# Kenneth Tyler Wilcox

Ph.D. Student, University of Notre Dame

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# **EDUCATION**

Ph.D. Quantitative Psychology

2022 (expected)

Department of Psychology, University of Notre Dame, Notre Dame, IN

Dissertation: Jointly modeling participant-level data and published summary statistics for treatment differences with and without covariates

M.S. Applied Statistics

2017

School of Mathematical Sciences, Rochester Institute of Technology, Rochester, NY

B.S. Psychology

2013

Department of Psychology, Rochester Institute of Technology, Rochester, NY

# **PUBLICATIONS**

Refereed Journal Articles

- Wilcox, K. T. & Wang, L. (2021). Modeling approaches for cross-sectional integrative data analysis: Evaluations and recommendations. Psychological Methods. Advance online publication. https://doi.org/10.1037/meto000397
- Ammerman, B. A., Wilcox, K. T., O'Loughlin, C. M., & McCloskey, M. S. (2021). Characterizing the choice to disclose nonsuicidal self-injury. *Journal of Clinical Psychology*, 77(3), 683–700. https://doi.org/10.1002/jclp.23045
- Hong, M., Wilcox, K. T., & Cheng, Y. (2021). A constructed response model. Multivariate Behavioral Research, 56(1), 150–151 (Abstract). https://doi.org/10.1080/00273171. 2020.1852907
- Jacobucci, R., Ammerman, B. A., & Wilcox, K. T. (2021). The use of text-based responses to improve our understanding and prediction of suicide risk. Suicide and Life-Threatening Behavior, 51(1), 55–64. https://doi.org/10.1111/sltb.12668
- Morrison, E. K., DeLong, C. M., & Wilcox, K. T. (2020). How humans discriminate acoustically among bottlenose dolphin signature whistles with and without masking by boat noise. Journal of the Acoustical Society of America, 147(6), 4162-4174. https://doi.org/10.1121/10.0001450
- DeLong, C. M., Fellner, W., Wilcox, K. T., Odell, K., & Harley, H. E. (2020). Visual perception in bottlenose dolphins (Tursiops truncatus): Successful recognition of 2-D

- objects rotated in the picture and depth planes. *Journal of Comparative Psychology*, 134(2), 180–196. https://doi.org/10.1037/com0000207
- Wilcox, K. T., Jacobucci, R., & Zhang, Z. (2020). Bayesian supervised topic modeling with covariates. *Multivariate Behavioral Research*, 55(1), 141 (Abstract). https://doi.org/10.1080/00273171.2019.1695568
- DeLong, C. M., Wright, C., Fobe, I., **Wilcox, K. T.**, & Morrison, E. (2019). North American river otters (*Lontra canadensis*) discriminate between 2D objects varying in shape and color. *Learning & Behavior*, 47, 91–104. https://doi.org/10.3758/s13420-018-0346-x
- DeLong, C. M., Fobe, I., O'Leary, T., & Wilcox, K. T. (2018). Visual perception of planar-rotated 2D objects in goldfish (*Carassius auratus*). *Behavioural Processes*, 157, 263–278. https://doi.org/10.1016/j.beproc.2018.10.009
- DeLong, C. M., Keller, A. M., **Wilcox, K. T.**, Fobe, I., & Keenan, S. A. (2018). Visual discrimination of geometric and complex 2D shapes in goldfish (*Carassius auratus*). *Animal Behavior and Cognition*, 5(3), 300–319. https://doi.org/10.26451/abc.05.03.05. 2018
- DeLong, C. M., Barbato, S., O'Leary, T., & Wilcox, K. T. (2017). Small and large number discrimination in goldfish (*Carassius auratus*) with extensive training. *Behavioural Processes*, 141(P2), 172–183. https://doi.org/10.1016/j.beproc.2016.11.011
- Edlund, J.E., Nichols, A. L., Okdie, B. M., Guadagno, R. E., Eno, C. A., Heider, J. D., Hansen, E., Sagarin, B. J., Blackhart, G., Cottrell, C. A., & Wilcox, K. T. (2014). The prevalence and prevention of crosstalk: A multi-institutional study. *The Journal of Social Psychology*, 154(3), 181-185. https://doi.org/10.1080/00224545.2013.872596

#### Conference Proceedings

Fobe, I., DeLong, C. M., & **Wilcox, K. T.** (2017). An exploration of rhythm perception in African penguins (*Spheniscus demersus*). *Proceedings of Meetings on Acoustics*, 31(1). https://doi.org/10.1121/2.0000773

#### Manuscripts in Submission

Wilcox, K. T., Jacobucci, R., & Zhang, Z. (2021). Supervised latent Dirichlet allocation with covariates: A Bayesian structural and measurement model of text and covariates [Manuscript under review at Psychological Methods]. PsyArXiv. https://doi.org/10.31234/osf.io/62tc3

#### Manuscripts in Preparation

- Che, C., Wilcox, K. T., & Zhang, Z. (2021). Evaluation of the unsupervised latent Dirichlet allocation model though simulation [Manuscript in preparation]. Department of Psychology, University of Notre Dame.
- DeLong, C.M., Gardner, K., & Wilcox, K.T. (2021). *Goldfish* (Carassius auratus) *exhibit* visual object constancy in the picture plane and depth plane with 3D objects [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.

- DeLong, C.M., Morelli, J., & Wilcox, K.T. (2021). Object recognition memory in gold-fish (Carassius auratus) [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.
- DeLong, C.M., Morrison, E., & Wilcox, K.T. (2021). Visual perception of rotated 2D color photos of 3D objects in goldfish (Carassius auratus) [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.
- DeLong, C.M., Morrison, E., **Wilcox, K.T.**, & Wegman, J. (2021). *Categorization of 3D objects in goldfish* (Carassius auratus) [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.
- DeLong, C.M., Wegman, J., & Wilcox, K.T. (2021). Object discrimination in goldfish (Carassius auratus): The role of color cues in the perception of rotated 3D objects [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.
- DeLong, C.M., Wegman, J., Wright, C., & Wilcox, K. T. (2021). *Categorization of 2D objects in North American river otters* (Lontra canadensis) [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.
- Hong, M., & Wilcox, K. T. (2021). A joint modeling framework for item response and topic models [Manuscript in preparation]. Department of Psychology, University of California, Davis.
- **Wilcox, K. T.**, Jacobucci, R., Dixon-Gordon, K., Waite, E., McCloskey, M. S., & Ammerman, B. A. (2021). *A topic mining approach to characterizing interpersonal stress among nonsuicidal self-injury* [Manuscript in preparation]. Department of Psychology, University of Notre Dame.

#### SOFTWARE DEVELOPMENT

**Wilcox, K. T.** (2020). *psychtm: Text mining for psychological research* (Version 2020.9) [Computer software]. https://github.com/ktw5691/psychtm/

#### AWARDS AND HONORS

- 2021 Outstanding Graduate Student Teacher Award (\$100) University of Notre Dame, Graduate School and ND Learning | Kaneb Center for Teaching Excellence
- 2020 Graduate Student Union Outstanding Teaching Assistant Award (\$300) University of Notre Dame
- 2019 Travel Assistance Award (\$1,500) Society of Multivariate and Experimental Psychology
- 2017 University Presidential Fellowship University of Notre Dame
- 2016 Honorable Mention for Oral Presentation Based on Methodology and Theory (\$50) Upstate Chapters of the American Statistical Association

- 2015 John D. and Rachel E. Hromi Endowed Scholarship Rochester Institute of Technology, Center for Quality and Applied Statistics
- 2014 Travel Assistance Award (\$200) Association for Psychological Science Student Caucus
- 2013 Outstanding Undergraduate Scholarship Award Rochester Institute of Technology, College of Liberal Arts
- 2013 Student Research Fund (\$72) Rochester Institute of Technology, College of Liberal Arts
- 2012 Kearse Award for Excellence in Writing (\$100) Rochester Institute of Technology, College of Liberal Arts

# **INVITED TALKS**

- **Wilcox, K. T.** (2021, October 21). *Integrating text into psychological and education research: Latent variable modeling and applications.* Quantitative Brown Bag Series, Department of Psychology, University of California, Davis, Davis, CA.
- **Wilcox, K. T.** (2021, September 13). *Integrating text into psychological and education research:* Latent variable modeling and applications. Quantitative Methods Colloquium, Department of Psychology & Human Development, Vanderbilt University, Nashville, TN.

# **CONFERENCE ACTIVITY**

- **Wilcox, K. T.**, & Wang, L. (2021, October 14–16). *Jointly modeling participant-level data and summary statistics for treatment differences* [Poster presentation]. 19th Annual Society of Multivariate Experimental Psychology Graduate Student Conference, Virtual conference.
- **Wilcox, K. T.**, & Wang, L. (2021, July 19–23). *Modeling approaches for cross-sectional integrative data analysis: Evaluations and recommendations* [Paper presentation]. 86th Annual Meeting of the Psychometric Society, Virtual conference.
- DeLong, C. M., Morelli, J., Wegman, J., Sheldon, H., Gunther, K., & Wilcox, K. T. (2021, April 7–10). *Long-term object recognition memory in goldfish (Carassius auratus)* [Paper presentation]. 28th Annual International Conference on Comparative Cognition, Virtual conference.
- Wegman, J., DeLong, C. M., Morrison, E., Morelli, J., Rachfal, T., & Wilcox, K. T. (2020, November 16–20). *Visual object categorization in goldfish (Carassius auratus)* [Paper presentation]. RIT Graduate Showcase, Rochester, NY, United States. Note: Winner of Oral Presentation Award. https://youtu.be/hrgLbcJDPXo
- Hong, M., Wilcox, K. T., & Cheng, Y. (2020, October 7–10). *A constructed response model* [Poster presentation]. 18th Annual Society of Multivariate Experimental Psychology Graduate Student Preconference, Virtual conference.

- Hong, M., Wilcox, K. T., & Cheng, Y. (2020, July 13–17). *A joint modeling framework for item response and topic models* [Paper presentation]. 85th Annual Meeting of the Psychometric Society, College Park, MD, United States.
- **Wilcox, K. T.**, Jacobucci, R., & Zhang, Z. (2020, July 13–17). *Combining topic modeling and regression: Supervised topic modeling with covariates* [Invited "Spotlight Talk" paper presentation]. 85th Annual Meeting of the Psychometric Society, College Park, MD, United States.
- Che, C., **Wilcox, K. T.**, & Zhang, Z. (2020, May 26–27). Evaluation of the unsupervised latent Dirichlet allocation model though simulation [Paper presentation]. 2nd Annual Meeting of the International Society for Data Science and Analytics, Notre Dame, IN, United States.
- **Wilcox, K. T.**, Jacobucci, R., & Zhang, Z. (2020, May 26–27). Modeling relationships from themes in text and covariates with an outcome: A Bayesian supervised topic model with covariates [Paper presentation]. 2nd Annual Meeting of the International Society for Data Science and Analytics, Notre Dame, IN, United States.
- DeLong, C. M., Morrison, E., Wegman, J., Morelli, J., Rachfal, T., & **Wilcox, K. T.**. (2020, April 1–4). *Visual object categorization in goldfish (Carassius auratus)* [Poster presentation]. 27th Annual International Conference on Comparative Cognition, Melbourne, FL, United States. (Conference canceled)
- Ammerman, B. A., **Wilcox, K. T.**, & Jacobucci, R. (2019, November 21–24). A nuanced examination of the relationship between social connectedness and suicidal ideation. In B. A. Ammerman & R. Jacobucci (Chairs), *Utilizing text mining in clinical research: Novel applications for improving the prediction of psychological distress* [Symposium]. 53rd Annual Convention of the Association for Behavioral and Cognitive Therapies, Atlanta, GA, United States.
- **Wilcox, K. T.**, Jacobucci, R., McCloskey, M. S., & Ammerman, B. A. (2019, November 21–24). Evaluating personal narratives of interpersonal relationships via text mining to predict nonsuicidal self-injury. In B. A. Ammerman & R. Jacobucci (Chairs), *Utilizing text mining in clinical research: Novel applications for improving the prediction of psychological distress* [Symposium]. 53rd Annual Convention of the Association for Behavioral and Cognitive Therapies, Atlanta, GA, United States.
- **Wilcox, K. T.** (2019, October 9–12). *Bayesian supervised topic modeling with covariates* [Poster presentation]. 17th Annual Society of Multivariate Experimental Psychology Graduate Student Conference, Baltimore, MD, United States.
- DeLong, C. M., Morrison, E., Wegman, J., Rachfal, T., & **Wilcox**, **K. T.** (2019, April 10–13). *Visual perception of rotated 2D color representations of familiar 3D objects in goldfish (Carassius auratus)* [Paper presentation]. 26th Annual International Conference on Comparative Cognition, Melbourne Beach, FL, United States.
- Wilcox, K. T. (2018, July 9–13). A Bayesian hidden topic Markov model for latent linguistic structure [Paper presentation]. 83rd Annual Meeting of the Psychometric Society,

- New York, NY, United States.
- DeLong, C. M., Gardner, K., Rachfal, H., Morrison, E., & Wilcox, K. T. (2018, April 4–7). *Visual discrimination of rotated 3D objects in goldfish (Carassius auratus)* [Paper presentation]. 25th Annual International Conference on Comparative Cognition, Melbourne Beach, FL, United States.
- Morrison, E., DeLong, C. M., Wright, C., Gardner, K., Rachfal, H., Gamble, M., Wilcox, K. T., Frye, D., Thorner, H., Fobe, I., & Dami, J. (2018, April 4–7). *North American river otters (Lontra canadensis) use shape and color to discriminate between 2D objects* [Poster presentation]. 25th Annual International Conference on Comparative Cognition, Melbourne Beach, FL, United States.
- Fobe, I., DeLong, C. M., & **Wilcox, K. T.** (2017, December 4–8). *An exploration of rhythm perception in African penguins (Spheniscus demersus)* [Paper presentation]. 174th Meeting of the Acoustical Society of America, New Orleans, LA, United States.
- DeLong, C. M., Fellner, W., Harley, H. E., Fobe, I., **Wilcox, K. T.**, Gardner, K., & Odell, K. (2017, November 9). *Visual discrimination of rotated 2D objects in a bottlenose dolphin* (*Tursiops truncatus*) and goldfish (*Carassius auratus*) [Paper presentation]. Fall Meeting of the Comparative Cognition Society 2017, Vancouver, BC, Canada.
- **Wilcox, K. T.** (2017, April). *Text mining with a Bayesian hidden topic Markov model* [Paper presentation]. 6th Annual Joint Conference of the Upstate Chapters of the American Statistical Association, Buffalo, NY, United States.
- DeLong, C. M., Fobe, I., Wilcox, K. T., & O'Leary, T. (2017, April 19–22). Visual discrimination of rotated 2D objects in goldfish (Carassius auratus) [Paper presentation]. 24th Annual International Conference on Comparative Cognition, Melbourne Beach, FL, United States.
- **Wilcox, K. T.** (2016, April). *An introduction to ensemble methods for machine learning* [Paper presentation]. 5th Annual Joint Conference of the Upstate Chapters of the American Statistical Association, Buffalo, NY, United States.
- **Wilcox, K. T.**, & DeLong, C. M. (2014, May 22–25). *Mindfulness meditation and relaxation differentially improve mindfulness and affect, not emotional memory* [Poster presentation]. 26th Association for Psychological Science Annual Convention, San Francisco, CA, United States.
- Nichols, A. L., Edlund, J. E., Okdie, B. M., Guadagno, R. E., Eno, C. A., Heider, J. D., Hansen, E., Sagarin, B. J., Blackhart, G., Cottrell, C. A., & Wilcox, K. T. (2013, November). *Predicting and preventing participant crosstalk: A multi-institutional investigation* [Paper presentation]. 2nd International Conference on Emerging Research Paradigms in Business and Social Sciences, Dubai, United Arab Emirates.
- Wilcox, K. T., Wright, C., & DeLong, C. M. (2012, August 10). *Training North American river otters (Lontra canadensis) to discriminate among objects* [Poster presentation]. 21st Annual Rochester Institute of Technology Undergraduate Research Symposium, Rochester, NY, United States.

### TEACHING EXPERIENCE

University of Notre Dame

Graduate Seminar: Quantitative Study (co-instructor, graduate course; Spring 2021, Fall 2021)

Quantitative Methods II (teaching assistant & lab instructor, graduate course; Spring 2020)

Quantitative Methods I (teaching assistant & lab instructor, graduate course; Fall 2019)

ROCHESTER INSTITUTE OF TECHNOLOGY

Elements of Statistical Theory (teaching assistant, graduate course; Fall 2015, Fall 2016)

Principles of Statistical Data Mining (teaching assistant, graduate course; Spring 2017)

Statistical Software (teaching assistant, graduate course; Fall 2015)

Probability and Statistics II for Engineers (teaching assistant; Spring 2015)

Critical Mathematical Skills (co-instructor; Fall 2014, Fall 2015)

**CERTIFICATIONS** 

Striving for Excellence in Teaching

08/2021

University of Notre Dame, Kaneb Center

#### RESEARCH EXPERIENCE

Rochester Institute of Technology, Rochester, NY

**Statistician**, Department of Service Systems

05/2017-07/2017

Research collaborators: Malarvizhi Hirudayaraj, Martin Anselm

**Research Assistant**, Department of Psychology

03/2012-05/2013

Research adviser: Caroline M. DeLong

Research Assistant, Department of Psychology

11/2011-05/2013

Research adviser: John Edlund

SUNY Upstate Medical University, Syracuse, NY

Research Analyst, Department of Psychiatry and Behavioral Sciences 06/2013–08/2013

Research adviser: John Manring

**Research Intern**, Department of Neurosurgery

07/2011-09/2011

Research advisers: John Manring, Satish Krishnamurthy

# **SERVICE TO PROFESSION**

#### **JOURNAL MANUSCRIPT REVIEW**

Frontiers in Psychology, section Quantitative Psychology and Measurement

Journal of Behavioral Data Science

Multivariate Behavioral Research

PLOS-ONE

Psychological Methods

#### Sessions Chaired

*Structural equation modeling.* (2021, July 19–23). 86th Annual Meeting of the Psychometric Society, Virtual conference.

Regression modeling and prediction. (2020, July 13–17). 85th Annual Meeting of the Psychometric Society, College Park, MD, United States.

Applications of statistics in environmental studies. (2017, April). 6th Annual Joint Conference of the Upstate Chapters of the American Statistical Association, Buffalo, NY, United States.

STUDENT SUBMISSION REVIEW

Society for Multivariate and Experimental Psychology

2020

Reviewer, SMEP Graduate Student Conference

Association for Psychological Science Student Caucus

2016-2021

Reviewer, APSSC Student Grant Competition

Sixth Annual Joint Conference of the Upstate Chapters of the American Statistical Association 2017

Judge, Pre-College Statistical Data Analysis Competition

Fifth Annual Joint Conference of the Upstate Chapters of the American Statistical Association 2016

Judge, Pre-College Statistical Data Analysis Competition

## DEPARTMENTAL/UNIVERSITY SERVICE

University of Notre Dame

Student Representative for the Quantitative Area, Departmental and Quantitative Area Faculty Meetings (08/2020–08/2021)

Quantitative Area Representative, Graduate Advisory Committee (08/2018–07/2019)

ROCHESTER INSTITUTE OF TECHNOLOGY

Discussant, "On the Five Pillars of Statistical Science: Methodology, Theory, Computation, Applications and Data", Summer Mathematics Institute (06/2016)

Student Representative, Eisenhart Award Nomination Committee (09/2012–05/2013)

Peer Mentor, First Year Enrichment Program (09/2010–05/2013)

# **EXTRACURRICULAR UNIVERSITY SERVICE**

ROCHESTER INSTITUTE OF TECHNOLOGY

Secretary, Data Science Research Group (01/2015–05/2017)

Secretary, Psychology Student Society (03/2012–05/2013)

# PROFESSIONAL MEMBERSHIPS

American Psychological Association

American Psychological Association Division 5

American Statistical Association

Association for Psychological Science

Psychometric Society