

Sophie Wohltjen

University of Wisconsin – Madison
Department of Psychology

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Current Position

Post-doctoral research fellow

2022 – present

University of Wisconsin - Madison
Training Program in Emotion Research
Niedenthal Emotions Lab
PI: Paula Niedenthal

Education

Dartmouth College, Hanover, NH

2016 – 2022

Ph.D., Psychological and Brain Sciences
Dartmouth Social Systems Lab

PI: Thalia Wheatley

Thesis: Examining Coupled Attention from Individual Differences to Dynamic Interactions

University of Virginia, Charlottesville, VA

2010 – 2014

B.A., Cognitive Science

B.A., Music

Thesis: Competition Between Rhythmic And Linguistic Meaning Revisited: The Importance of Task Demands

Employment

Post-Baccalaureate Research Fellow

2014 - 2016

National Institute of Mental Health – Bethesda, MD
Laboratory of Brain and Cognition
PI: Alex Martin

Research Experience

University of Virginia, Charlottesville, VA

2012 – 2014

PI: Michael Kubovy

Research assistant / Honors thesis student

University of South Carolina, Columbia, SC

2013

Summer Research Experience in Brain and Cognitive Sciences

PI: Dirk-Bart den Ouden

Research assistant

Manuscripts

In prep

Wohltjen, S., Zhong, Y., Colon, I., Zhao, O., Ward, E., Li, Y., Mutlu, B., & Niedenthal, P. (in prep). Discovering facial behaviors in the wild.

Wohltjen, S., Goldman, M., & Wheatley, T. (in prep). Hanging on to *almost* every word: Pupillary asynchrony between storytellers and listeners predicts enhanced memory for surprising, exciting story moments.

Wohltjen, S. & Wheatley, T. (in prep) Rapt with attention: Spontaneous eye blink rate decreases as conversation partners become more engaged.

Under review

Turkstra, L., Hosseini-Moghaddam, S., **Wohltjen, S.**, Nurre, S.V., Mutlu, B., & Duff, M. (under review). Adults with vs without TBI differ in how they “read” emotion in context. *Frontiers in Psychology*.

Published

Wohltjen, S., Toth, B., Boncz, A., & Wheatley, T. (2023). Synchrony to a beat predicts synchrony with other minds. *Nature Scientific Reports*, 13(3591). [\[link\]](#) [\[data and code\]](#)

Coverage: [Psychology Today](#)

Wohltjen, S. & Wheatley, T. (2021). Eye contact marks the rise and fall of shared attention in conversation. *Proceedings of the National Academy of Sciences*, 118(37), 1-8. [\[link\]](#) [\[data and code\]](#)

Coverage: [Scientific American](#), [Forbes](#)

Avery, J.A., Ingeholm, J.E., **Wohltjen, S.**, Collins, M., Riddell, C., Gotts, S.J., Kenworthy, L., Wallace, G., Simmons, K., & Martin, A. (2018). Neural correlates of taste reactivity in autism spectrum disorders. *Neuroimage Clinical*, 19, 38-46. [\[link\]](#)

Mellem, M., **Wohltjen, S.**, Gotts, S., Ghuman, A., & Martin, A. (2017). Intrinsic frequency biases and profiles across human cortex. *Journal of Neurophysiology*. [\[link\]](#)

Getz, L., **Wohltjen, S.**, & Kubovy, M. (2016). Competition between rhythmic and language organization: The importance of task demands. *Quarterly Journal of Experimental Psychology*, (69). [\[link\]](#)

Talks & Presentations

2023

From “I” to “We”: Examining social interaction from individuals to dyads

Invited talk, Bar Ilan University, Ramat Gan, Israel.

Discovering facial behaviors in the wild.

Flash talk at the Society for Affective Science Annual Conference, Long Beach, CA.

2022

The dance of conversation: Investigating coordinated nonverbal communication during dyadic interaction.

Presentation at the Social Area Lab and Discussion meeting, University of Wisconsin – Madison, Madison, WI

Examining coupled attention from individual differences to dynamic interactions.

Invited talk, University of Wisconsin – Madison, Madison, WI.

Examining coupled attention from individual differences to dynamic interactions.

Public dissertation defense, Dartmouth College, Hanover, NH.

2021

Attention in the real world: From individual differences to dynamic interactions.

Invited talk, Western Kentucky University, Bowling Green, KY.

2020

Eye contact is a marker of alignment in conversation.

Presentation at the Social Area Lab Meeting, Dartmouth College, Hanover, NH.

Eye contact is a marker of alignment in conversation.

Presentation at the ACM Collective Intelligence Conference, virtual.

(Not so) social attention.

Presentation at the Social Area Lab Meeting, Dartmouth College, Hanover, NH.

2019

Social attention.

Invited talk, Dartmouth College, Hanover, NH.

Eye contact and learning to communicate.

Guest lecture in the Introduction to Psychology course, Dartmouth College, Hanover, NH.

Learning language.

Guest lecture in the Introduction to Psychology course, Dartmouth College, Hanover, NH.

Eye contact facilitates shared attention in natural conversation.

Presentation at the Annual Meeting of the Society for Affective Science, Boston, MA.

Sharing attention during eye contact.

Presentation at the Social Brain Sciences Brown Bag Series, Dartmouth College, Hanover, NH.

2018

Defining predictability.

Presentation at the Social Area Lab Meeting, Dartmouth College, Hanover, NH.

Love and Rejection.

Guest lecture in the Emotion psychology course, Dartmouth College, Hanover, NH.

How do people share attention?

Qualifying exam presentation, Dartmouth College, Hanover, NH.

2013 - 2017

Predicting attention to natural speech with individual models of pupil dilation.

Presentation at the Social Area Lab Meeting, Dartmouth College, Hanover, NH.

Intrinsic frequency biases across the cortex.

Presentation at the National Institutes of Mental Health, Bethesda, MD.

Comparison of neural correlates for musical and linguistic syntax.

Presentation at the University of South Carolina, Columbia, SC.

Posters & Conference Proceedings

2023

Wohltjen, S., Zhong, Y., Colon, I., Zhao, O., Ward, E., Li, Y., Mutlu, B., & Niedenthal, P. (2023). Discovering facial behaviors in the wild. Long abstract submitted for publication in *Affective Science*, Society for Affective Science, Long Beach, CA.

Wohltjen, S., Goldman, M., & Wheatley, T. (2023). Hanging on to *almost* every word: Pupillary asynchrony between storytellers and listeners predicts enhanced memory for surprising, exciting story moments. Society for Personality and Social Psychology, Atlanta, GA.

Colon, Y. I., **Wohltjen, S.**, Zhong, Y., Li, Y., Mutlu, B., & Niedenthal, P. (2023). Faces in the wild: Clustering facial expressions using face movement trajectories. Society for Personality and Social Psychology, Atlanta, GA.

2022

Goldman, M., **Wohltjen, S.**, & Wheatley, T. (2022). Salience and predictability as tools for good storytelling. Society for Personality and Social Psychology, San Francisco, CA.

2021

Wohltjen S. & Wheatley, T (2021). Sharing attention during eye contact in natural conversation. Social and Affective Neuroscience Society, virtual.

Goldman, M., **Wohltjen, S.**, & Wheatley, T. (2021). Investigating the role of salience and predictability in good storytelling. Society for Personality and Social Psychology, virtual.

2020

Wohltjen, S. & Wheatley, T. (2020). Eye contact is a marker of alignment in conversation. Proceedings of the ACM Collective Intelligence 2020 Virtual Conference, virtual.

Wohltjen, S. & Wheatley, T. (2020). Sharing attention during eye contact in natural conversation. Social and Affective Neuroscience Society, cancelled.

2019

Wohltjen, S. & Wheatley, T. (2019). Eye contact facilitates shared attention in natural conversation. Society for Affective Science, Boston, MA.

Wohltjen S. & Wheatley, T. (2019). Eye contact facilitates shared attention in natural conversation. Social and Affective Neuroscience Society, Miami, FL.

2017

Wohltjen, S., Mellem, M., Ghuman, A., Gotts, S., & Martin, A. (2017). Neural Frequency Abnormalities in Social Brain Regions in Autism Spectrum Disorders. Social and Affective Neuroscience Society, Los Angeles, CA.

2016

Collins, M. A., Milleville, S. C., **Wohltjen, S.**, Ingeholm, J. E., Wallace, G. L., Simmons, K., Gotts, S. J., & Martin, A. (2016). Food-Related Symptoms in Autism Are Related to Aberrant Gustatory System Functional Connectivity. Society for Neuroscience, San Diego, CA.

Wohltjen, S., Mellem, M., Gotts, S., Ghuman, A., & Martin, A. (2016). Neural Frequency Abnormalities in Social Brain Regions of Autism Spectrum Disorder. NIH Post-bac Poster Day, Bethesda, MD.

Mellem, M., **Wohltjen, S.**, Ghuman, A., & Martin, A. (2016). The Cortex Displays Regional Intrinsic Frequency Biases. Cognitive Neuroscience Society, New York, NY.

2015

Mellem, M., Ghuman, A., **Wohltjen, S.**, & Martin, A. (2015). Intrinsic Frequency Biases across the Posterior-Anterior Cortical Hierarchy. Society for Neuroscience, Chicago, IL.

Wohltjen, S., Mellem, M., Ghuman, A., & Martin, A. (2015, April). Resting State MEG Reveals Intrinsic Frequency Differences between Sensory and Frontal Cortices. Presented at the NIH Post-bac Poster Day, Bethesda, MD.

2014

Wohltjen, S. Getz, L., & Kubovy, M. (2014). Ambiguity and Complexity as Factors in Simultaneous Rhythm and Sentence Processing. L. Starling Reid Undergraduate Psychology Research Conference, Charlottesville, VA.

Awards

2022

Ruth L. Kirschstein National Research Service Award

2021

Social and Affective Neuroscience Society Poster Award

2019

Society for Affective Science Poster Spotlight Award
Neukom Travel Grant

2017

Graduate Student Council Conference Grant

2010 – 2014

Highest Distinction in Cognitive Science at University of Virginia
Highest Distinction in Music at University of Virginia
Charles S. Roberts Scholarship
Raven Society Membership at University of Virginia
University of Virginia Echols Scholar

Teaching

2023

Design An Inclusive Canvas Dream Course
Semester-long teaching course
Delta Program at UW - Madison

Future Faculty Teaching Series	2021
Multi-week teaching workshop	
Dartmouth Center for the Advancement of Learning	
Skype a Scientist	2020
Guest Lecturer	
Skype a Scientist program	
Introduction to Psychology	2019
TA and Guest Lecturer	
Dartmouth College	
Emotion	2018
TA and Guest Lecturer	
Dartmouth College	
Research Methods in Psychology	2017
TA, Guest Lecturer, Lab Discussion Leader	
Dartmouth College	
Abnormal Psychology	2016
TA	
Dartmouth College	

Mentorship

Obsune Osso '25	2023
PREP undergraduate summer research scholar	
University of Wisconsin – Madison	
Dylan Monfried '23	2022 – 2023
Research assistant	
University of Wisconsin – Madison	
Megan Thomason '23	
Research assistant	
University of Wisconsin – Madison	

2018 – 2022

Maria Goldman '22

Honors Thesis student; STAMPS scholar; Presidential Research Scholar
Dartmouth College

2017 – 2021

Peter Kaiser '21

Second Year Research Scholar, Presidential Research Scholar
Dartmouth College

2017 - 2019

Oriana Gamper '19

Second Year Research Scholar, Third Year Research Scholar
Dartmouth College

2017

Jason Dunlap '18

ASURE Program Summer Research Scholar
Dartmouth College

Technical Skills

Programming Languages

Python, Matlab, R, Bash

Stimulus/Survey Presentation

Psychopy, psychtoolbox, E-Prime, Qualtrics

Data Analysis

Scientific-Python, Scikit-learn, fastdtw, lme4, mlVAR

Data Visualization

Seaborn, Matplotlib, ggplot

Collaborative and Version Control Tools

Git/Github

Professional Activities & Service

Reviewer

Nature Scientific Reports

Professional Memberships

Social and Affective Neuroscience Society
Society for Personality and Social Psychology
Society for Affective Science

Service

Post-doc mental health focus groups Volunteer, UW - Madison	2023
Dartmouth Graduate Student Council Council member, Dartmouth College	2020 – 2021
Social Area Graduate Student Representative Graduate representative, Dartmouth College	2019 – 2021
Social Area Lab Meeting Meeting coordinator, Dartmouth College	2018 – 2019
Graduate Research Roundtable Co-Chair, Dartmouth College	2017 – 2018