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Education

- Ph.D., Psychology, Texas A&M University – Commerce, 2010
- M.S., Mathematics, Oklahoma State University - 2002
- B.S. with highest honors, Mathematics, Southeastern Oklahoma State University, 2000

Academic positions

- 2019-present: Associate Professor (with tenure), Department of Psychological Sciences, Tarleton State University
- 2013-2019: Assistant Professor, Department of Psychological Sciences, Tarleton State University
- 2012-2013: Assistant Professor, Department of Mathematics, Texas A&M University – Commerce
- 2010-2012: Visiting Assistant Professor, Department of Psychology and Special Education, Texas A&M University – Commerce
- 2005-2010: Lecturer, Department of Mathematics, Texas A&M University - Commerce

Books

1. Faulkenberry, T. J. (2022). *Psychological Statistics: The Basics*. New York: Routledge. https://doi.org/10.4324/9781003181828

Papers (last 10 years)

1. Faulkenberry, T. J. (in press). A note on the normality assumption for modeling constraint in cognitive individual differences. To appear in *Metodoloski Zvezki: Advances in Methodology and Statistics*, https://arxiv.org/abs/2112.05503
2. Zapata, B., & Faulkenberry, T. J. (in press). A diffusion model decomposition of the unit-decade compatibility effect in two-digit number comparison. To appear in *Proceedings of the 21st International Conference on Cognitive Modeling (ICCM 2023)*. https://psyarxiv.com/f6qpy
3. Colpitts, K., Dias, J., Faulkenberry, T. J., & Harris Bozer, A. (in press). Investigation of the relationship between perceived mental workload and chronic pain. To appear in *Psi Chi Journal of Psychological Research*.
4. Faulkenberry, T. J., & Brennan, K. B. (2023). Computing analytic Bayes factors from summary statistics in repeated-measures designs. *Biometrical Letters, 60* (1), 1-21. https://doi.org/10.2478/bile-2023-0001
5. Brennan, K., Rutledge, M., & Faulkenberry, T. J. (2023). Arithmetic operation signs elicit spatial associations: A confirmatory Bayesian analysis. *Journal of Psychological Inquiry, 27* (1), 5-13. https://www.psychinquiry.org/wp-content/uploads/2023/05/vol27n1.pdf
6. Faulkenberrry, T. J., & Bowman, K. A. (2023). Bayesian modeling of the latent structure of individual differences in the numerical size-congruity effect. *Journal of Cognitive Psychology, 35* (2), 217-232. https://doi.org/10.1080/20445911.2022.2136186

7. Vogel, S., Faulkenberry, T. J., & Grabner, R. (2021). Quantitative and qualitative differences in the canonical and the reverse distance effect and their selective association with arithmetic and mathematical competencies. *Frontiers in Education: Educational Psychology, 6*: 655747. https://doi.org/10.3389/feduc.2021.655747

8. Faulkenberry, T. J. (2021). The Pearson Bayes factor: An analytic formula for computing evidential value from minimal summary statistics. *Biometrical Letters*, *58* (1), 1-26. https://doi.org/10.2478/bile-2021-0001

9. Nejman, J. A. & Faulkenberry, T. J. (2020). Implicit priming reveals decomposed processing in fraction comparison. *Journal of Psychological Inquiry*, *24* (2), 17-23. https://www.psychinquiry.org/wp-content/uploads/2021/01/vol24-2v3.pdf

10. Faulkenberry, T. J. (2020). Estimating Bayes factors from minimal summary statistics in repeated-measures analysis of variance designs. *Metodoloski Zvezki: Advances in Methodology and Statistics*, *17*, 1-17. https://arxiv.org/abs/1905.05569

11. Faulkenberry, T. J., Ly, A., & Wagenmakers, E. J. (2020). Bayesian statistics in numerical cognition: A tutorial using JASP. *Journal of Numerical Cognition*, *6*, 231-259. https://doi.org/10.5964/jnc.v6i2.288

12. Faulkenberry, T. J., Cruise, A., & Shaki, S. (2020). Task instructions modulate unit-decade binding in two-digit number representation. *Psychological Research*, *84*, 424-439. https://doi.org/10.1007/s00426-018-1057-9

13. Faulkenberry, T. J. (2019). Estimating evidential value from ANOVA summaries: A comment on Ly et al. (2018). *Advances in Methods and Practices in Psychological Science*, *2*, 406-409. https://doi.org/10.1177/2515245919872960

14. Faulkenberry, T. J. (2019). A tutorial on generalizing the default Bayesian t-test via posterior sampling and encompassing priors. *Communications for Statistical Applications and Methods*, *26*, 217-238. https://doi.org/10.29220/CSAM.2019.26.2.217

15. Frampton, A. R., & Faulkenberry, T. J. (2018). Mental arithmetic processes: Testing the independence of encoding and calculation. *Journal of Psychological Inquiry*, *22*, 30-35. https://www.psychinquiry.org/wp-content/uploads/2019/03/Vol22-1.pdf

16. Faulkenberry, T. J., Vick, A. D., & Bowman, K. A. (2018). A shifted Wald decomposition of the numerical size-congruity effect: Support for a late interaction account. *Polish Psychological Bulletin*, *49*, 391-397. https://doi.org/10.24425/119507

17. Faulkenberry, T. J., Witte, M., & Hartmann, M. (2018). Tracking the continuous dynamics of numerical processing: A brief review and editorial. *Journal of Numerical Cognition*, *4* (2), 271-285. https://doi.org/10.5964/jnc.v4i2.179

18. Faulkenberry, T. J. (2018). Computing Bayes factors to measure evidence from experiments: An extension of the BIC approximation. *Biometrical Letters*, *55* (1), 31-43. https://doi.org/10.2478/bile-2018-0003

19. Faulkenberry, T. J. (2018). A simple method for teaching Bayesian hypothesis testing in the brain and behavioral sciences. *Journal of Undergraduate Neuroscience Education*, *16*, A126-A130. http://www.funjournal.org/wp-content/uploads/2018/01/june-16-126.pdf?x91298

20. Faulkenberry, T. J. (2017). A single-boundary accumulator model of response times in an arithmetic verification task. *Frontiers in Psychology*, *8:1225*. https://doi.org/10.3389/fpsyg.2017.01225/

21. Faulkenberry, T. J., Cruise, A., & Shaki, S. (2017). Reversing the manual digit bias in two-digit number comparison. *Experimental Psychology*, *64*, 191-204. https://doi.org/10.1027/1618-3169/a000365

22. Sobel, K. V., Puri, A. M., Faulkenberry, T. J., & Dague, T. D. (2017). Visual search for conjunctions of physical and numerical size shows that they are processed independently. *Journal of Experimental Psychology: Human Perception & Performance*, *43*, 444-453. https://doi.org/10.1037/xhp0000323

23. Faulkenberry, T. J., & Tummolini, L. (2016). Commentary: Is there any Influence of Variations in Context on Object-Affordance Effects in Schizophrenia? Perception of Property and Goals of Action). *Frontiers in Psychology*, *7:1915*. https://doi.org/10.3389/fpsyg.2016.01915

24. Faulkenberry, T. J. (2016). Testing a direct mapping versus competition account of response dynamics in number comparison. *Journal of Cognitive Psychology*, *28*, 825-842. https://doi.org/10.1080/20445911.2016.119150

25. Sobel, K. V., Puri, A. M., & Faulkenberry, T. J. (2016). Bottom-up and top-down attentional contributions to the size-congruity effect. *Attention, Perception, & Psychophysics*, *78*, 1324-1336. https://doi.org/10.3758/s13414-016-1098-3

26. Faulkenberry, T. J., Cruise, A., Lavro, D., & Shaki, S. (2016). Response trajectories capture the continuous dynamics of the size congruity effect. *Acta Psychologica*, *163*, 114-123. https://doi.org/10.1016/j.actpsy.2015.11.010

27. Faulkenberry, T. J., Montgomery, S. A., & Tennes, S. N. (2015). Response trajectories reveal the temporal dynamics of fraction representations. *Acta Psychologica*, *159*, 100-107. https://doi.org/10.1016/j.actpsy.2015.05.013

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29. Faulkenberry, T. J. (2014). Hand movements reflect competitive processing in numerical cognition. *Canadian Journal of Experimental Psychology*, *68*, 147-151. https://doi.org/10.1037/cep0000021

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- 2021-2022, Mathematical Association of America, National Research Experiences for Undergraduates Program (NREUP), $30,125. *CMAT: Computational Mathematics at Tarleton*
- 2019-2020, Mathematical Association of America, National Research Experiences for Undergraduates Program (NREUP), $29,663. *CMAT: Computational Mathematics at Tarleton*
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