# Kenneth Tyler Wilcox

Statistical Consultant, Cornell University 315 Savage Hall · Cornell Statistical Consulting Unit · Ithaca, NY 14853

## **EDUCATION**

- 2022 Ph.D., Quantitative Psychology, Department of Psychology, University of Notre Dame
- 2017 M.S., Applied Statistics, School of Mathematical Sciences, Rochester Institute of Technology
- 2013 B.S., Psychology, Department of Psychology, Rochester Institute of Technology

## **EMPLOYMENT**

- 2023–present Statistical Consultant, Cornell Statistical Consulting Unit, Cornell University
- 2022–2023 Postdoctoral Associate, Center for Integrative Developmental Science, Department of Psychology, Cornell University

## **GRANTS**

NIH Ro1 PA-20-183 (PI: A. D. Ong). Not funded. National Institutes of Health. "Targeting Deficits in Positive Affect Regulation to Improve Fibromyalgia Symptoms: A Randomized Controlled Trial." Role: Collaborator.

#### **PUBLICATIONS**

REFEREED JOURNAL ARTICLES

- Ong, A. D., **Wilcox, K. T.**, Moskowitz, J. T., Wethington, E., Addington, E. L., Sanni, M. M., Kim, P., & Reid, M. C. (2023). Feasibility, acceptability, and preliminary efficacy of a positive affect skills intervention for adults with fibromyalgia. *Innovation in Aging*, 7(10), igado70. https://doi.org/10.1093/geroni/igado70
- **Wilcox, K. T.**, Jacobucci, R., Dixon-Gordon, K. L., Waite, E. E., McCloskey, M. S., & Ammerman, B. A. (2023). A text mining approach to characterizing interpersonal stress among individuals with a nonsuicidal self-injury history. *Current Psychology*, Advance online publication. https://doi.org/10.1007/s12144-023-05056-4
- **Wilcox, K. T.**, Jacobucci, R., Zhang, Z, & Ammerman, B. A. (2023). Supervised latent Dirichlet allocation with covariates: A Bayesian structural and measurement model of text and covariates. *Psychological Methods*, 28(5), 1178–1206. https://doi.org/10.1037/met0000541

- Schor, D., **Wilcox, K. T.**, & Gibson, B. S. (2023). Partial recall: Implications for the discrete slot limit of working memory capacity. *Attention, Perception, & Psychophysics, 85*(5), 1746–1754. https://doi.org/10.3758/s13414-023-02713-5
- **Wilcox, K. T.** & Wang, L. (2023). Modeling approaches for cross-sectional integrative data analysis: Evaluations and recommendations. *Psychological Methods*, 28(1), 242–261. https://doi.org/10.1037/meto000397
- Wegman, J. J., Morrison, E., **Wilcox, K. T.**, & DeLong, C. M. (2022). Visual perception of photographs of rotated 3D objects in goldfish (*Carassius auratus*). *Animals*, 12(14), 1797. https://doi.org/10.3390/ani12141797
- 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
- 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
- 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

- **Wilcox, K. T.**, & Wang, L. (2022). Jointly modeling participant-level data and summary statistics for treatment differences. *Multivariate Behavioral Research*, 57(1), 175–176 (Abstract). https://doi.org/10.1080/00273171.2022.2030204
- 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
- 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
- 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

- Ong, A. D., Wilcox, K. T., Cintron, D. W., Moskowitz, J. T., Wethington, E., & Reid, C. (2023). *Targeting daily positive experiences to improve emotional and functional well-being in adults with fibromyalgia*. [Submitted]. Department of Psychology, Cornell University.
- Ong, A. D., Fang, Y., Wang, L., Zhang, G., Joiner, R. J., **Wilcox, K. T.**, & Bergeman, C. S. (2023). *Affect dynamics and depressive symptomatology: Revisiting the inertia–instability paradox*. [Submitted]. Department of Psychology, Cornell University.
- Shao, S., Kuerbis, A., **Wilcox, K. T.**, & Morgenstern, J. (2023). *Understanding the autoregressive process of drinking among individuals with alcohol use disorder*. [Submitted]. Department of Psychology, University of Notre Dame. https://doi.org/10.31234/osf.io/236dk

#### **PREPRINTS**

**Wilcox, K. T.**, & Ong, A. D. (2023). Leveraging integrative analyses to advance the science of happiness [Preprint]. PsyArXiv. https://doi.org/10.31234/osf.io/kxb54

#### Manuscripts in Preparation

- Hong, M., & Wilcox, K. T. (2023). *A joint modeling framework for item response and topic models*. [Manuscript in preparation]. Department of Psychology, University of Notre Dame. https://doi.org/10.31219/osf.io/fzx7r
- DeLong, C.M., Gardner, K., & Wilcox, K.T. (2023). *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. (2023). 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.**, & Wegman, J. (2023). *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. (2023). 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. (2023). *Categorization of 2D objects in North American river otters* (Lontra canadensis). [Manuscript in preparation]. Department of Psychology, Rochester Institute of Technology.

#### SOFTWARE DEVELOPMENT

**Wilcox, K. T.** (2021). psychtm: Text mining methods for psychological research (Version 2021.1.0) [Computer software]. https://cran.r-project.org/package=psychtm

#### **AWARDS AND HONORS**

- Anne Anastasi Dissertation Award (\$500) American Psychological Association, Division 5, Quantitative and Qualitative Methods
- 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
- 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, November 30). *Integrating text into psychological and education research: Latent variable modeling and applications*. Job Talk, Department of Educational Psychology, University of Minnesota, Minneapolis, MN.
- **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.**. (2023, July 20–23). An integrative data analysis of positive psychology interventions. In J. Moskowitz (Chair), *IPPA past president's symposium: Emerging topics in positive psychological interventions* [Invited symposium]. 8th International Positive Psychology Association World Congress, Vancouver, Canada.
- Ong, A., Wilcox, K. T., Moskowitz, J., Wethington, E., Addington, E., & Reid, M. C. (2022, November 02–06). Lessons in Affect Regulation to Keep Stress and Pain UndeR control (LARKSPUR): Design of a randomized controlled trial to increase positive affect in middle-aged and older adults with fibromyalgia [Paper presentation]. 75th Annual Scientific Meeting of the Gerontological Society of America, Indianapolis, IN, United States.
- 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**

2021 Striving for Excellence in Teaching, University of Notre Dame, Kaneb Center

#### RESEARCH EXPERIENCE

University of Notre Dame, Notre Dame, IN

2017–2022 Graduate Research Assistant, Department of Psychology, Research advisers: Lijuan Wang, Zhiyong Zhang, Ross Jacobucci, Brooke A. Ammerman

Rochester Institute of Technology, Rochester, NY

Statistician, Department of Service Systems, Research team: Malarvizhi Hirudayaraj, Martin Anselm

2012–2013 Research Assistant, Department of Psychology, Research adviser: Caroline M. DeLong

2011–2013 Research Assistant, Department of Psychology, Research adviser: John E. Edlund

SUNY Upstate Medical University, Syracuse, NY

Research Analyst, Department of Psychiatry and Behavioral Sciences, Research adviser: John Manring

Research Intern, Department of Neurosurgery, Research advisers: John

Manring, Satish Krishnamurthy

## **SERVICE TO PROFESSION**

#### AD HOC REVIEWER

**Emotion** 

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

2020, 2022	Reviewer, SMEP Graduate Student Conference, Society for Multivariate and Experimental Psychology
2016–2021	Reviewer, APSSC Student Grant Competition, Association for Psychological Science Student Caucus
2016–2017	Judge, Pre-College Statistical Data Analysis Competition, Annual Joint Conference of the Upstate Chapters of the American Statistical Association

## DEPARTMENTAL/UNIVERSITY SERVICE

## University of Notre Dame

2017-2022	Prospective Graduate Student Recruitment for the Quantitative Area
2020–2021	Student Representative for the Quantitative Area, Departmental and Quantitative Area Faculty Meetings
2018–2019	Quantitative Area Representative, Graduate Advisory Committee

## ROCHESTER INSTITUTE OF TECHNOLOGY

2016 Discussant, "On the Five Pillars of Statistical Science: Methodology, The-

ory, Computation, Applications and Data", Summer Mathematics Institute

2012–2013 Student Representative, Eisenhart Award Nomination Committee

2010–2013 Peer Mentor, First Year Enrichment Program

## **EXTRACURRICULAR UNIVERSITY SERVICE**

ROCHESTER INSTITUTE OF TECHNOLOGY

2015–2017 Secretary, Data Science Research Group

2012–2013 Secretary, Psychology Student Society

## PROFESSIONAL MEMBERSHIPS

American Psychological Association

American Psychological Association Division 5