

Dirk U. Wulff

CURRICULUM VITAE, OCTOBER 15, 2020

CONTACT INFORMATION

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4051 Basel
Switzerland

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EDUCATION

PhD Psychology 2010-2015

University of Basel & Max Planck Institute for Human Development

'Information search in experience-based choice and valuation: Challenges and applications' (summa cum laude)

Diploma in Psychology 2004-2010

University of Marburg

'Modeling stochastic independence in source memory' (Average 1.1)

APPOINTMENTS

Visiting Scholar 2019

Indiana University, Bloomington, IN, USA

Research scientist 2016–ongoing

University of Basel, Switzerland

Adjunct research scientist 2016–ongoing

Max Planck Institute for Human Development, Berlin, Germany

Post-doctoral Fellow 2015–2016

Max Planck Institute for Human Development, Berlin, Germany

Visiting Scholar 2010

University of California, Davis, CA, USA

AWARDS

Select Speaker Award 2017

Psychonomic Society

Otto Hahn Medal 2016

Dissertation prize of the Max Planck Society

Best Poster Award 2011

3rd place, Society for Judgment and Decision Making

Publications

H-INDEX: 10, I10-INDEX: 11, OVERALL CITATIONS: 429 ¹

PEER-REVIEWED JOURNAL ARTICLES

13. Haslbeck, J. M. B., & **Wulff, D. U.** (in press). Estimating the number of clusters via a corrected clustering instability. *Computational Statistics*.
12. Fuchs, X., **Wulff, D. U.**, & Heed, T. (in press). Online sensory feedback during active search improves tactile localization. *Journal of Experimental Psychology: Human Perception and Performance*.
11. Kenett, Y. N., Siew, C. S., Beckage, N. M., & **Wulff, D. U.** (2020). Cognitive Network Science: A new frontier. *Complexity*, 6870278.
10. **Wulff, D. U.**, De Deyne, S., Jones, M. N., Mata, R., & the Aging Lexicon Consortium (2019). New perspectives on the aging lexicon. *Trends in Cognitive Sciences*, 238.686-698
9. Siew, C. S. Q., **Wulff, D. U.**, Beckage, N., & Kenett, Y. (2019). Cognitive Network Science: A review of research on cognition through the lens of network representations, processes, and dynamics. *Complexity*, 2108423.
8. Hertwig, R., **Wulff, D. U.**, & Mata, R. (2019). Three gaps and what they mean for risk preferences. *Philosophical Transactions of the Royal Society B*, 374(1766), 20180140.
7. **Wulff, D. U.**, Mergenthaler-Canseco, M., & Hertwig, R. (2018). A meta-analytical review of two modes of learning and the description-experience gap. *Psychological Bulletin*, 144(2), 140–176.
6. **Wulff, D., U.**, & Van den Bos, W. (2018). Modeling choices in delay discounting. *Psychological Science*, 29(11), 1890–1894.
5. **Wulff, D., U.**, & Pachur, T. (2016). Modeling valuations from experience: A comment on Ashby and Rakow (2014). *Journal of Experimental Psychology: Learning, Memory and Cognition*, 42(1), 158–166.
4. Kollwe, K., Escher, C. M., **Wulff, D. U.**, Fathi, D., Paracka, L., Mohammadi, B., ... & Dressler, D. (2016). Long-term treatment of chronic migraine with OnabotulinumtoxinA: efficacy, quality of life and tolerability in a real-life setting. *Journal of Neural Transmission*, 123(5), 533–540.
3. **Wulff, D. U.**, Hills, T., & Hertwig, R. (2015). How short- and long-run frames impact search and choice in decisions from experience. *Cognition*, 144,29–37.
2. **Wulff, D. U.**, Hills, T., & Hertwig, R. (2015). Online product reviews the description-experience gap. *Journal of Behavioral Decision Making*, 28, 214–223.
1. Hertwig, R., & **Wulff, D. U.** (2014). Risikoentscheidungen: Die Kluft zwischen Erfahrung und Beschreibung *Controlling: Zeitschrift für erfolgsorientierte Unternehmenssteuerung*, 26, 630–636.

¹Google Scholar, October 15, 2020

WORKING PAPERS

12. **Wulff, D. U.**, Hills, T., & Hertwig, R. (2020). Memory is one representation not many: Evidence against wormholes in memory. . doi.org/10.31234/osf.io/b5ynj
11. Spektor, M. S. & **Wulff, D. U.** (2020). Individual differences drive reckless behavior in the face over-taxation . doi.org/10.31234/osf.io/34gzp
10. **Wulff, D. U.**, Hills, T., & Mata, R. (2019). Structural differences in the semantic networks of younger and older adult . doi.org/10.31234/osf.io/s73dp
9. Ugurlar, P., & **Wulff, D. U.** (2019). Beyond preferences: Self-concept clarity and social decision making. . doi.org/10.31219/osf.io/8fwge
8. Hertwig, R., & **Wulff, D. U.** (2019). A Description–Experience Framework of the Dynamic Response to Risk. *Invited by Nature Human Behavior*.. doi.org/10.31234/osf.io/qrph5
7. Schwab, N. & **Wulff, D. U.** (in prep.). Abstract words do not translate (*Manuscript in preparation*).
6. Spektor, M. S. & **Wulff, D. U.** (in prep.). Strategic information search in decisions from experience (*Manuscript in preparation*).
5. **Wulff, D. U.** & Mata, R. (in prep.). The semantic representation of risk across the lifespan (*Manuscript in preparation*).
4. **Wulff, D. U.**, Lindskog, M., & Hertwig, R. (in prep.). Declarative memory representations from experience (*Manuscript in preparation*).
3. Wanner, P. M., & **Wulff, D. U.**, Djurdjevic, M., Korte, W., Schnider, T. W., & Filipovic, M. (in prep.). Raising blood pressure in major noncardiac surgery: a single-centre, randomised controlled trial (*Manuscript in preparation*).
2. **Wulff, D. U.**, Haslbeck, J. M. B., & Schulte-Mecklenbeck, M. (in prep.). Measuring the (dis-)continuous mind: What movement trajectories reveal about cognition (*Manuscript in preparation*).
1. Kieslich, P. J., **Wulff, D. U.**, Henninger, F., Haslbeck, J. M. B., & Schulte-Mecklenbeck, M. (in prep.). Mouse-and hand-tracking as a window to cognition: A tutorial on implementation, analysis, and visualization (*Manuscript in preparation*).

PEER-REVIEWED PROCEEDINGS ARTICLES

3. **Wulff, D. U.**, Hills, T., Lachman, M., & Mata, R. (2016) The Aging Lexicon: Differences in the Semantic Networks of Younger and Older Adults. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.) *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (p. 907–913). Austin, TX: Cognitive Science Society.
2. **Wulff, D. U.**, Hills, T., Hertwig, R. (2013) Wormholes in Memory: Is memory one representation or many?. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.) *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (p. 3817–3823). Austin, TX: Cognitive Science Society.
1. **Wulff, D. U.**, Hills, T., Hertwig, R. (2012) Adaptive Information Search and Decision Making over Single and Repeated Plays. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.) (Eds.) *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (p. 1167–1173). Austin, TX: Cognitive Science Society.

BOOKS

1. Hertwig, R., Pleskac, T. J., Pachur, T., & **The Center for Adaptive Rationality** (2019). *Taming Uncertainty*. Cambridge: MIT Press.

BOOK CHAPTERS

5. **Wulff, D. U.**, Markant, D., Pleskac, T. J., & Hertwig, R. (2019). Adaptive search: What you see is up to you. In R. Hertwig, T. J. Pleskac, T. Pachur, & The Center for Adaptive Rationality (Eds.). *Taming Uncertainty* (p. 131-152). Cambridge: MIT Press.
4. Kieslich, P., **Wulff, D. U.**, Haslbeck, J., Henninger, F., & Schulte-Mecklenbeck, M. (2019). Mouse-tracking: A practical guide to implementation and analysis. In M. Schulte-Mecklenbeck, A. Kühberger, & J.G. Johnson (Eds.). *A Handbook of Process Tracing Methods* (p. 108–127). New York: Taylor & Francis.
3. **Wulff, D. U.**, Haslbeck, J., Kieslich, P., Henninger, F., & Schulte-Mecklenbeck, M. (2019). Mouse-tracking: Detecting Types in Movement Trajectories. In M. Schulte-Mecklenbeck, A. Kühberger, & J.G. Johnson (Eds.). *A Handbook of Process Tracing Methods* (p. 128–142). New York: Taylor & Francis.
2. **Wulff, D. U.**, & Hertwig, R. (2019). Uncovering the anatomy of search without technology. In M. Schulte-Mecklenbeck, A. Kühberger, & J.G. Johnson (Eds.). *A Handbook of Process Tracing Methods* (p. 128–142). New York: Taylor & Francis.
1. van den Bos, W., Jenny, M. A., & **Wulff, D. U.** (2015). Open minded psychology. In S. A. Moore (Ed.) *Issues in open research data*. (p. 107–127). London: Ubiquity Press.

R PACKAGES

3. Haslbeck, J. M. B., & **Wulff, D. U.** (2019). cstab: Selection of Number of Clusters via Normalized Clustering Instability. *R package* version 0.2-3. CRAN.R-project.org/package=cstab
2. **Wulff, D. U.** (2019). memnet: Network Tools for Memory Research. *R package* version 0.1.0. CRAN.R-project.org/package=memnet
1. Kieslich, P. J., **Wulff, D. U.**, Henniger, F., Haslbeck J. M. B. (2019). mousetrap: Process and Analyze Mouse-Tracking Data. *R package* version 0.1.0. CRAN.R-project.org/package=mousetrap

INVITED TALKS

16. University of Basel, Digital Humanities Lab, Switzerland	2020
15. École Normale Supérieure, Department for Cognitive Science, France	2020
14. T.A.Pai Management Institute, Max Planck Winter School on Bounded Rationality, India	2020
13. Society for Mathematics at Swiss Universities of Applied Sciences, Switzerland	2019
12. University of Cologne, Social Cognitive Center (Glöckner), Germany	2019
11. NetSci Satellite, Cognitive Network Science, USA	2019
10. University of Mannheim, Faculty for Psychology, Germany	2019
9. University of Cologne, Social Cognitive Center (Unkelbach), Germany	2018
8. University of Salzburg, EADM Summer School, Austria	2018
7. University of Bielefeld, Faculty for Psychology and Sports Science, Germany	2018
6. University of Zürich, Department for Psychology, Germany	2018
5. T.A.Pai Management Institute, Max Planck Winter School on Bounded Rationality, India	2017
4. University of Basel, JDM Workshop for Early-Career Researchers, Switzerland	2016
3. University of Bern, Department for Consumer Behavior, Switzerland	2016
2. University of Bern, Department for Consumer Behavior, Switzerland	2015
1. University of Warwick, DR@W Forum, UK	2012

External Funding

IN CHF

- Swiss Science Foundation, Project Grant, 2019 396'972.-
"Laying the groundwork for understanding age-related changes in individual semantic networks and their role in cognitive aging"
- Biäsch Foundation for Applied Psychology, Project Grant, 2019 49'258.-
"Harnessing Simulated Experience to Help People Make Investment Decisions"
- Swiss National Science Foundation, Scientific Exchange Grant, 2019 4'500.-
"memnet: Network Tools for Memory Research"
- Center for Social and Economic Behavior, Start-Up Grant, 2018 3,400.-
"Self-Concept Clarity Predicts Decision-Making Performance"
- Max Planck Institute for Human Development, Post-Doc Grant, 2015-2016 21'650.-
- European Association for Decision Making, Workshop Grant, 2013 3'000.-
- Max Planck Institute for Human Development, Summer Institute Stipend, 2011 800.-
- Swiss National Science Foundation, Multiple Travel Grants, 2010-2013 4,000.-
- German Academic Exchange Service, Travel Grant, 2010 500.-

Editorial and reviewer activities

- Guest editor: Complexity - Cognitive Network Science: A New Frontier
- Reviewer for journals: Acta Psychologica, Behavior Research Methods*, Cognition*, Cognitive Science, Computational Statistics*, Decision*, Frontiers in Psychology, Human Brain Mapping, Journal of Applied Research in Memory and Cognition, Journal of Behavioral Decision Making*, Journal of Cognition, Journal of Experimental Psychology: General*, Journal of Experimental Psychology: Learning, Memory & Cognition*, Journal of Experimental Social Psychology, Journal of Medical Decision Making, Judgment and Decision Making*, Management Science, Nature Human Behaviour*, Organizational Behavior and Human Decision Processes*, PLOS ONE, Psychonomic Bulletin & Review, Psychological Science*, Quarterly Journal of Experimental Psychology, Risk Analysis, Social Psychology (*multiple times)
- Reviewer for funding institutions: The Netherlands Organisation for Health Research and Development
- Reviewer for conferences: North American Chapter of the Association for Computational Linguistics, 2019.

Committee work and services

- Organizer of the Data Analytics in Psychology and Business: Meet-the-Expert event, Basel, Switzerland 2020
- Faculty member of Winter School for Bounded Rationality, T A Pai Management Institute, Manipal, India 2020
- Program committee member of the Annual Conference of the North American Chapter of the Association for Computational Linguistics, Minneapolis, US 2019
- Faculty member of the 5th European Association for Decision Making Summer School 2018
- Organizer of the 1-day Cognitive Network Science satellite conference at NetSci 2018, Paris, France 2018
- Organizer of the 3-day Symposium for the Aging Lexicon, University of Basel, Switzerland 2018
- Faculty member of Winter School for Bounded Rationality, T A Pai Management Institute, Manipal, India 2018
- Faculty member of Summer Institute for Bounded Rationality, Max Planck Institute for Human Development, Berlin, Germany 2017
- Member of the Internal Review Board of the Faculty for Psychology, University of Basel, Switzerland 2016–date
- Organizer of the 8-day Summer Institute for Bounded Rationality, Max Planck Institute for Human Development, Berlin, Germany 2014
- Organizer of the 6th JDM Meeting for Early Career Researchers, Max Planck Institute for Human Development, Berlin, Germany 2013

Teaching experience

INSTITUTE FOR PSYCHOLOGY, BASEL

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|---|--------------|
| 7. Introduction to Neural Networks , Seminar | 2020-ongoing |
| 6. Data analytics for Psychology Business , Seminar | 2020-ongoing |
| 5. Psychology in the age of Twitter, Facebook, and Co.: Natural language processing as a tool in psychological research , Seminar | 2017-ongoing |
| 4. Networks in Psychology , Seminar | 2017-2019 |
| 3. Was sind gute Entscheidungen? , Seminar | 2016-ongoing |
| 2. Wie schreibe ich eine Bachelorarbeit? , Seminar | 2015 |
| 1. Experimentalpraktikum , Seminar | 2011-2012 |

ADVANCED STUDIES, BASEL

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| 5. Reporting mit R , 2-day Workshop | 2020-ongoing |
| 4. Machine learning mit R , 2-day Workshop | 2019-ongoing |
| 3. Statistik mit R , 2-day Workshop | 2019-ongoing |
| 2. Einführung in die moderne Datenanalyse mit R , half-day Workshop | 2019-ongoing |
| 1. Explorative Datenanalyse mit R , 2-day Workshop | 2018-ongoing |

INSTITUTE FOR APPLIED PSYCHOLOGY, ZÜRICH

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| 2. Big Data in the workplace 4.0 , 1-day Workshop | 2018-ongoing |
| 1. Big Data in the employment life cycle , 1-day Workshop | 2019-ongoing |