

Dr. phil. Gidon T. Frischkorn

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• University of Zurich, General Psychology (Cognition)

As a psychometrician, I study the measurement of cognitive processes and experimental manipulations that influence them. My research is at the intersection of psychometrics, research methods and experimental psychology and aims to close the gap between observed behavior and the underlying psychological processes using mathematical models. After completing my PhD at the University of Heidelberg, I am currently an SNSF Ambizione Fellow at the Psychological Institute of the University of Zurich and am involved in research and teaching in the field of statistics and methods.

Education

09/2015 - 03/2019	Dr. phil. (PhD), Psychology , with distinction: <i>summa cum laude</i>
Germany	Ruprecht-Karls University Heidelberg
10/2013 - 08/2015	Master of Science, Psychology
Germany	Ruprecht-Karls University Heidelberg Grade Ø 1.0 - "very good"
10/2009 - 08/2012	Bachelor of Science, Psychology
Germany	Ruprecht-Karls University Heidelberg Grade Ø 1.6 - "good"

Professional experience

Since 01/2023	SNSF Ambizione Fellow, University of Zurich (UZH), Switzerland
	Junior Research Group Leader: Research Group "Cognitive Psychometrics"
	• Development of predictive analysis & modeling techniques that account for uncer-
	tainty in predictions using Bayesian statistics
	 Development & programming of a software package for Bayesian measurement
	models (R package: bmm)
	 Head of a research group with one PhD student & 3 research assistants
	• Budget responsibility, personnel planning and financial management of the research
	project (CHF 950 000 over 4 years)
	• Planning & execution of behavioral experiments in the lab and online, as well as their
	programming with JavaScript & jsPsych
	Lecturer for advanced statistical methods
01/2019 - 12/2022	Postdoctoral Researcher, UZH, Switzerland
	Senior researcher in the "Cognitive Psychology" research group at UZH
	 Management & implementation of numerous international research projects at the
	interface between psychometrics & cognitive psychology
	 Numerous publications (> 10) in high-ranking international journals, as well as
	presentations (> 15) at international scientific congresses
	Acquisition of third-party funds
	Teaching university courses & supervising Bachelor & Master theses
	Organization & contact person for Science Computing
09/2015 - 12/2018	Ph.D. student, University of Heidelberg, Germany
	Junior Researcher in the research group "Differential Psychology & Diagnostics"
	Head of a research project on differences in intelligence
	Advanced data analysis and modeling (including attendance at the summer school
	"Computational Modeling of Cognition")
	 Leading courses on the programming of experiments

09/2010 - 08/2015 **Research Assistant**, University of Heidelberg, Germany

• Conducting behavioral experiments, as well as data backup and processing

Scholarships & awards

2024	Nomination for the UZH Mentoring Award . Award for particularly committed support and promotion of doctoral students.
2024	Fellow of the Psychonomic Society. Psychonomic Society.
	Recognition of outstanding contributions to cognitive psychology and development
	of an independent research profile.
2020	Teacher of the Hour , University of Zurich.
	Award for special achievements by teachers during the corona outbreak
2019	Best Paper Award, Journal of Intelligence.
	For the article: Cognitive Models in Intelligence Research: Advantages and Recommen-
	dations for Their Application.
2015	Franz Emanuel Weinert Prize, Institute of Psychology, University of Heidelberg.
	Award for the Master's thesis

Commitment

Since 2018	Reviewer for various (> 20) international journals
10/2019 - 06/2024	Representative of the young scientists in the Strategy Commission of the Psychologi- cal Institute of the University of Zurich
10/2019 - 06/2024	Deputy of the young scientists in the Institute Assembly of the Psychological Institute of the University of Zurich

Language skills

German	Mother tongue (Swiss German: excellent understanding)	
English	Business fluent, written and spoken (9 years school education + 10 years working language)	
French	Basic knowledge (DELF A2 diploma)	

Technical skills

Concepts	<i>Expert</i> : data analysis, data visualization, statistical modeling, questionnaire con- struction, experiments <i>Basics</i> : Machine Learning, Artificial Intelligence, Large Language Models
Programming languages	<i>Expert</i> : R <i>Advanced</i> : MATLAB, JavaScript <i>Basics</i> : Python, HTML, CSS, SQL
Tools	Visual Studio Code, ChatGPT, Git, R Studio, Microsoft Office, LaTeX
Experiments	jsPsych, lab.js, Psychtoolbox 3, Qualtrics, Unipark, E-Prime
AI	Prompt Engineering Expert (Copilot, ChatGPT)

Research contributions

Third-party funds acquired (total > CHF 1,000,000)

SNF (2023 - 2026)	SNF Ambizione Grant "The binding hypothesis - A unified account of cognitive individual differences?" (PI) CHF 916,510
SNF (2023 - 2026)	Flexibility Grant . Additional contribution as part of the SNSF Ambizione Grant to support the compatibility of family and career. (PI) CHF 120,000

- *GRC* (2024) **Short Grant** of the Graduate Campus (GRC) of the Faculty of Arts and Humanities for the workshop "*Bayes Factor Estimation for Complex Hierarchical Models: Methods, Application, and Challenges*" (Co-PI), **CHF 4000**
- DFG (2022 2025) Scientific network funded by the German Research Foundation (DFG) on the topic of "*Neurocognitive Psychometrics*", main applicant: Prof. Anna-Lena Schubert; own role: co-coordinator of the network and contribution to conceptualization and application process

Travel grants

- *SAGW* (2019) **Travel Award** (November 2019), for participating and presenting at the 60th Annual Meeting of the Psychonomic Society in Montreal, Canada. **CHF 1000**
 - ISIR (2018) Student Travel Award (July 2018), for participating and presenting at the Annual Meeting of the International Society for Intelligence Research (ISIR) in Edinburgh, Scotland. € 1000
- DAAD (2017)Travel Award (November 2017), for participating and presenting at the 58th Annual
Meeting of the Psychonomic Society (2017) in Vancouver, Canada. € 1000

Involvement in the scientific community

Editorial	PCI: Registered Reports (Recommender)
	PCI: Psychology (Recommender)
	Psychological Science (Editorial Board Member)
	Behavior Research Methods (Consulting Editor)
Reviewer	Research funding

- 1. Swiss National Science Foundation
- 2. National Science Center Poland

Scientific journals

- 1. Advances in Methods and Practices in Psychological Science
- 2. Attention, Perception, & Psychophysics
- 3. Behavior Research Methods
- 4. BMC Psychology
- 5. Brain Sciences
- 6. Current Directions in Psychological Science
- 7. Experimental Psychology
- 8. Intelligence
- 9. Journal of Cognition
- 10. Journal of Experimental Psychology: General
- 11. Journal of Experimental Psychology: Learning, Memory, and Cognition
- 12. Journal of Intelligence

- 13. Memory & Cognition
- 14. Nature Communications
- 15. npj Science of Learning
- 16. Personality & Individual Differences
- 17. PLOS:One
- 18. Psychological Review
- 19. Psychological Science
- 20. Sustainability
- 21. Quarterly Journal of Experimental Psychology
- memberPsychonomic SocietyEuropean Society of Cognitive Psychology (ESCoP)Society for the Improvement of Psychological Science

Publications

* Shared first authorships

Journal article		31 published / accepted, 4 in preparation
In preparation	4	Li, C., Frischkorn, G. T. , & Oberauer, K. (under review at JEP: LMC). Can We Process Information Without Encoding It into Working Memory? Preprint available at PsyArXiv: <u>https://doi.org/10.31234/osf.io/mcpf7_v1</u>
	3	Oberauer, K., Schubert, AL., Frischkorn, G. T. , Nunez, M. D., & Fieach, C. J. (under review at Psychological Review). The Signal-To-Noise Ratio Hypothesis of Intelli- gence. Preprint available at PsyArXiv: <u>https://osf.io/preprints/osf/nkms3_v1</u>
	2	Löffler, C., Sadus, K., Frischkorn, G. T. , Hagemann, D., & Schubert, AL. (invited for revision at Journal of Experimental Psychology: Learning, Memory & Cognition). The factor structure of executive functions measured with electrophysiological correlates: An event-related potential analysis. Preprint available at PsyArXiv: <u>https://doi.org/10.31234/osf.io/kfqt4</u>
	1	 Von Bastian, C. C., Blais, C., Brewer, G., Gyurkovics, M., Hedge, C., Kałamała, P., Meier, M., Oberauer, K., Rey-Mermet, A., Rouder, J. N., Souza, A. S., Bartsch, L. M., Conway, A. R. A., Draheim, C., Engle, R. W., Friedman, N. P., Frischkorn, G. T., Gustavson, D. E., Koch, I., Wiemers, E. (in preparation). Advancing the understanding of individual differences in attentional control: Theoretical, methodological, and analytical considerations. Preprint available at PsyArXiv: <u>https://doi.org/10.31234/osf.io/x3b9k</u>
In press	31	Frischkorn, G. T. , & Oberauer, K. (accepted at JEP: General). Is the Anti-Saccade Task a Valid Measure of Inhibition? Preprint available at PsyArXiv: <u>https://doi.org/10.31234/osf.io/sbyqt</u>
	30	Li, C., Frischkorn, G. T. , Dames, H., & Oberauer, K. (2025). The Benefit of Removing Information from Working Memory: Increasing Available Cognitive Resources or Reducing Interference? <i>Cognition</i> , <i>260</i> . <u>https://doi.org/10.1016/j.cogni-</u>

tion.2025.106134

- 29 Nunez, M. D., Schubert, A.-L., Frischkorn, G. T., & Oberauer, K. (2025). Cognitive models of decision-making with identifiable parameters: Diffusion decision models with within-trial noise. *Journal of Mathematical Psychology*, 125, 102917. <u>https://doi.org/10.1016/j.jmp.2025.102917</u>
- 28 Frischkorn, G. T.*, & Popov, V.* (2025). A tutorial for estimating Bayesian hierarchical mixture models for visual working memory tasks: Introducing the Bayesian Measurement Modeling (bmm) package for R. *Behavior Research Methods*, 57(5), 144. <u>https://doi.org/10.3758/s13428-025-02643-0</u>
- 2025 27 Li, C., Frischkorn, G. T., & Oberauer, K. (2025). Updating of information in working memory: Time course and consequences. Cognitive Psychology, 156, 101702. https://doi.org/10.1016/j.cogpsych.2024.101702
 - 26 Schubert, A.-L., Frischkorn, G. T., Sadus, K., Welhaf, M. S., Kane, M. J., & Rummel, J. (2024). The brief mind wandering three-factor scale (BMW-3). *Behavior Research Methods*. <u>https://doi.org/10.3758/s13428-024-02500-6</u>
 - 25 Dames, H., Li, C., Frischkorn, G. T., & Oberauer, K. (2024). Removing information from working memory with a delay: Effective but not beneficial. *Psychonomic Bulletin & Review*. <u>https://doi.org/10.3758/s13423-024-02550-z</u>
 - 24 Souza, A. S., Frischkorn, G. T., & Oberauer, K. (2024). Older yet sharp: No general age-related decline in focusing attention. *Journal of Experimental Psychology: General*. <u>https://doi.org/10.1037/xge0001649</u>
 - 23 Bartsch, L. M., Frischkorn, G. T., & Shepherdson, P. (2024). When Load is Low, Working Memory is Shielded From Long-Term Memory's Influence. *Journal of Cognition* 7(1), Article 1. <u>https://doi.org/10.5334/joc.368</u>
 - 22 Löffler, C., Frischkorn, G. T., Hagemann, D., Sadus, K., & Schubert, A.-L. (2024). The common factor of executive functions measures nothing but speed of information uptake. *Psychological Research*. <u>https://doi.org/10.1007/s00426-023-01924-7</u>
 - 21 **Frischkorn, G. T.** (2024). Responsible Research Assessment requires structural more than procedural reforms. *Meta-Psychology*, 8. <u>https://doi.org/10.15626/MP.2023.3734</u>
- 2024 20 Dames, H., Musfeld, P., Popov, V., Oberauer, K., & Frischkorn, G. T. (2024). Responsible Research Assessment Should Prioritize Theory Development and Testing Over Ticking Open Science Boxes. *Meta-Psychology*, 8. <u>https://doi.org/10.15626/MP.2023.3735</u>
- 2023 19 Souza, A. S., & Frischkorn, G. T. (2023). A diffusion model analysis of age and individual differences in the retro-cue benefit. *Scientific Reports*, 13(1), Article 1. https://doi.org/10.1038/s41598-023-44080-z

- 18 Frischkorn, G. T., Wilhelm, O., & Oberauer, K. (2022). Process-oriented intelligence research: A review from the cognitive perspective. *Intelligence*, 94, 101-681. <u>https://doi.org/10.1016/j.intell.2022.101681</u>
- 17 Frischkorn, G. T., Hilger, K., Kretzschmar, A., & Schubert, A.-L. (2022). Intelligence diagnostics of the future. [The future of intelligence assessment] *Psychologische Rundschau*, 73(3), 173-189. <u>https://doi.org/10.1026/0033-3042/a000598</u>
- 16 Frischkorn, G. T., von Bastian, C. C., Souza, A. S., & Oberauer, K. (2022). Individual differences in updating are not related to reasoning ability and working memory capacity. *Journal of Experimental Psychology: General.* <u>https://doi.org/10.1037/xge0001141</u>
- **2022** 15 Löffler, C., **Frischkorn, G. T.**, Rummel, J., Hagemann, D., & Schubert, A.-L. (2022). Do Attentional Lapses Account for the Worst Performance Rule? *Journal of Intelligence*, 10(1), 2. <u>https://doi.org/10.3390/jintelligence10010002</u>
 - 14 **Frischkorn, G. T.**, & Oberauer, K. (2021). Intelligence test items varying in capacity demands cannot be used to test the causality of working memory capacity for fluid intelligence. *Psychonomic Bulletin & Review*. <u>https://doi.org/10/gjp3br</u>
 - 13 Frischkorn, G. T., & von Bastian, C. C. (2021). In Search of the Executive Cognitive Processes Proposed by Process-Overlap Theory. *Journal of Intelligence*, 9(3), 43. <u>https://doi.org/10/gmm7dz</u>
 - 12 Lerche, V., von Krause, M., Voss, A., Frischkorn, G. T., Schubert, A.-L., & Hagemann, D. (2020). Diffusion modeling and intelligence: Drift rates show both domaingeneral and domain-specific relations with intelligence. *Journal of Experimental Psychology: General*, 149, 2207-2249. <u>https://doi.org/10/ggt8r7</u>
 - Schubert, A.-L.*, & Frischkorn, G. T.* (2020). Neurocognitive Psychometrics of Intelligence: How Measurement Advancements Unveiled the Role of Mental Speed in Intelligence Differences. *Current Directions in Psychological Science*. <u>https://doi.org/10/ggkz9b</u>
 - Schubert, A.-L., Hagemann, D., Löffler, C., & Frischkorn, G. T. (2020). Disentangling the Effects of Processing Speed on the Association between Age Differences and Fluid Intelligence. *Journal of Intelligence*, 8(1), 1. <u>https://doi.org/10/ggj5hm</u>
 - 9 Schubert, A.-L., Frischkorn, G. T., & Rummel, J. (2019). The validity of the online thought-probing procedure of mind wandering is not threatened by variations of probe rate and probe framing. *Psychological Research*. <u>https://doi.org/10/gfz6s4</u>
- 2019 8 Frischkorn, G. T., Schubert, A.-L., & Hagemann, D. (2019). Processing speed, working memory, and executive functions: Independent or inter-related predictors of general intelligence. *Intelligence*, 75, 95-110. <u>https://doi.org/10/gf3sxs</u>
 - 7 Schubert, A.-L., Hagemann, D., Frischkorn, G. T., & Herpertz, S. C. (2018). Faster, but not smarter: An experimental analysis of the relationship between mental speed and mental abilities. *Intelligence*, 71, 66-75. <u>https://doi.org/10/gffjb9</u>

2018	6	Frischkorn, G. T.*, & Schubert, AL.* (2018). Cognitive Models in Intelligence Re-
		search: Advantages and Recommendations for Their Application. Journal of In-
		<i>telligence</i> , 6(3), 34. <u>https://doi.org/10/gd3vqn</u>

- 2017 5 Schubert, A.-L., Hagemann, D., & Frischkorn, G. T. (2017). Is general intelligence little more than the speed of higher-order processing? *Journal of Experimental Psychology: General*, 146(10), 1498-1512. <u>https://doi.org/10/gch83n</u>
 - 4 **Frischkorn, G. T.**, Schubert, A.-L., Neubauer, A., & Hagemann, D. (2016). The Worst Performance Rule as Moderation: New Methods for Worst Performance Analysis. *Journal of Intelligence*, 4(3), 9. <u>https://doi.org/10/gd3vsz</u>
 - 3 Schubert, A.-L., Frischkorn, G. T., Hagemann, D., & Voss, A. (2016). Trait Characteristics of Diffusion Model Parameters. *Journal of Intelligence*, 4(3), 7. <u>https://doi.org/10/gd3vs3</u>
- 2016 2 Meißner, A., Greiff, S., Frischkorn, G. T., & Steinmayr, R. (2016). Predicting Complex Problem Solving and school grades with working memory and ability self-concept. *Learning and Individual Differences*, 49, 323-331. https://doi.org/10/f82798
- 2014 1 Frischkorn, G. T., Greiff, S., & Wüstenberg, S. (2014). The development of complex problem solving in adolescence: A latent growth curve analysis. *Journal of Educational Psychology*, 106(4), 1007-1020. <u>https://doi.org/10/gd3vsg</u>

Software

bmm (R package)	Lead author. R package for Easy and Accessible Bayesian Measurement Models Us-
	ing 'brms'. Available at: <u>https://cran.r-project.org/web/packages/bmm/index.html</u>

Lecture series

2021 Organizer of the Distributed Working Memory Series (DWMS). A virtual talk series aimed at bringing together researchers interested in working memory all around the globe. <u>https://www.world-wide.org/Psychology/Distributed-WM-Series/</u>

Talks

- Invited 5 Analyzing data on the level of psychological processes. (2024, July). Colloquium of the Psychological Institute, Johannes-Gutenberg University Mainz.
 - 4 The bmm R package: Easy and Accessible Bayesian Measurement Models using 'brms'. (2024, May). Department of Statistics, Computational Statistics Lab, TU Dortmund.
 - 3 Measuring psychological theories requires formal theories. (2024, May). Faculty for Psychology, Sigmund Freud University Vienna.
 - 2 Measuring & dissociating cognitive processes: Problems and pitfalls exemplified with the Anti-Saccade Task. (2022, May) Working Memory, Cognition, and Development Laboratory, University of Geneva.
 - 1 Implications from cognitive psychology for measuring cognitive processes: The example of the anti-saccade task. (2021, May). Chair of General Psychology: Cognition, Action, and Sustainability. University of Freiburg

Conference contributions

More than 30 contributions (18 of them as talks) at international specialist congresses, such as

- > Annual Meeting of the Psychonomic Society
- > Conference of the European Society of Cognitive Psychology
- > Congress of the German Psychological Society
- European Working Memory Symposium
- > Annual Conference Psychology & Brain
- > Conference of Experimental Psychologists (TeaP)
- > Conference of the European Mathematical Psychology Group
- > International Workshop on Psychometric Computing

Relevant publications

• Frischkorn, G. T., & Popov, V. (2025). A tutorial for estimating Bayesian hierarchical mixture models for visual working memory tasks: Introducing the Bayesian Measurement Modeling (bmm) package for R. *Behavior Research Methods*, *57*(5), 144. <u>https://doi.org/10.3758/s13428-025-02643-0</u>

Introduction to the estimation of cognitive measurement models for visual working memory tasks and the R package "Bayesian Measurement Models (bmm)" developed for this purpose. This publication is representative of my commitment to make advanced and sophisticated methods accessible and easy to use for a large number of researchers.

• Souza, A. S., & **Frischkorn, G. T.** (2023). A diffusion model analysis of age and individual differences in the retro-cue benefit. *Scientific Reports*, 13(1), Article 1. <u>https://doi.org/10.1038/s41598-023-44080-z</u>

In this collaboration with Alessandra Souza (University of Porto), we analyzed age differences in the ability to focus attention on working memory content using cognitive measurement models, demonstrating how theoretically motivated analyses can provide a nuanced picture of age differences in cognitive processes.

• Frischkorn, G. T., von Bastian, C. C., Souza, A. S., & Oberauer, K. (2022). Individual differences in updating are not related to reasoning ability and working memory capacity. *Journal of Experimental Psychology: General*. <u>https://doi.org/10.1037/xge0001141</u>

Using advanced methods such as latent change models and Bayesian hierarchical models, this research separated individual differences in working memory updating ability from general working memory capacity and showed that updating does not correlate with individual differences in cognitive performance via working memory capacity.

• Frischkorn, G. T., Wilhelm, O., & Oberauer, K. (2022). Process-oriented intelligence research: A review from the cognitive perspective. *Intelligence*, 94, 101-681. <u>https://doi.org/10.1016/j.intell.2022.101681</u>

This review article summarizes my current research program on process-oriented research on individual differences in cognitive performance. In particular, the article explains why the combination of cognitive modeling with traditional psychometric methods is central to a better understanding of the underlying processes of cognitive performance.

• Frischkorn, G. T., & Oberauer, K. (2021). Intelligence test items varying in capacity demands cannot be used to test the causality of working memory capacity for fluid intelligence. *Psychonomic Bulletin & Review*. <u>https://doi.org/10/gjp3br</u>

This simulation study shows how mathematical models can be used to test the predictions of theories and models and investigates whether the interpretation of results from early studies is consistent with the underlying theories. It turns out that the hypotheses intuitively derived from theories do not follow from the theories used, which illustrates the importance of formal models to critically question our intuitive understanding of theoretical ideas.

Research interests & planned research orientation.

My research focuses on the development and application of mathematical models to accurately measure psychological processes and individual differences in these processes. My work thus combines psychometric and statistical research with theory development and the study of individual differences to bridge the gap between observed behavior and underlying psychological processes. To this end, I develop and use mathematical models that depict cognitive processes and their relationship to behavior, such as evidence accumulation models or the memory measurement model. Such models make it possible to obtain theoretically sound and objectively interpretable indicators for psychological processes and to gain more profound insights into the processes underlying behavior.

To further these ideas, I have published several reviews on the application of cognitive measurement models in intelligence research (Frischkorn & Schubert, 2018; Frischkorn et al., 2022) and am currently developing an R package entitled "*Easy and Accessible Bayesian Measurement Models Using 'brms'*" (bmm) that implements advanced measurement models in a hierarchical Bayesian framework (Frischkorn & Popov, 2025; Popov & Frischkorn, 2024). My empirical work has also focused on integrative modeling of response times and accuracies to improve the measurement of cognitive processing speed (Frischkorn & Schubert, 2018; Lerche et al., 2020; Schubert & Frischkorn, 2020).

In the long term, my research questions focus on how psychological processes translate into observed behavior and what types of data are needed to adequately measure these processes and the individual differences therein. Answering these questions requires integrating my psychometric and methodological work with findings from basic and applied areas of psychology. Therefore, I am eager to expand my network and collaboration with colleagues from different fields of psychology to address these questions step by step in relation to different psychological processes and concepts.

As part of my SNF Ambizione project, I am currently combining cognitive experimental work with my own research to develop mathematical models of response selection and timing in procedural and declarative working memory tasks. This involves estimating individual differences in the cognitive processing underlying working memory retrieval and how this relates to cognitive performance in general. My medium-term goal is to expand the use of mathematical models to measure psychological processes underlying cognitive and emotional-motivational personality traits. In the long term, I would like to narrow the gap between the behavior measured in empirical psychology and questionnaires on the underlying psychological processes. This will help to better understand many aspects of psychological research findings, such as the effects of experimental manipulations, the psychological processes crucial for educational success and occupational performance, as well as the development of psychological traits in childhood and adulthood and the effects of interventions in clinical psychology.

Contribution to Open Science

A central concern of my scientific work is the promotion of open and replicable research. Accordingly, I routinely share all raw data and scripts for data preparation and analysis of my research work. In addition, I am involved as a recommender for the peer community in Registered Reports, which aims to reconnect the publication process with the scientific community and to enable the review and revision of research plans prior to data collection through the Registered Report format. In the field of cognitive modeling, I also want to strengthen Open Science by continuing the documentation of models and data as part of the *bmm* R package and making it easily accessible to a wide range of scientists.

Teaching & promoting early career researchers

Courses

- 3 lectures, > 10 seminars, 4 workshops (2 more planned)
- Topic overview:
 - o Basic & advanced methods & statistics
 - Mathematical modeling
 - Simulation studies
 - Programming of experiments
 - o Psychometrics
 - o Intelligence
 - Working memory
 - Attention

Lectures

Spring semester (FS) 2021	<i>Cognitive Psychology I</i> (B.Sc. Psychology, approx. 800 students), University of Zurich. (shared teaching with Dr. Lea Bartsch; full responsibility for 6 out of 12 lectures and 50% of the exam.)		
Fall semester (HS) 2019	<i>Cognitive Psychology II</i> (B.Sc. Psychology, approx. 300 students), University of Zurich. (shared teaching with Dr. Lea Bartsch; full responsibility for 6 out of 12 lectures and 50% of the exam.)		
FS 2017	Advanced Psychometrics (M.Sc. Psychology, approx. 90 students), Heidelberg Univer- sity. (sole teacher; full responsibility for all lectures including the full exam)		
Seminars			
FS 2024	<i>Introduction to Bayesian Statistics</i> (M.Sc. Psychology, 15 students), University of Zur- ich.		
FS 2023	<i>Using simulations to challenge your intuitions about cognitive theories</i> (M.Sc. Psychology, 20 students), University of Zurich.		
FS 2022	Using simulations to challenge your intuitions about statistics and cognitive theories (M.Sc. Psychology, 5 students), University of Zurich.		
HS 2021	<i>Cutting Edge Research in Human Cognition</i> (M.Sc. Psychology, 25 students), Univer- sity of Zurich.		
HS 2020	<i>Investigating and measuring working memory processes</i> (M.Sc. Psychology, 25 stu- dents), University of Zurich.		
FS 2020	<i>Cutting Edge Research in Human Cognition</i> (M.Sc. Psychology, 25 students), Univer- sity of Zurich.		
HS 2018	<i>Planning & Programming Experiments in MATALB & Psychtoolbox 3</i> (B.Sc. Psychology, 10 students), Heidelberg University.		
FS 2018	<i>Planning & Programming Experiments in MATALB & Psychtoolbox 3</i> (B.Sc. Psychology, 10 students), Heidelberg University.		
HS 2017	<i>Personality Traits: The theoretical development of the trait concept</i> (M.Sc. Psychology, 25 students), Heidelberg University.		
FS 2017	Empirical Projectseminar II (B.Sc. Psychology, 15 students), Heidelberg University.		
HS 2016	Empirical Projectseminar I (B.Sc. Psychology, 15 students), Heidelberg University.		

- FS 2016 *Attention, Processing Speed & Working Memory Capacity* (M.Sc. psychology, 25 students), Heidelberg University.
- HS 2015 *Personality Traits: The theoretical development of the trait concept* (M.Sc. Psychology, 25 students), Heidelberg University

Workshops

September 2025	Analyzing data on the level of cognitive processes
(planned)	Two-day workshop at the 24th Conference of the European Society of Cognitive Psy-
	chology, Sheffield, United Kingdom.
June 2025	Introduction to Structural Equation Modeling in R
(planned)	Scheduled Three-day course for PhD students of the Graduate School of the Faculty
	of Arts and Social Sciences at University of Zurich, Zurich, Switzerland.
April 2024	Bayesian Modeling for Observational Data
	Workshop for the R group at the Institute of Psychology at University of Zurich, Zur-
	ich, Switzerland.
September 2023	Improving Inference About Cognitive Processes Using Mixture Models
	Workshop at the 23rd Conference of the European Society of Cognitive Psychology,
	Porto, Portugal.
October 2022	Structural equation modeling in R & lavaan.
	Workshop for PhD & MSc students, University of Porto.
April 2018	Applied diffusion model analyses: Introduction to fast-dm.
	Workshop at the Leibniz Research Centre for Working Environment & Human Factors.

Supervision & promotion of young talent

Doctorate

2023 - 2026	Isabel Courage, SNF Ambizione Project Group. Topic: Similarities and Differences of Declarative and Procedural Working Memory.
2021 - 2025	Chenyu Li, Cognition Lab at UZH. Topic: Measuring the Removal of Information from Working Memory.
Master theses	Supervision & co-supervision of <i>4</i> master theses at the University of Heidelberg and the University of Zurich
	List of Master's students: Igor Pedrioli, Valentina Vogel, Felix Wirth, Jan Göttmann.
Bachelor theses	Supervision of <i>11</i> bachelor theses at the University of Heidelberg and the University of Zurich
	List of Bachelor students: Lynn Gärtner, Ben Riemenschneider, Helena Dürsch, La- rissa Kunoff, Isabel Gebhardt, Jan Göttmann, Noah Rischert, Fiona Manzolini, Flutur Bytyqi, Nadine Schär, Joseph Doell.
Internships	Supervision of 3 research internships at the University of Zurich List of research interns: Aleyna Ersin, Lisa Walder, Elena Venturi.