Curriculum Vitae

Mariella Paul

Work Experience

- 2020— **Postdoctoral Researcher at University of Göttingen**, Research Group "Psychology of Language", Research Topic "Curiosity-driven Word Learning".
- 2015–2016 **Research Assistant at University of Potsdam**, Linguistics Department, BabyLAB, Research Topic "New Pragmatic Theories based on Experimental Evidence".
- 2015–2016 **Internship at University of Potsdam**, Linguistics Department, Neurocognition of Language, Research Topic "New Pragmatic Theories based on Experimental Evidence".
- 2014–2015 **Student Assistant at Osnabrück University**, Institute of Cognitive Science, Computational Linguistics, Research Topic "Definites, Demonstratives, and Reference".
- 2013–2014 **Erasmus Internship at the MPI for Psycholinguistics, Nijmegen**, Language and Genetics Department, Research Topic "Brain and Behavioural Asymmetries".

Education

- 2016–2020 **Doctoral candidate in Psychology**, Max Planck Institute for Human Cognitive and Brain Sciences, Department of Neuropsychology; Berlin School of Mind and Brain. PhD Thesis (working title): "The development of non-adjacent dependency learning in the linguistic and non-linguistic auditory domain during early childhood" supervised by Prof. Dr. Dr. h.c. A.D. Friederici and Prof. Dr. I. Wartenburger. Funding awarded by the Berlin School of Mind and Brain.
- 2015–2016 International Master of Experimental and Clinical Linguistics, with distinction,
 University of Potsdam, Linguistics Department.
 Master's Thesis: "Do You See What I See? An EEG-study on the Time Course of Perspective Taking" supervised by Prof. Dr. I. Wartenburger and Dipl. Patholinguist M. Richter.
- 2011–2015 **Bachelor of Cognitive Science**, Osnabrück University, Institute of Cognitive Science. Bachelor's Thesis: "Development of Auditory Rule Learning in Early Childhood an ERP-study" supervised by Juniorprof. Dr. J. Mueller and Priv. Doz. Dr. U. Martens.

Publications

- under review Schaadt, G.*, **Paul, M.***, Muralikrishnan, R., Männel, C., & Friederici, A.D., Seven-year-olds recall non-adjacent dependencies after overnight retention.

 *These authors contributed equally. Preprint on bioRxiv: https://doi.org/10.1101/670257
- under review van der Kant, A., Männel, C., **Paul, M.**, Friederici, A.D., Höhle, B., Wartenburger, I., Domain-specificity of non-adjacent dependency learning in early human development.
 - in prep. **Paul, M.**, Männel, C., van der Kant, A., Mueller, J.L., Höhle, B., Wartenburger, I., & Friederici, A.D., *The sensitive period for learning linguistic non-adjacent dependencies*.
 - in prep. **Paul, M.**, Schettino, A., *Preregistration of EEG Projects discussion and guidelines*.

Funding and Awards

- Since 2016 **Mind & Brain Scholarship**.

 PhD scholarship awarded by the Berlin School of Mind and Brain.
 - 2019 **SIPS 2019 Travel award**.

 Travel award awarded by the Society for the Improvement of Psychological Science (SIPS).

Invited Talks

- 2018 **Paul, M.**, Harry Potter and the Methods of Reproducibility a brief introduction to Open Science, Talk presented at CogSci Futures conference, Germany, October 2019. Materials available on OSF: https://osf.io/m67rf/
- 2018 **Paul, M.** & van der Kant, A., *Developmental shift in non-adjacent dependency learning*, Talk presented at the Neurolinguistics Kolloquium at University of Potsdam, Germany, July 2018.
- 2017 **Paul, M.**, Associative learning of non-adjacent dependencies: ERP evidence from 24-month-olds, Talk presented at the Neurolinguistics Kolloquium at University of Potsdam, Germany, October 2017.

Conference Talks

- 2019 **Paul, M.**, Non-adjacent dependency learning undergoes a developmental shift around the age of 2 years, Talk presented at the joint meeting of the developmental and pedagogic psychology groups of the German Psychological Society (paEpsy) 2019, Leipzig, Germany, September 2019.
- 2019 Conry-Murray, C., Dietrich, B., & Paul, M., Open science in time-limited student projects, Unconference session presented at Society for the Improvement of Psychological Science (SIPS) 2019, Rotterdam, the Netherlands, July 2019.

- 2018 van der Kant, A. & **Paul, M.**, *Developmental shift in non-adjacent dependency learning*, Talk presented at Crossing the Borders Conference, Potsdam, Germany, September 2018.
- 2018 **Paul, M.** & van der Kant, A., *Developmental shift in non-adjacent dependency learning*, Talk presented in symposium "Grammar learning in Infancy", International Congress of Infant Studies (ICIS), Philadelphia, USA, July 2018.
- 2018 van der Kant, A. & **Paul, M.**, *P1: Developmental shift from associative to controlled learning*, Talk presented at the annual meeting of the DFG-funded project Crossing the Borders in Munich, Germany, February 2018.
- 2017 **Paul, M.** & van der Kant, A., *P1 The sensitive period for associative learning of non-adjacent dependencies in verbal and non-verbal material*, Talk presented at the annual meeting of the DFG-funded project Crossing the Borders in Göttingen, Germany, May 2017.

Posters

- 2018 Paul, M., Männel, C., Mueller, J.L., van der Kant, A., Wartenburger, I., Höhle, B., & Friederici, A.D., The sensitive period for associative learning of non-adjacent dependencies: ERP evidence, Poster presented at Berlin School of Mind and Brain annual Poster Presentations 2018 in Berlin, Germany, December 2018.
- 2018 Paul, M., Männel, C., Mueller, J.L., van der Kant, A., Wartenburger, I., Höhle, B., & Friederici, A.D., The sensitive period for associative learning of non-adjacent dependencies: ERP evidence, Poster presented at 51st Congress of the German Psychological Society (DGPs) in Frankfurt, Germany, September 2018.
- 2018 van der Kant, A., **Paul, M.**, Männel, C., Friederici, A.D., Höhle, B., & Wartenburger, I., *fNIRS reveals a sensitive period for non-adjacent dependency learning in the linguistic domain*, Poster presented at International Congress of Infant Studies (ICIS), Philadelphia, USA, July 2018.
- 2017 Paul, M., Männel, C., Mueller, J.L., van der Kant, A., Wartenburger, I., Höhle, B., & Friederici, A.D., The sensitive period for associative learning of non-adjacent dependencies: ERP evidence from 24-month-olds, Poster presented at Berlin School of Mind and Brain annual Poster Presentations 2017 in Berlin, Germany, December 2017.
- 2017 Richter, M., Lee, C., **Paul, M.**, Wartenburger, I., & Höhle, B., *How common ground information affects reference resolution in children and adults: evidence from behavioral data, eye-tracking and ERPs*, Poster presented at the annual XPRAG.de meeting in Cologne, Germany, September 2017.

- 2017 Paul, M., Männel, C., Mueller, J.L., van der Kant, A., Wartenburger, I., Höhle, B., & Friederici, A.D., The sensitive period for associative learning of non-adjacent dependencies: ERP evidence from 24-month-olds, Poster presented at Interdisciplinary Advances in Statistical Learning in Bilbao, Spain, June 2017.
- 2017 van der Kant, A., Männel, C., Paul, M., Friederici, A.D., Höhle, B., & Wartenburger, I., Adult associative learning of non-adjacent dependencies in tone sequences is related to musical experience, Poster presented at Interdisciplinary Advances in Statistical Learning in Bilbao, Spain, June 2017.
- 2017 Paul, M., Männel, C., Mueller, J.L., van der Kant, A., Wartenburger, I., Höhle, B., & Friederici, A.D., The sensitive period for associative learning of non-adjacent dependencies: ERP evidence from 24-month-olds, Poster presented at the annual meeting of the DFG-funded project Crossing the Borders in Göttingen, Germany, May 2017.
- van der Kant, A., Männel, C., **Paul, M.**, Friederici, A.D., Höhle, B., & Wartenburger, I., *Adult associative learning of non-adjacent dependencies in tone sequences is related to musical experience*, Poster presented at the annual meeting of the DFG-funded project Crossing the Borders in Göttingen, Germany, May 2017.
- 2016 Richter, M., Paul, M., Lee, C., Zhang, L., Höhle, B., & Wartenburger, I., I spy with my little eye: ERP signatures of perspective taking in referential communication, Poster presented at the Eighth Annual Society for the Neurobiology of Language Conference in London, UK, August 2016.
- 2014 **Paul, M.**, Guadalupe, T., Zwiers, M.P., Fisher, S.E., Francks, C., *Are schizophrenia risk alleles associated with brain morphology changes in healthy subjects?*, Poster presented at Interdisciplinary College 2014 "Cognition 3.0: the social mind in the connected world" in Günne, Germany, March 2014.

Administration

- 2018 Organization of regular lab meetings focusing on language acquisition, MPI for Human Cognitive and Brain Sciences, Department of Neuropsychology.
- 2018 Co-organization of the conference Crossing The Borders: Development of language, cognition, and the brain, University of Potsdam.

Teaching

2020 **Open Science and Research Ethics**, Guest lecture in the course "Planning and Conducting a Psychology Experiment", MPI for Human Cognitive and Brain Sciences. Slides available on OSF: https://osf.io/m67rf/

2018 **A Hands-on Introduction to Event-Related Potentials**, Block course, Berlin School of Mind and Brain.

Slides and code available on OSF: https://osf.io/rga5d/

- 2014 **Introduction to Computational Linguistics**, Weekly tutorials accompanying lecture by Peter Bosch, Institute of Cognitive Science, Osnabrück University.
- 2012, 2014 **Cognitive Science Freshmen Tutorials**, *Block tutorials*, Institute of Cognitive Science, Osnabrück University.

Supervision

- 2018–2019 **Lisa Haake**, *Master's thesis*, Title: "Neural Correlates of Grammatical Learning", MPI for Human Cognitive and Brain Sciences.
- 2018–2019 **Wenwen Jin**, *Master's thesis*, Title: "Adult ERP Study on Artificial Grammar Learning in the Non-Linguistic Domain", MPI for Human Cognitive and Brain Sciences.

Mentoring

- 2017 **Aroma Dabas & Cornelia van Scherpenberg**, Mentoring at Berlin School of Mind and Brain.
 - 2017 Larissa Rombold, Mentoring at European University Viadrina.

Open Science

Since 2019 eLife Community Ambassador.

Awarded ambassadorship and training to promote Open Science. Focus: Reproducibility and preregistrations

Since 2019 CBS Open Science Initiative.

Member of the Steering Committee of the Open Science initiative at the Max Planck Institute for Human Cognitive and Brain Sciences (MPI-CBS).

2020 Organization of workshop "Project Planning: From Experiment Design to Manuscript and Data Release", Workshop organized at MPI-CBS.

https://www.cbs.mpg.de/events/23219/1413783

- 2020 **Paul, M.**, Janssen, L., *How to start an OS initiative*, Blog post on ecrLife blog. http://www.ecrlife.org/how-to-start-an-os-initiative/
- 2019 Co-organization of CBS Open Science Day, MPI-CBS.

https://www.cbs.mpg.de/en/cbs-open-science/kick-off

- 2019 **Co-organization of Preregistration Workshop**, *MPI-CBS*, Title: A Hands-On Introduction to Preregistration.
- 2019 Blog Post "A fruitful rendezvous at SIPS: Neuroimagers meet study preregistration advocates", by Algermissen, J., Bartlett, J., Gau, R., Heunis, S., Klapwijk, E., Mazor, M., Paul, M., Schettino, A., Mehler, D., OHBM Blog. https://bit.ly/2YxBRF7

Outreach and Science Communication

- 2019 **Talk "Children's first steps in language acquisition"**, Lab visit of high school students, MPI for Human Cognitive and Brain Sciences, Leipzig.
- 2018 German translation of the coloring page "Colour your Learning: Brain Cells", original by Suzy J. Styles. https://doi.org/10.21979/N9/0IEIPV
- 2018 Outreach event "Wissenschaft in Windeln" (Science in diapers), Long Night of the Sciences, MPI for Human Cognitive and Brain Sciences.

Technical skills

Programming Languages

R, Matlab, SPSS, LaTeX

Software

Adobe (Photoshop, Illustrator), Office (Microsoft Office, Libre Office, Google Docs)

Experimental Procedures

EEG (active and passive systems, with Brain Products and Brain Vision), Eyetracking (remote and headmounted, with Tobii and SMI), reaction time experiments, standardized tests, questionnaires

Languages

German: native, English: fluent