

Curriculum Vitae Sabine Schaefer

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

- 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., Braun, T., & Schaefer, S. (2021). Can acute resistance exercise facilitate episodic memory encoding? *Current Psychology*. <https://doi.org/10.1007/s12144-021-02352-9>
- 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* (8th 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* (7th 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>

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Ad-hoc Rewiever

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Professional Affiliations

Deutsche Gesellschaft für Psychologie (German Society for Psychology; DGPs)
Arbeitsgemeinschaft für Sportpsychologie (German Society for Sport
Psychology; ASP)
EGREPA- European Group for Research into Elderly and Physical Activity
International Society for Posture and Gait Research
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