

Martin Zettersten

POSTDOCTORAL RESEARCH FELLOW · PRINCETON UNIVERSITY

Department of Psychology, 218 Peretsman Scully Hall, Princeton, NJ 08540

✉ martincz@princeton.edu | 🏠 <https://mzettersten.github.io/> | 📄 <https://github.com/mzettersten>

Appointments

Princeton University

2020 - present

POSTDOCTORAL RESEARCH ASSOCIATE/FELLOW

- Advisor: Dr. Casey Lew-Williams

Education

University of Wisconsin-Madison

2020

PHD PSYCHOLOGY

- Advisors: Dr. Jenny Saffran, Dr. Gary Lupyan
- Dissertation: "Seeking new words: Active word learning in infants and children"

Ruprecht Karl University of Heidelberg

2013

1ST STAATSEXAMEN

- Majors: Mathematics, English language and Linguistics; Minor: Psychology
- Advisors: Dr. Stefanie Hoehl, Dr. Sabine Pauen

Awards, Fellowships, & Grants

- | | |
|------------|--|
| 2022- | NRSA F32 Postdoctoral Fellowship (\$209,118) , National Institutes of Health |
| 2022 | Fellow , Diverse Intelligences Summer Institute |
| 2021 | Early Career Award (with Jessica Kosie; \$115,000) , Einstein Foundation |
| 2021 | Data-Driven Social Science Grant (co-PI; \$48,000) , Princeton University |
| 2019 | Mission Award, ManyBabies1 (contributor) , Society for the Improvement of Psychological Science |
| 2018 | Poster Prize , Evolang XII, Torun |
| 2017 | Fellow , Kavli Summer Institute in Cognitive Neuroscience |
| 2015-2018 | NSF Graduate Research Fellowship , National Science Foundation |
| 2015-2019 | Hertz Travel Award , University of Wisconsin-Madison |
| 2015 | Student Travel Award , Society for Research in Child Development |
| 2013; 2018 | University Fellowship , University of Wisconsin-Madison |
| 2009-2010 | Erasmus scholarship , University of Edinburgh |
| 2007-2013 | Scholar , German Academic Scholarship Foundation (Studienstiftung des deutschen Volkes) |

Publications

* *equal authorship contribution*; Google Scholar: https://scholar.google.com/citations?user=APLxh_UAAAAJ

UNDER REVIEW/IN PREP

Zettersten, M., Bredemann, C., Kaul, M., Vlach, H., Kirkorian, H., & Lupyan, G. (under review). Nameability supports rule-based category learning in children and adults. <https://psyarxiv.com/umrj8>

Zettersten, M., Choi, K., Kirkorian, H., & Saffran, J. (in prep). Children actively select words that support learning.

Schreiner, M., Bergmann, C., Frank, M. C., Fritzsche, T., Gonzalez-Gomez, N., Hamlin, K., Kartushina, N., Kellier, D.J., Mani, N., Mayor, J., Saffran, J., Shukla, M., Silverstein, P., Soderstrom, M., **Zettersten, M.**, & Lippold, M. (in prep). Assessing test-retest reliability in infant-directed speech preference measures.

Bergmann, C., **Zettersten, M.**, Soderstrom, M., Tsui, A.S.T., Mayor, J., Lundwall, R.A., Lewis, M., Kosie, J.E., Kartushina, N., Fusaroli, R., Frank, M.C., Byers-Heinlein, K., Black, A.K., & Mathur, M.B. (in prep). Investigating discrepancies between

multisite replications and published meta-analyses: A case study.

JOURNAL ARTICLES

- Zettersten, M.**, Yurovsky, D., Xu, T. L., Uner, S., Tsui, A.S.T., Schneider, R. M., Saleh, A. N., Meylan, S. C., Marchman, V., Manke-witz, J., MacDonald, K., Long, B., Lewis, M., Kachergis, G., Handa, K., deMayo, B., Carstensen, A., Braginsky, M., Boyce, V., Bhatt, N., Bergey, C. A., & Frank, M.C. (accepted). Peekbank: An open, large-scale repository for developmental eye-tracking data of children's word recognition. *Behavior Research Methods*. <https://psyarxiv.com/tgnzv>
- Koranda, M., **Zettersten, M.**, & McDonald, M. (accepted). Good-enough production: Selecting easier words instead of more accurate ones. *Psychological Science*. <https://psyarxiv.com/q2h9d>
- Zettersten, M.***, Weaver, H.*, & Saffran, J. (Stage 1 registered report, in-principle acceptance). Becoming word meaning experts: Infants' processing of familiar words in the context of typical and atypical exemplars. *Child Development*. <https://psyarxiv.com/njh38/>
- Zettersten, M.**, Pomper, R., & Saffran, J. (2022). Valid points and looks: Reliability and validity go hand-in-hand when improving infant methods. *Infant and Child Development*, e2326. <https://doi.org/10.1002/icd.2326>
- Wojcik, E., **Zettersten, M.**, & Benitez, V. (2022). The map trap: Why and how word learning research should move beyond mapping. *WIREs Cognitive Science*, e1596. <https://doi.org/10.1002/wcs.1596>
- Visser, I., Bergmann, C., Byers-Heinlein, K., Dal Ben, R., Duch, W., Forbes, S., Franchin, L., Frank, M. C., Geraci, A., Hamlin, J. K., Kaldy, Z., Kulke, L., Lavery, C., Lew-Williams, C., Mateu, V., Mayor, J., Moreau, D., Nomikou, I., Schuwerk, T., Simpson, E. A., Singh, L., Soderstrom, M., Sullivan, J., van den Heuvel, M. I., Westermann, G., Yamada, Y., Zaadnoordijk, L., & **Zettersten, M.** (2022). Improving the generalizability of infant psychological research: The ManyBabies model. *Behavioral and Brain Sciences*, 45, E35. <https://doi.org/10.1017/S0140525X21000455>
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2021). Developmental changes in children's knowledge of facial configurations. *Child Development*. <https://doi.org/10.1111/cdev.13716>
- Santolin, C., Garcia-Castro, G., **Zettersten, M.**, Sebastian-Galles, N., & Saffran, J. (2021). Experience with research paradigms relates to infants' direction of preference. *Infancy*, 26(1), 39-46. <https://doi.org/10.1111/infa.12372>
- Zettersten, M.**, & Saffran, J. (2021). Sampling to learn words: Adults and children sample words that reduce referential ambiguity. *Developmental Science*, 24(3), e13064. <https://doi.org/10.1111/desc.13064>
- Byers-Heinlein, K., Bergmann, C., Davies, C., Frank, M. C., Hamlin, K., Kline, M., ..., **Zettersten, M.**, & Soderstrom, M. (2020). Building a collaborative Psychological Science: Lessons from ManyBabies 1. *Canadian Psychology*, 61(4), 349-363. <https://doi.org/10.1037/cap0000216>
- Benitez, V., **Zettersten, M.**, & Wojcik, E. (2020). The temporal structure of naming events differentially affects children's and adults' statistical word-referent learning. *Journal of Experimental Child Psychology*, 200, 104961. <https://doi.org/10.1016/j.jecp.2020.104961>
- Zettersten, M.**, Potter, C., & Saffran, J. (2020). Tuning in to non-adjacencies: Exposure to learnable patterns supports discovering otherwise difficult structures. *Cognition*, 202, 104283. <https://doi.org/10.1016/j.cognition.2020.104283>
- The ManyBabies Consortium (2020). Quantifying sources of variability in infancy research using the infant-directed-speech preference. *Advances in Methods and Practices in Psychological Science*, 3(1), 24-52. <https://doi.org/10.1177/2515245919900809>
- Zettersten, M.**, Schonberg, C., & Lupyan, G. (2020). What does a radical exemplar view not predict? A commentary on Ambridge (2020). *First Language*, 40(5-6), 636-639. <https://doi.org/10.1177/0142723720903895>
- Zettersten, M.**, & Lupyan, G. (2020). Finding categories through words: More nameable features improve category learning. *Cognition*, 196, 104135. <https://doi.org/10.1016/j.cognition.2019.104135>
- Lewis, M., **Zettersten, M.**, & Lupyan, G. (2019). Distributional semantics as a source of visual knowledge. *Proceedings of the National Academy of Sciences*, 116(39), 19237-19238. <https://doi.org/10.1073/pnas.1910148116>
- Zettersten, M.**, Wojcik, E. W., Benitez, V., & Saffran, J. R. (2018). The company objects keep: Linking referents together during cross-situational word learning. *Journal of Memory & Language*, 99, 62-73. <https://doi.org/10.1016/j.jml.2017.11.001>
- Hoehl, S., **Zettersten, M.**, Schleihauf, H., Graetz, S., & Pauen, S. (2014). The role of social interaction and pedagogical cues for eliciting and reducing overimitation in preschoolers. *Journal of Experimental Child Psychology*, 122, 122-133. <https://doi.org/10.1016/j.jecp.2013.12.012>

BOOK CHAPTERS

- Lupyan, G., & **Zettersten, M.** (2021). Does vocabulary help structure the mind? In Sera, M., & Koenig, M (Eds.). *Minnesota Symposia on Child Psychology: Human Communication: Origins, Mechanisms, and Functions, Volume 40* (pp. 160-199). Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1002/9781119684527.ch6>. Preprint: <https://psyarxiv.com/b74u9>
- Zettersten, M.** (2019). Learning by predicting: How predictive processing informs language development. In Busse, B., & Moehlig-Falke, R. (Eds.). *Patterns in Language and Linguistics: New Perspectives on a Ubiquitous Concept* (pp. 255-288). Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110596656-010>

PEER-REVIEWED CONFERENCE PROCEEDINGS

- Zettersten, M.**, Bergey, C. A., Bhatt, N., Boyce, V., Braginsky, M., Carstensen, A., deMayo, B., Kachergis, G., Lewis, M., Long, B., MacDonald, K., Mankewitz, J., Meylan, S. C., Saleh, A. N., Schneider, R. M., Tsui, A.S.T., Uner, S., Xu, T. L., Yurovsky, D., & Frank, M.C. (2021). Peekbank: Exploring children's word recognition through an open, large-scale repository for developmental eye-tracking data. *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Preprint: <https://psyarxiv.com/ep693/>
- Zettersten, M.**, Suffill, E., & Lupyan, G. (2020). Nameability predicts subjective and objective measures of visual similarity. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.
- Zettersten, M.**, & Saffran, J. (2019). Sampling to learn words: Adults and children sample words that reduce referential ambiguity. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*.
- Koranda, M.* , **Zettersten, M.***, & McDonald, M. (2018). Word frequency can affect what you choose to say. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
- Zettersten, M.**, Potter, C., & Saffran, J. (2018). Tuning in to non-adjacent dependencies: How experience with learnable patterns supports learning novel regularities. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
- Zettersten, M.**, & Lupyan, G. (2018). Using language to discover categories: More nameable features improve category learning. In C. Cuskley, M. Flaherty, H. Little, Luke McCrohon, A. Ravignani, & T. Verhoef (Eds.), *The Evolution of Language: Proceedings of the 12th International Conference (EVLANGXII)*.

Presentations

* equal authorship contribution

INVITED TALKS

- Developmental Meeting, Princeton University, 2022.
- Cognitive Science Department Seminar, University of California San Diego, 2022.
- Language and Development Seminar, University of Oxford, 2022.
- Cognitive Development and Learning Lab Meeting, UC Berkeley, 2021.
- Language & Cognitive Development Lab Meeting, UC Berkeley, 2021.
- Goldstone Lab Meeting, Indiana University, 2021.
- Bergelson Lab Meeting, Duke University, 2020.
- Cognitive Area Meeting, Lehigh University, 2020.
- Baby BRAIN Group meeting, Donders Institute, 2020.
- Departmental Colloquium, University of Wisconsin-Madison, 2019.
- Language Brownbag, University of Illinois Urbana-Champaign, 2019.
- Princeton Baby Lab Meeting, Princeton University, 2019.
- Developmental Brownbag, University of Chicago, 2017.

CONFERENCE PRESENTATIONS

- Zettersten, M.***, Kosie, J.*, & the ManyBabies5 team (2022). ManyBabies5: A large-scale, collaborative investigation of the Hunter & Ames model of infant looking preference. Poster. Biennial International Congress of Infant Studies. Ottawa, CA.
- Weaver, H.*, **Zettersten, M.***, & Saffran, J. (2022). Becoming word meaning experts: Infants' processing of familiar words in the context of typical and atypical exemplars. Poster. 12th Biennial Meeting of the Cognitive Development Society. Madison, WI.
- Zettersten, M.**, Saleh, A., Bhatt, N., Yurovsky, D., Xu, T. L., Uner, S., Tsui, A., Schneider, R. M., Meylan, S. C., Marchman, V., Mankewitz, J., MacDonald, K., Long, B., Lewis, M., Kachergis, G., deMayo, B., Carstensen, A.S.T., Braginsky, M., Boyce, V., Bergey, C., & Frank, M. C. (2021). Increases in speed and accuracy of children's online word recognition measured via a large-scale, open database of developmental eye-tracking data. Oral presentation. BUCLD 46. Virtual.
- Zettersten, M.**, Bergey, C. A., Bhatt, N., Boyce, V., Braginsky, M., Carstensen, A., deMayo, B., Kachergis, G., Lewis, M., Long, B., MacDonald, K., Mankewitz, J., Meylan, S. C., Saleh, A. N., Schneider, R. M., Tsui, A.S.T., Uner, S., Xu, T. L., Yurovsky, D., & Frank, M.C. (2021). Peekbank: Exploring children's word recognition through an open, large-scale repository for developmental eye-tracking data. Poster. 43rd Annual Meeting of the Cognitive Science Society. Virtual.
- Zettersten, M.**, Choi, K., Kirkorian, H., & Saffran, J. (2021). Children actively sample information in support of learning new words. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Kosie, J.*, **Zettersten, M.***, & the ManyBabies5 team (2021). ManyBabies5: A large-scale, collaborative investigation of the Hunter & Ames model of infant looking preference. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Benitez, V., **Zettersten, M.**, & Wojcik, E. (2021). Developmental differences in the role of temporal structure in ambiguous word learning. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Campbell, E., **Zettersten, M.**, Lewis, M., & Bergelson, E. (2021). Early language in blind, deaf/hard-of-hearing, and typically-developing infants. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2021). How is emotion knowledge represented across development? Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Schonberg, C., Valentyn, E., Yang, R., Masters, M., & **Zettersten, M.** (2021). Characterizing the practices of reporting sex differences in infancy research. Poster. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Anderson, L., Hwang, H., Kamhout, S., Gilliat, S., Lundwall, R., Black, A., Kartushina, N., Kosie, J., Tsui, A., **Zettersten, M.**, & Bergmann, C. (2021). A fresh look at infant-directed speech preference through an updated meta-analysis. Poster. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Zettersten, M.**, Black, A., Bergmann, C., Bacon, D., Weaver, H., & Saffran, J. (2020). Investigating the relationship between infant learning and measured effect size in preferential looking paradigms. Poster. Many Paths to Language (MPaL) Workshop. Virtual.
- Zettersten, M.**, Suffill, E., & Lupyan, G. (2020). Nameability predicts subjective and objective measures of visual similarity. Oral presentation. 42nd Annual Meeting of the Cognitive Science Society. Virtual.
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2020). Developmental changes in children's knowledge of facial configurations. Poster. 42nd Annual Meeting of the Cognitive Science Society. Virtual.
- Zettersten, M.**, Black, A., Bergmann, C., Bacon, D., Weaver, H., & Saffran, J. (2020). Investigating the relationship between infant learning and measured effect size in preferential looking paradigms. Poster. Biennial International Congress of Infant Studies. Virtual.
- Schreiner, M., Lippold, M., & ManyBabies Consortium Test-Retest (2020). Assessing test-retest reliability of the infant preference measures. Poster. Biennial International Congress of Infant Studies. Virtual.
- Santolin, C., Garcia-Castro, G., **Zettersten, M.**, Sebastian-Galles, N., & Saffran, J. (2020). Prior experience with the Head-turn Preference Procedure relates to infants' direction of preference in learning studies. Poster. Biennial International Congress of Infant Studies. Virtual.
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2020). Developmental changes in children's knowledge of facial configurations. Oral presentation. Annual Conference of the Society for Affective Science. San Francisco, CA (cancelled, COVID-19).
- Benitez, V., **Zettersten, M.**, & Saffran, J. (2019). Preschooler's remembering and learning from predictable and unpredictable events. Oral presentation. 11th Biennial Meeting of the Cognitive Development Society. Louisville, KY.

- Zettersten, M., Choi, K., Kirkorian, H., & Saffran, J. (2019).** How does active sampling support learning new words? Poster. 11th Biennial Meeting of the Cognitive Development Society. Louisville, KY.
- Zettersten, M., & Saffran, J. (2019).** Sampling to learn words: Adults and children sample words that reduce referential ambiguity. Oral presentation. 41st Annual Meeting of the Cognitive Science Society. Montreal, CA.
- Zettersten, M., Bredemann, C., Kaul, M., Vlach, H., Kirkorian, H., & Lupyan, G. (2019).** Verbal labels support rule-based category learning in children. Poster. Biennial Meeting of the Society for Research in Child Development. Baltimore, MD.
- Zettersten, M., & Saffran, J. (2018).** How do infants sample novel object-label associations? Oral presentation. XXI Biennial International Congress of Infant Studies. Philadelphia, PA.
- Koranda, M., **Zettersten, M.**, & McDonald, M. (2018). Word frequency can affect what you choose to say. Oral presentation. 40th Annual Meeting of the Cognitive Science Society. Madison, WI.
- Zettersten, M., Potter, C., & Saffran, J. (2018).** Tuning in to non-adjacent dependencies. Poster. 40th Annual Meeting of the Cognitive Science Society. Madison, WI.
- Hopman, E. & **Zettersten, M.** (2018). Immediate feedback is critical for learning from your own productions. Poster. Psycholinguistics in Flanders. Ghent, Belgium.
- Zettersten, M., & Lupyan, G. (2018).** Using language to discover categories: More nameable features improve category learning. Poster. EvoLang XII. Torun, Poland.
- Zettersten, M., & Saffran, J. (2017).** Choosing words wisely: How infants strategically seek information when learning novel words. Poster. 10th Biennial Meeting of the Cognitive Development Society. Portland, OR.
- Zettersten, M., Potter, C., & Saffran, J. (2017).** Tuning in to non-adjacent dependencies. Poster. International Conference on Interdisciplinary Advances in Statistical Learning. Bilbao, Spain.
- Zettersten, M., Benitez, V., & Saffran, J. (2017).** When prediction violation boosts memory: 5-year-olds remember images involved in unexpected events better. Poster. Biennial Meeting of the Society for Research in Child Development. Austin, TX.
- Zettersten, M., & Saffran, J. (2016).** Choosing words wisely: How infants strategically seek information when learning novel words. Oral presentation. XX Biennial International Congress of Infant Studies. New Orleans, LA.
- Zettersten, M., & Lupyan, G. (2015).** The role of language in categorical statistical learning. Poster. 56th Annual Meeting of the Psychonomic Society. Chicago, IL.
- Zettersten, M., Paul, J., & Lupyan, G. (2015).** Language augments relational reasoning. Oral presentation. 9th Biennial Meeting of the Cognitive Development Society. Columbus, OH.
- Zettersten, M., Wojcik, E., Benitez, V., & Saffran, J. (2015).** Learning multiple kinds of associations during cross-situational word learning. Poster. 37th Annual Meeting of the Cognitive Science Society. Pasadena, CA.
- Zettersten, M., Paul, J., & Lupyan, G. (2015).** Language augments relational reasoning: The effect of late exposure to a standardized language. Poster. Biennial Meeting of the Society for Research in Child Development. Philadelphia, PA.
- Schleihauf, H., **Zettersten, M.**, Pauen, S., & Hoehl, S. (2015). Both causal and social reasoning underlies overimitation in five-year-olds. Poster. Biennial Meeting of the Society for Research in Child Development. Philadelphia, PA.
- Pleyer, M. & **Zettersten, M.** (2012). From cognition to corpus, from corpus to cognition: How corpus research in child language can benefit from research in developmental psychology, and vice versa. Poster. 11th Biannual Meeting of the German Cognitive Science Society. Bamberg, Germany.

Teaching

2021	Programming experiments in PsychoPy , /L+/ Summer/ Winter School, Instructor, https://osf.io/7kfbu/
2019	Psychology 601: Developing babies, building robots , Instructor, UW-Madison
2019	Psychology 460: Child Development , Guest Lecturer, UW-Madison
2019	Psychology 711: Language Acquisition in Infancy and Early Childhood , Guest Instructor, UW-Madison
2019	Psychology 710: Design & Analysis of Psychological Experiments II , Guest Instructor, UW-Madison
2018	Psychology 601: Language Development , Guest Lecturer, UW-Madison
2017	Psychology 710: Design & Analysis of Psychological Experiments II , Teaching Assistant, UW-Madison
2016	Psychology 610: Design & Analysis of Psychological Experiments I , Teaching Assistant, UW-Madison
2015	Psychology 521: The Structure of Human Thought , Guest Lecturer, UW-Madison
2014-2015	Adult Role Models in Science , Instructor, Sandburg Elementary School, weekly science classes
2012-2013	English Department: Introduction to Linguistics , Teaching Assistant, Heidelberg University
2010-2012	English Department: Introduction to English Literature , Teaching Assistant, Heidelberg University
2010-2011	Mathematics Department: Linear Algebra I , Teaching Assistant, Heidelberg University

Mentoring

UNDERGRADUATE RESEARCH

2022-	Jasmine Hao , ReMatch+ mentee and undergraduate, Princeton University
2021-	Molly Cutler , ReMatch+ mentee and undergraduate, Princeton University
2021-	Kunal Handa , summer research intern, Peekbank project
2020-	Annie Jain , undergraduate, Princeton University
2018	Andrew Kressin , Welton Summer Research Apprenticeship, UW-Madison
2017-2018	Maddie Cincebeaux , undergraduate, UW-Madison
2017-2018	Michaela McCabe , undergraduate, UW-Madison
2016-2017	Ellen Breen , undergraduate, UW-Madison
2016-2017	Lizzie Hoff , undergraduate, UW-Madison
2015	Nicholas Baird , NSF-funded PREP summer research program, UW-Madison

OTHER ACTIVITIES

2021-	Mentor , Next-Gen Psych Scholars Program
2020-	Mentor , Científico Latino, Graduate Student Mentorship Initiative (GSMI)
2020-	Mentor , ManyBabies5 mentoring network

Service

PROFESSIONAL ACTIVITIES

2021	Young Women's Conference in STEM , session organizer, Princeton, NJ
2018	40th Annual Meeting of the Cognitive Science Society , Local Arrangements Chair, UW-Madison
2016	Psychology Department Writing Workshop , co-creator and session organizer, UW-Madison
2013-2018	Psychology Colloquium Series Committee , President (2016-2017), committee member, UW-Madison
2013-2015	Expanding Your Horizons , presenter, workshop for young women exploring science careers, UW-Madison
2013	3rd Linguistic Conference for Doctoral Students , organizing committee, Heidelberg, Germany

REVIEWING

Ad-Hoc Reviewer. Cognition; Current Directions in Psychological Science; Frontiers in Psychology; Journal of Experimental Child Psychology; Journal of Experimental Psychology: General; Language Acquisition; PLOS One; Quarterly Journal of Experimental Psychology; Scientific Reports

Conferences. Annual Conference of the Cognitive Science Society; Boston University Conference on Language Development; Evolang; Multiple Paths to Language Workshop

Grants. NSF Developmental Sciences Program (CAREER)