Frisch, N. (2021). Choosing an optimal motor-task difficulty is not trivial: The influence of age and expertise. *Psychology of Sport and Exercise, 57*, 102031. <https://doi.org/10.1016/j.psychsport.2021.102031>
- Amico, G., & Schaefer, S. (2021). Implementing full body movements in a verbal memory task: Searching for benefits but finding mainly costs. *Mind, Brain, and Education, 15*(2), 211-219. <https://doi.org/10.1111/mbe.12284>
- Möhring, W., Klupp, S., Zumbrennen, R., Segerer, R., Schaefer, S., & Grob, A. (2021). Age-related changes in children's cognitive-motor dual-tasking: Evidence from a large, cross-sectional sample. *Journal of Experimental Child Psychology, 206*, 105103. <https://doi.org/10.1016/j.jecp.2021.105103>
- Amico, G., & Schaefer, S. (2021). Negative effects of embodiment in a visual spatial working memory task in children, young adults, and oldults. *Frontiers*

in *Psychology*, 12, 688147. <https://doi.org/10.3389/fpsyg.2021.688174>

Möhring, W., Klupp, S., Segerer, R., Schaefer, S., & Grob, A. (2020). Effects of various executive functions on adults' and children's walking. *Journal of Experimental Psychology: Human Perception and Performance*, 46, 629-642. <https://doi.org/10.1037/xhp0000736>

Vieweg, J., & Schaefer, S. (2020). How an age simulation suit affects motor and cognitive performance and self-perception in younger adults. *Experimental Aging Research*, 46, 273-290. <https://doi.org/10.1080/0361073X.2020.1766299>

Amico, G., & Schaefer, S. (2020). Running during encoding improves word learning for children. *Frontiers in Psychology*, 11, 684. <https://doi.org/10.3389/fpsyg.2020.00684>

Amico, G., & Schaefer, S. (2020). No evidence for performance improvements in episodic memory due to fidgeting, doodling or a "neuro-enhancing" drink. *Journal of Cognitive Enhancement*, 4, 2-11. <https://doi.org/10.1007/s41465-019-00124-9>

Schaefer, S., & Scornaienchi, D. (2019). Table tennis experts outperform novices in a demanding cognitive-motor dual-task situation. *Journal of Motor Behavior*, 52, 204-213. <https://doi.org/10.1080/00222895.2019.1602506>

Schaefer, S. (2019). Embodiment helps children solve a spatial working memory task: Interactions with age and gender. *Journal of Cognitive Enhancement*, 3, 233-344. <https://doi.org/10.1007/s41465-018-0081-4>

Schaefer, S. (2019). Werde ich das schaffen? Unter- und Überschätzung der eigenen Fähigkeiten im Alltag. *InMind*, 3.

Schaefer, S. (2018). Why is it difficult to cross the street while talking? *Frontiers for Young Minds*, 6, 30. <https://doi.org/10.3389/frym.2018.00030>

Meeusen, R., Schaefer, S., Tomporowski, P., & Bailey, R. (Eds.). (2018). *Physical activity and educational achievement: Insights from exercise neuroscience*. London: Routledge.

Walter, N. & Schaefer, S. (2018). A review of laboratory studies on the effects of movement and exercise on cognition in children (pp. 187-190). In R. Meeusen, S. Schaefer, P. Tomporowski & R. Bailey (eds.) *Physical activity and educational achievement: Insights from exercise neuroscience*. Taylor & Francis.

- Kray, J. & Schaefer, S. (2018). Mittlere und späte Kindheit (6-11 Jahre) (Middle to late childhood). In W. Schneider & U. Lindenberger (Hrsg.), *Entwicklungspsychologie* (8<sup>th</sup> Edition, pp. 215-238). Weinheim: Beltz.
- Bierbauer, W., Inauen, J., Schaefer, S., Kleemeyer, M. M., Lüscher, J., König, C., Tobias, R., Kliegel, M., Zimmerli, L., Holzer, B. M., Battegay, E., Siebenhüner, K., Ihle, A., Schmid, C., Scholz, U. (2017). Health behavior change in older adults: Testing the Health Action Process Approach at the inter- and intraindividual level. *Applied Psychology: Health and Well-Being*, *9*, 324-348. <https://doi.org/10.1111/aphw.12094>
- Kleemeyer, M. M., Polk, T. A., Schaefer, S., Bodammer, N. C., Brechtel, L., & Lindenberger, U. (2017). Exercise-induced fitness changes correlate with changes in neural specificity in older adults. *Frontiers in Human Neuroscience*, *11*, 1-8. <https://doi.org/10.3389/fnhum.2017.00123>
- Kleemeyer, M., Kühn, S., Prindle, J., Bodammer, N. C., Brechtel, L., Garthe, A., Kempermann, G., Schaefer, S., & Lindenberger, U. (2016). Changes in fitness are associated with changes in hippocampal microstructure and hippocampal volume among older adults. *NeuroImage*, *131*, 155-161. <https://doi.org/10.1016/j.neuroimage.2015.11.026>
- Schaefer, S., Kleemeyer, M. & Lindenberger, U. (2015). Kognition und Motorik über die Lebensspanne: Doppelaufgabenstudien und eine Fitnessintervention. *Leipziger Sportwissenschaftliche Beiträge*, *56*, 114-125.
- Schaefer, S., Jagenow, D., Verrel, J. & Lindenberger, U. (2015). The influence of cognitive load and walking speed on gait regularity in children and young adults. *Gait and Posture*, *41*, 258-262. <https://doi.org/10.3389/fpsyg.2014.01167>
- Schaefer, S., Schellenbach, M., Lindenberger, U., & Woollacott, M. (2015). Walking in high-risk settings: Do older adults still prioritize gait when distracted by a cognitive task? *Experimental Brain Research*, *233*, 79-88. <https://doi.org/10.1007/s00221-014-4093-8>
- Schaefer, S. (2014). The ecological approach to dual-task research: Findings on the effects of expertise and age. *Frontiers in Psychology*, *5*, 1-9. <https://doi.org/10.3389/fpsyg.2014.01167>
- Wenger, E., Mårtensson, J., Noack, H., Bodammer, N. C., Kühn, S., Schaefer, S., Heinze, H.-J., Düzel, E., Bäckman, L., Lindenberger, U., & Lövdén, M. (2014). Comparing manual and automatic segmentation of hippocampal volumes: Reliability and validity issues in younger and older brains. *Human Brain Mapping*, *35*, 4236-4248. <https://doi.org/10.1002/hbm.22473>

- Riediger, M., Voelkle, M., Schaefer, S. & Lindenberger, U. (2014). Charting the life course: Age differences and validity of beliefs about lifespan development. *Psychology and Aging, 29*, 503-520.  
<https://doi.org/10.1037/a0036228>
- Schaefer, S. & Lindenberger, U. (2013). Thinking while walking: Experienced high-heel walkers flexibly adjust their gait. *Frontiers in Psychology, 4*, 1-7.  
<https://doi.org/10.3389/fpsyg.2013.00316>
- Kray, J. & Schaefer, S. (2012). Mittlere und späte Kindheit (6-11 Jahre) (Middle to late childhood). In W. Schneider & U. Lindenberger (Eds.), *Entwicklungspsychologie* (7<sup>th</sup> Edition, pp. 211-234). Weinheim: Beltz.
- Wenger, E., Schaefer, S., Noack, H., Kühn, S., Martensson, J., Heinze, H.-J., Düzel, E., Bäckman, L., Lindenberger, U., & Lövdén, M. (2012). Cortical thickness changes following spatial navigation training in adulthood and aging. *NeuroImage, 59*, 3386-3397.  
<https://doi.org/10.1016/j.neuroimage.2011.11.015>
- Lövdén, M., Schaefer, S., Noack, H., Bodammer, N. C., Kühn, S., Heinze, H.-J., Düzel, E., Bäckman, L. & Lindenberger, U. (2012). Spatial navigation training protects the hippocampus against age-related changes during early and late adulthood. *Neurobiology of Aging, 33*, 620.e9-620.e22.  
<https://doi.org/10.1016/j.neurobiolaging.2011.02.013>
- Krampe, R. T., Schaefer, S., Lindenberger, U., & Baltes, P. B. (2011). Lifespan changes in multi-tasking: Concurrent walking and memory search in children, young, and older adults. *Gait and Posture, 33*, 401-405.  
<https://doi.org/10.1016/j.gaitpost.2010.12.012>
- Schaefer, S. & Schumacher, V. (2011). The interplay of cognitive and motor functioning in healthy older adults: Findings from dual-task studies and suggestions for intervention. *Gerontology, 57*, 239-246.  
<https://doi.org/10.1159/000322197>
- Lövdén, M., Schaefer, S., Noack, H., Kanowski, M., Kaufmann, J., Tempelmann, C., Bodammer, N. C., Kühn, S., Heinze, H.-J., Lindenberger, U., Düzel, E. & Bäckman, L. (2011). Performance-related increases in hippocampal N-acetylaspartate (NAA) induced by spatial navigation training are restricted to BDNF val homozygotes. *Cerebral Cortex, 21*, 1435-1442.  
<https://doi.org/10.1093/cercor/bhq230>

- Lövdén, M., Bäckman, L., Lindenberger, U., Schaefer, S. & Schmiedek, F. (2010). A theoretical framework for the study of adult cognitive plasticity. *Psychological Bulletin*, *136*, 659-676. <https://doi.org/10.1037/a0020080>
- Schaefer, S., Lövdén, M., Wieckhorst, B., & Lindenberger, U. (2010). Cognitive performance is improved while walking: Differences in cognitive-sensorimotor couplings between children and young adults. *European Journal of Developmental Psychology*, *7*, 371-389. <https://doi.org/10.1037/0012-1649.44.3.747>
- Schaefer, S., Krampe, R. Th., & Lindenberger, U. (2009). Gleichzeitig Balancieren und Denkaufgaben bearbeiten: Altersunterschiede zwischen Kindern und jungen Erwachsenen (Balancing while working on cognitive tasks: Age differences between children and young adults). In V. Nagel & V. Lippens (Eds.), *Sportwissenschaft und Sportpraxis: Gleichgewichts-Leistungen im Handlungsbezug. Aktuelle Arbeiten aus der Gleichgewichtsforschung* (pp. 13-24). Hamburg: Czwalina-Verlag.
- Verrel, J., Lövdén, M., Schellenbach, M., Schaefer, S., & Lindenberger, U. (2009). Interacting effects of cognitive load and adult age on the regularity of whole-body motion during treadmill walking. *Psychology and Aging*, *24*, 75-81. <https://doi.org/10.1037/a0014272>
- Huxhold, O., Schäfer, S., & Lindenberger, U. (2009). Wechselwirkungen zwischen Sensomotorik und Kognition im Alter: Überblick über ein internationales Forschungsfeld (Interactions of sensory and cognitive functioning in old age: Overview of an international research topic). *Zeitschrift für Gerontologie und Geriatrie*, *42*, 93-98. <https://doi.org/10.1007/s00391-008-0566-3>
- Schaefer, S., Krampe, R. Th., Lindenberger, U., & Baltes, P. B. (2008). Age differences between children and young adults in the dynamics of dual-task prioritization: Body (balance) vs. mind (memory). *Developmental Psychology*, *44*, 747-757. <https://doi.org/10.1037/0012-1649.44.3.747>
- Lövdén, M., Schaefer, S., Pohlmeier, A., & Lindenberger, U. (2008). Walking variability and working memory load in aging: A dual-process account relating cognitive control to motor control performance. *Journal of Gerontology: Psychological Science*, *63B*, P121-P128. <https://doi.org/10.1093/geronb/63.3.P121>
- Lindenberger, U., & Schaefer, S. (2008). Erwachsenenalter und Alter (Middle and old adulthood). In R. Oerter & L. Montada (Eds.), *Entwicklungspsychologie* (6. Auflage, pp. 366-409). Weinheim: Beltz.

Schaefer, S. & Bäckman, L. (2007). Normales und pathologisches kognitives Altern (Normal and pathological cognitive aging). In J. Brandtstädter & U. Lindenberger (Eds.), *Lehrbuch zur Entwicklungspsychologie der Lebensspanne*. Stuttgart: Kohlhammer.

Schaefer, S., Huxhold, O., & Lindenberger, U. (2006). Healthy mind in healthy body? A review of sensorimotor-cognitive interdependencies in old age. *European Review of Aging and Physical Activity*, 3, 45-54. <https://doi.org/10.1007/s11556-006-0007-5>

## Submitted Manuscripts and Manuscripts in Preparation

Heggenberger, A., Harth, P., Schaefer, S., & Kaczmarek, C. (submitted). Simulating sensorimotor aging: Impact on gait and cognitive-motor dual-task performance.

Kaczmarek, C., Pelzer, F., Engler, C., Ziegler, A., Bohnenberger, C., & Schaefer, S. (submitted). Balancing in front of a virtual audience: Social facilitation or visual fixation effects?

Leisge, K., Pitsch, W., & Schaefer, S. (submitted). Spotting the difference from lab to screen: How social distance and anonymity affect dishonesty.

Wahl, H.-W., Gerstorff, D., Schaefer, S., & Brunner, R. (in preparation). Frühe Risiko- und Schutzfaktoren menschlicher Entwicklung und ihre lebenslangen Auswirkungen (Early protective and early risk factors in human development and their lifelong consequences). Buch in der Reihe "Entwicklungspsychologie über die Lebensspanne". (Book in the series "Lifepan Developmental Psychology")

## Member of Editorial Boards

Frontiers in Psychology: Movement Science and Sport Psychology

## Ad-hoc Rewiever

Age (Journal for the American Aging association)  
Aging, Neuropsychology, and Cognition  
Applied Developmental Psychology

Archives of Physical Medicine and Rehabilitation  
Behavior and Brain Functions  
Brain, Mind, and Education  
Developmental Psychology  
Disability and Rehabilitation  
Ergonomics  
European Journal of Applied Physiology  
European Journal of Developmental Psychology  
European Journal of Sport Sciences  
Exercise and Sport Science Reviews  
Experimental Brain Research  
Experimental Child Psychology  
Experimental Gerontology  
Frontiers in Human Neuroscience  
Frontiers in Neuroscience  
Frontiers in Psychology  
German Journal of Exercise and Sport Research  
Gerontology  
GeroPsych: The Journal of Gerontopsychology and Geriatric Psychiatry  
Human Brain Mapping  
Innovations in Aging  
International Journal of Aging and Human Development  
Journal of Experimental Child Psychology  
Journal of Experimental Psychology: General  
Journal of Gerontology: Psychological Science  
Journal of Motor Behavior  
Journal of Psychophysiology  
Journal of Speech, Language, and Hearing Research  
Journal of the American Aging Association  
Medicine and Science in Sports and Exercise  
Memory  
Motor Control  
Multisensory Research  
Nature  
Neurobiology of Learning and Memory  
NeuroImage  
Neuropsychological Rehabilitation  
Neuroscience Letters  
Perceptual and Motor Skills  
PLOS One  
Psychological Research  
Psychology and Aging  
Psychology of Sport and Exercise  
Research Quarterly for Exercise and Sport  
Scandinavian Journal of Medicine and Science in Sports

Sports Biomechanics  
Sports Medicine  
Sportwissenschaft  
Stroke  
Zeitschrift für Sportpsychologie

## Reviewer for Grant Proposals

German Research Foundation (DFG)  
Ministry of Science, Technology, and Space, Israel  
Research Grants Council, Hong Kong, China  
Swiss National Science Foundation  
Wellcome Trust

## Professional Affiliations

Deutsche Gesellschaft für Psychologie (German Society for Psychology;  
DGPs)  
Arbeitsgemeinschaft für Sportpsychologie (German Society for Sport  
Psychology; ASP)

## Supervision of Dissertations

Christian Jost (started February 2026, Saarland University)  
Fabian Pelzer (started January 2025, Saarland University)  
Anna Heggenberger (started June 2023, Saarland University)  
Kai Leisge (started April 2022, Saarland University)  
Rina Meha (started summer 2020, external PhD student from Cosovo)  
Janine Vieweg (defense 2022, Saarland University)  
Gianluca Amico (defense 2020, Saarland University)  
Maike Kleemeyer (defense 2017, Humboldt University Berlin,  
co-supervised by Ulman Lindenberger)