

# Sophie Wohltjen

University of Wisconsin – Madison  
Department of Psychology

•  
1202 West Johnson St.  
Madison, WI 53706

•  
wohltjen@wisc.edu

## Current Position

---

### Post-doctoral Research Associate

*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

## Awards

---

NIH Training Program in Emotion Research Postdoctoral Trainee

2022-2023

Social and Affective Neuroscience Society Poster Award

2021

Society for Affective Science Poster Spotlight Award

2019

Neukom Travel Grant

2019

Dartmouth Graduate Student Council Conference Grant

2017

Highest Distinction in Cognitive Science at University of Virginia

2014

Highest Distinction in Music at University of Virginia

2014

Charles S. Roberts Scholarship

2013-2014

Raven Society Membership at University of Virginia

2013-2014

University of Virginia Echols Scholar

2010-2014

## Manuscripts

---

### *Published*

Turkstra, L., Hosseini-Moghaddam, S., **Wohltjen, S.**, Nurre, S.V., Mutlu, B., & Duff, M. (2023). Facial affect recognition in context in adults with and without TBI. *Frontiers in Psychology – Emotion Science*, 14. [\[link\]](#)

**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](#)

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

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). [\[link\]](#)

*Under review/In press*

**Wohltjen, S.**, Zhong, Y., Colon, I., Zhao, O., Ward, E., Li, Y., Mutlu, B., & Niedenthal, P. (2023). Discovering facial behaviors in the wild. *Affective Science: SAS 2023*.

*Invited*

**Wohltjen, S.**, & Wheatley, T. (in prep). The eyes have it: Using dual eye-tracking during interaction as an honest measure of attention. *Frontiers in Human Neuroscience – Women in Interacting Minds and Brains special issue*.

**Wohltjen, S.**, Zhong, Y., Colon, I., Huang, A., Miller, K., Li, Y., Mutlu, B., & Niedenthal, P. (in prep). Uniting theory and data: The promise and challenge of creating an honest model of facial expression.

*In prep*

**Wohltjen, S.**, Zhong, Y., Colon, I., Zhao, O., Ward, E., Li, Y., Mutlu, B., & Niedenthal, P. (in prep). A data-driven model for 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.

## Talks & Presentations

---

From “I” to “We”: Examining social interaction from individuals to dyads 2023  
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.

The dance of conversation: Investigating coordinated nonverbal communication 2022  
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.
- Attention in the real world: From individual differences to dynamic interactions. 2021  
Invited talk, Western Kentucky University, Bowling Green, KY.
- Eye contact is a marker of alignment in conversation. 2020  
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.
- Social attention. 2019  
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.
- Defining predictability. 2018  
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.
- Predicting attention to natural speech with individual models of pupil dilation. 2017  
Presentation at the Social Area Lab Meeting, Dartmouth College, Hanover, NH.
- Intrinsic frequency biases across the cortex. 2016  
Presentation at the National Institutes of Mental Health, Bethesda, MD.
- Comparison of neural correlates for musical and linguistic syntax. 2013  
Presentation at the University of South Carolina, Columbia, SC.

## Posters

---

- 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.
- Goldman, M., **Wohltjen, S.**, & Wheatley, T. (2022). Salience and predictability as tools for good storytelling. Society for Personality and Social Psychology, San Francisco, CA.
- 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.
- Wohltjen, S.** & Wheatley, T. (2020). Sharing attention during eye contact in natural conversation. Social and Affective Neuroscience Society, cancelled.
- 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.
- 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.
- 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.
- 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.

**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.

## Teaching

---

Design An Inclusive Canvas Dream Course	2023
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

---

Obscure 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	
Maria Goldman '22 Honors Thesis student; STAMPS scholar; Presidential Research Scholar Dartmouth College	2018 – 2022
Peter Kaiser '21 Second Year Research Scholar, Presidential Research Scholar Dartmouth College	2017 – 2021
Oriana Gamper '19 Second Year Research Scholar, Third Year Research Scholar Dartmouth College	2017 - 2019
Jason Dunlap '18 ASURE Program Summer Research Scholar Dartmouth College	2017

## Professional Activities & Service

---

### 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
Graduate Student Peer Mentor Program Peer mentor, Dartmouth College	2019 – 2022
Social Area Graduate Student Representative Graduate representative, Dartmouth College	2019 – 2021
Building Inclusivity to Advance Science (BIAS) group Graduate student member, Dartmouth College	2018 – 2021
Social Area Lab Meeting Meeting coordinator, Dartmouth College	2018 – 2019
Graduate Research Roundtable Co-Chair, Dartmouth College	2017 – 2018

**Reviewer**

Biotechnology and Biological Sciences Research Council  
eLife Sciences  
Journal of Eye Movement Research  
Journal of Neuroscience  
Nature Scientific Reports  
NeuroImage  
Psychological Science

**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