

Yutian Tang Thompson, M.A., M.S., Ph.D

Assistant Professor of Research, Department of Pediatrics
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EDUCATION AND TRAINING

Education

- 2013 - 2018 Doctor of Philosophy, Psychology, Quantitative Psychology
The University of Oklahoma, Norman, OK
"Bayesian and Frequentist Approaches for Factorial Invariance Test"
Advisor: Hairong Song, Ph.D
- 2013 - 2015 Master of Science, Psychology, Quantitative Psychology
The department of psychology, The University of Oklahoma, Norman, OK
"A comparison of multiple imputation software programs in the context of CFA with missing data"
Advisor: Taehun Lee, Ph.D
- 2010 - 2012 Master of Arts, Psychology
The department of psychology, Brandeis University, Waltham, MA
"Anxious Attachment and Social Information Processing: A Proposal Testing the Relationship between Anxious Attachment and Offensive Schema among Adolescents"
Advisor: Xiaodong Liu, Ph.D

Academic

- 2018 - Present Assistant Professor of Research, Department of Pediatrics, College of Medicine,
University of Oklahoma Health Sciences Center, Oklahoma City, OK

SCHOLARSHIP

Contracts, Grants, and Sponsored Research

Current Grants

Hecht, D. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), "Family KINnections 2.0: Collaboration in Kinship Navigation Programs," Sponsored by Oklahoma Department of Human Services

Grant/Contract Number: GRF00005192

Current Funding (Total Cost per Year): \$78,007.00

Total Direct Costs: \$61,910.00

October 1, 2021 - September 30, 2022

Milojevich, H. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), "Maternal Infant and Early Childhood Home Visiting (MIECHV) Evaluation 8.0," Sponsored by Oklahoma State Department of Health

Grant/Contract Number: GRF00005476

October 1, 2021 - September 30, 2022

Silovsky, J. F. (Principal Investigator), **Thompson, Y. T.** (Supporting Investigator), 5% Effort, "National Center on the Sexual Behavior of Youth: Implementing Community-Based Effective Interventions for Youth with Problematic or Illegal Sexual Behaviors," Sponsored by Office of Justice Programs
Current Funding (Total Cost per Year): \$500,000.00
Total Direct Costs: \$396,824.00
June 25, 2019 - September 30, 2022

Milojevich, H. M. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), 10% Effort, "MIECHV Continuous Quality Improvement (CQI) 7.0," Sponsored by Oklahoma State Department of Health
Grant/Contract Number: GRF00004791
Total Direct Costs: \$119,048.00
September 30, 2021 - September 29, 2022

Milojevich, H. M. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), 10% Effort, "Maternal Infant and Early Childhood Home Visiting Grant Program Evaluation (MIECHV 7.0)," Sponsored by Oklahoma State Department of Health
Grant/Contract Number: GRF00004784
Total Direct Costs: \$560,036.00
February 5, 2021 - September 29, 2022

Moore, K. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), "Early Access FY22," Sponsored by Developmental Disabilities Council of OK
Grant/Contract Number: GRF00005465
Current Funding (Total Cost per Year): \$100,000.00
Total Direct Costs: \$79,365.00
November 1, 2021 - June 30, 2022

Silovsky, J. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), "Treatment Outcomes for Children with Sexual Behavior Problems (Preschool and Primary Age)," Sponsored by Oklahoma Department of Human Services
Grant/Contract Number: GRF00005647
Current Funding (Total Cost per Year): \$9,898.00
Total Direct Costs: \$166,730.00
October 5, 2021 - June 30, 2022

Hecht, D. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), 10% Effort, "Evaluation of Oklahoma Children's Services (OCS) & Family TREE Evaluation," Sponsored by Oklahoma Department of Human Services
Grant/Contract Number: GRF00004886
Current Funding (Total Cost per Year): \$252,469.00
Total Direct Costs: \$200,372.00
July 1, 2021 - June 30, 2022

Silovsky, J. F. (Principal Investigator), **Thompson, Y. T.** (Supporting Investigator), 10% Effort, "Family Navigator E3 Project: Enhancing Early Engagement in Mental Health Services through Children's Advocacy Center's Family Advocates," Sponsored by NIH
Total Direct Costs: \$551,050.00
October 1, 2018 - September 30, 2021

Completed Grants

Silovsky, J. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), "National Center on the Sexual Behavior of Youth: Implementing Community-Based Effective Interventions for Youth with Problematic or Illegal Sexual Behaviors," Sponsored by Office of Justice Programs
Grant/Contract Number: GRF00003209

Current Funding (Total Cost per Year): \$500,000.00
Total Direct Costs: \$396,824.00
October 1, 2019 - September 30, 2022

McBride, B. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), "Early Access Extension,"
Sponsored by Developmental Disabilities Council of OK
Grant/Contract Number: GRF00005220
Current Funding (Total Cost per Year): \$33,250.00
Total Direct Costs: \$26,389.00
July 1, 2021 - September 1, 2021

Pending Grants

Silovsky, J. F. (Principal Investigator), **Thompson, Y. T.** (Biostatistician), 10% Effort, "National Center on the Sexual Behavior of Youth: Implementing Community-Based Effective Interventions for Adolescents and Children with Problematic or Illegal Sexual Behaviors"
Total Direct Costs: \$396,825.00
October 1, 2020 - September 30, 2021

Thompson, Y. T. (Principal Investigator), "Pilot Study to Investigate a Systematic Framework to Improve Data Quality for a National Child Welfare Database"
Total Direct Costs: \$45,000.00
July 1, 2022 - June 30, 2023

TEACHING AND INSTRUCTION

Professional and Continuing Education Instruction

- Thompson, Y.T.** & Bohora, S.B. (2018). Missing Data Analysis. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, August 16, 2018.
- Thompson, Y.T.** & Bohora, S.B. (2018). Growth Modeling I. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, October 18, 2018.
- Thompson, Y.T.** & Bohora, S.B. (2019). Growth Modeling II. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, January 24, 2019.
- Thompson, Y.T.** (2019). Moderator-Mediator Variables. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, April 26, 2019.
- Thompson, Y.T.** (2019). Regression Diagnostics on Assumptions. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, May 31, 2019.
- Thompson, Y.T.** (2020). Matched-Group Comparison Design. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, March 26, 2020.

Thompson, Y.T. (2020). Incomplete Data with Outliers. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Biomedical and Behavioral Methodology Core (BBMC) Meeting*; Oklahoma City, OK, May 25, 2020.

Thompson, Y.T. (2020). Interrater reliability and interrater agreement. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, May 27, 2020.

Thompson, Y.T. (2020). Effect Size Estimates. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, July 31, 2020.

Thompson, Y.T. (2020). Statistical Issues Recommendations for Clinic Trials During the COVID-19 Pandemic. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, August 28, 2020.

Thompson, Y.T. (2020). Clearinghouse Handbook of Standards and Procedures, Chapter 5: Evidence Review. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, September 25, 2020.

Thompson, Y.T. (2020). Regression Discontinuity Designs. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, November 25, 2020.

Thompson, Y.T. (2021). Variable selection, introduction of regularized regression. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, January 29, 2021.

Thompson, Y.T. (2021). Cluster randomized trials I: learning a lesson on research design and conduct from E3 training project. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, February 26, 2021.

Thompson, Y.T. (2021). Variable selection, introduction of regularized regression. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, January 29, 2021.

Thompson, Y.T. (2021). Cluster randomized trials I: learning a lesson on research design and conduct from E3 training project. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, February 26, 2021.

Thompson, Y.T. (2021). How to analyze ordinal data in psychology. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, August 27, 2021.

Thompson, Y.T. (2021). Multiple imputation. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, September 24, 2021.

Thompson, Y.T. (2022). Introduction of data mining: classification. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, January 28, 2022.

Thompson, Y.T. (2022). Introduction of data mining: classification. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI) Meeting*; Oklahoma City, OK, January 28, 2022.

Thompson, Y.T. (2022). Introduction of data mining II: random forest. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and

Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, March 25, 2022.

Thompson, Y.T. (2022). Joint model selection with multiple imputation under generalized linear mixed model. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Biomedical and Behavioral Methodology Core (BBMC)* Meeting; Oklahoma City, OK, April 07, 2022.

Liao, X, **Thompson, Y.T.** (2022). Introduction of survival analysis. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, April 29, 2022.

Thompson, Y.T., Liao, X, (2022). An introduction of Covariate-Adaptive Randomization. Presented to the University of Oklahoma Health Sciences Center Department of Pediatrics Section of Developmental and Behavioral Pediatrics at the *Section Ongoing Methodology Initiative (SOMI)* Meeting; Oklahoma City, OK, May 27, 2022.

Publication

- Scafe, M. J., Mapes, A. R., Bard, E., **Thompson, Y.** (2022, April). Prenatal substance exposure: How risk and protective factors predict children’s externalizing and internalizing symptoms. [Poster Presentation]. *Society of Pediatric Psychology Annual Conference*, Phoenix, AZ.
- **Thompson, Y. T.**, Song, H., Shi, D., & Liu, Z. (2020). It Matters: Reference Indicator Selection in Measurement Invariance Tests. *Educational and Psychological Measurement*. <https://doi.org/10.1177/0013164420926565>
- **Thompson, Y.T.**, Bayesian and Frequentist Approaches for Factorial Invariance Test, Doctoral Dissertation, 07/2018.
- Egan, R., Wilsie, C. C., **Thompson, Y. T.**, Funderburk, B. W., Bard, E (2020). A Community Evaluation of Parent-Child Interaction Therapy for Children with Prenatal Substance Exposure. *Children and Youth Services Review*, 116, 105239.
- Taylor, E., Dopp, A., Lounsbury, K., **Thompson, Y.T.**, Miller, M., Jorgensen, A., Silovsky, J., Enhancing early engagement (E3) in mental health services training for children’s advocacy center’s victim advocates: feasibility protocol for a randomized controlled trial. *Pilot and Feasibility Studies*. <https://doi.org/10.1186/s40814-021-00949-2>.
- **Thompson, Y.T.**, A Comparison of Multiple Imputation Software Programs in the Context of CFA with Missing Data, *Association for Psychological Science*, Chicago, 05/2016
- Lewis, M., **Thompson, Y.T.**, et al., Predicting Student Retention Using Data Mining Techniques, *Association for Psychological Science*, Boston, 05/2017.
- Wang, T., **Thompson, Y.T.**, Bad Romance: Transitional Justice and Authoritarian Nostalgia, *American Political Science Association*, San Diego, 08/2017.
- Lajos, J.E., **Thompson, Y.T.** et al., Exploring the Efficacy of a Game-Based Learning Application in Undergraduate Mathematics: Functions of the Machine, *SIGMAA-RUME 2018 Conference*, San Diego, CA, 02/2018.

Mentoring and Advising

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2021 - Present	Meredith Scafe	Doctoral Student	Mentor - Statistical analytic support	Meredith has made some progress on the manuscript of the ABC project.
2021	Chelsy Simmons	Graduate Student	Mentor	Provide statistical analytic consulting on her doctoral dissertation.

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2019 - 2021	Ashley Galsky	Postgraduate Fellow	Postdoctoral Research Supervision - Mentor - Experimental design advice and statistical analysis.	Dr Galsky has finished one of her post-doc research project and finalized in manuscript writing.
2019 - 2021	Ashley Jorgensen, Ph.D	Fellow, DBP/Department of pediatrics/College of medicine, CCAN	Mentor	Provide statistical analytic consulting and data science knowledge support. Dr. Jorgensen has successfully completed her post-doc training and working as a professional researcher.

ORGANIZATIONAL SERVICE

Organizational Committee Service

Division/Section

Attendee, Cultural awareness subcommittee, Pediatrics, July 1, 2021 - Present

PROFESSIONAL SERVICE

Editor, Editorial Board, Journal Reviewer

Journal Referee, Educational and psychological measurement, 2020 - Present

Editorial Board Member, Frontiers in quantitative psychology and measurement, 2020 – Present

Poster Judge, the 16th Annual Department of Pediatrics Research Day, March 4th, 2022

PROFESSIONAL MEMBERSHIPS

American Statistical Association (ASA)
Association for Psychological Science (APS)

June 1, 2020 - Present
January 1, 2016 - Present

PROFESSIONAL GROWTH AND DEVELOPMENT

Faculty Fellowships and Internships

Faulty Leadership, Career Development and Mentoring Programs, University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States, 88 Hours Per Year, Monthly, August 15, 2020 - June 3, 2021