

National Institutes of Health, National Institute of Mental Health R01

Title: The Impact of Food Pantry Accessibility, Customer Experience, and Nutrition on Food Insecurity, Mental Illness in the Era of COVID-19
Role: Co-Investigator (PI: Yu)
Duration: 9/1/2022-8/31/2026
Amount: \$1,565,000
Status: Pending

National Institutes of Health, National Library of Medicine R01

Title: Systems for Helping Patients Understand Their Clinical Visits
Role: Co-Investigator (PI: Yu)
Duration: 7/1/2022-6/30/2026
Amount: \$1,611,571
Status: Pending

Department of Education, China

Title: A Comparative Study of Narrative Language Development Among Children in China and U.S. from the Perspective of Language Typology
Role: Co-Investigator (PI: Zhang)
Duration: 8/1/2022-12/31/2025
Amount: \$31,447
Status: Pending

Funded

American Educational Research Association (AERA) – Division D

Title: Incorporating Machine Learning into Factor Mixture Modeling: Selection of Covariates to Predict Population Heterogeneity
Role: **Principal Investigator**
Duration: 3/1/2021-8/1/2021
Amount: \$4,921

National Institutes of Health, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) R00

Title: Virtual Reality-based Rehabilitation for Children with Traumatic Brain Injuries
Role: Co-Principal Investigator (PI: Shen)
Duration: 9/3/2020-8/31/2023
Amount: \$713,112

University of Massachusetts Lowell Internal Seed Grant

Title: Evaluating Statistical Models for the Disaggregation of Between-Person and Within-Person Effects
Role: **Principal Investigator**
Duration: 6/1/2019-5/31/2022
Amount: \$9,107

Peer Reviewed Journal Articles(n = 34)

- Wang, Y., Kim, E., Joo, S.H., Chun, S., Alamri, A., Lee, P., & Stark, S. (2022). Reconsidering multilevel latent class models: Can level-2 latent classes affect item response patterns? *Journal of Experimental Education*, 90(1), 158. <https://doi.org/10.1080/00220973.2020.1737413> [IF = 2.623; 5year IF = 3.114]
- Wang, Y., Kim, E., & Yi, Z. (2022). Robustness of latent profile analysis to measurement noninvariance between profiles. *Educational and Psychological Measurement*, 82(1), 5

- Tan, X. T., *Yi, Z., Kamphaus, R., Wang, Y., *Li, Z., & *Cheng, K. (2019). Testing the reliability and construct validity of the Chinese translation of BASRP for 1218-year old youth. *Journal of Psychoeducational Assessment*, 38(5), 1299-1317. <https://doi.org/10.1177/0734282919874217> [IF = 1.256; 5year IF = 1.626]
- Zhang, F., McCabe, A., Ye, J., Wang, Y., & Li, X. (2019). A developmental study of the narrative components and patterns of Chinese children aged three to six years. *Journal of Psycholinguistic Research*, 48(2), 457-470. <https://doi.org/10.1007/s10996-018-9614-3> [IF = .655; 5year IF = .791]
- Wang, Y., *Pham, T. V., *Nguyen, D. T., Kim, E. S., Chen, H., Kromrey, J. D., *Yi, Z., & *Yin, Y. (2018). Evaluating the efficacy of conditional analysis of variance under heterogeneity and nonnormality. *Journal of Modern Applied Statistical Methods*, 18(2), eP2701. <https://doi.org/10.22237/jmasm/1555340224>
- Kim, E. S. & Wang, Y. (2018). Investigating sources of heterogeneity with the multilevel factor mixture modeling: Beyond testing measurement invariance in cross-national studies. *Structural Equation Modeling: A Multidisciplinary Journal*, 26(2), 185-208. <https://doi.org/10.1080/10705511.2018.1521184> [IF = 4.426; 5year IF = 6.742]
- Tan, T. X., Wang, Y., Chea, C., & Wang, G. H. (2018). Reliability and construct validity of Children's Sleep Habits Questionnaire in Chinese kindergartners. *Sleep Health: Journal of the National Sleep Foundation*, 4(1), 1009. <https://doi.org/10.1016/j.sleh.2017.10.008>
- Wang, Y., & Kim, E. S. (2017). Evaluating model fit and structural coefficient bias: A Bayesian approach to multilevel bifactor model misspecification. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(5), 699-713. <https://doi.org/10.1080/10705511.2017.1333910>
- Wang, Y., Kim, E. S., Dedrick, R., Ferron, J., & Tan, T. X. (2017). A multilevel bifactor approach to construct validation of the mixed-format Students Confident in Mathematics Scale. *Educational and Psychological Measurement*, 76(2), 253-271. <https://doi.org/10.1177/0013164417690858>
- Wang, Y., Rodriguez de Gil, P., Chen, H., Kromrey, J. D., Kim, E. S., Nguyen, D. T., Pham, T. V., & Romano, J. (2017). Comparing the performance of approaches for testing the Homogeneity of Variance assumption in factor ANOVA models. *Educational and Psychological Measurement*, 77(2), 308-329. <https://doi.org/10.1177/0013164416645162>
- Kim, E. S., Cao, C., Wang, Y., & Nguyen, D. T. (2017). Measurement invariance testing with many groups: A comparison of three approaches. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(4), 525-544. <https://doi.org/10.1080/10705511.2017.1304822>
- Kim, E. S., & Wang, Y. (2017). Class enumeration and parameter recovery of growth mixture

modeling and second-order growth mixture modeling in the presence of measurement noninvariance *Frontiers in Psychology*, 8:1499.
<https://doi.org/10.3389/fpsyg.2017.01499>

Kim, E. S., Wang, Y., & Kiefer, S(2017

Tan, T. X., & Wang, Y. (under review). Maternal education, home environment and children's academic performance: 8efw3J [-1(o)] TJ4(er)] TJ [DC [2(Wan)] TJ EMC /ArtifactBDC 5.011 0 g

Yan Wang

heterogeneity. Paper presented at American Educational Research Association (AERA), San Antonio, USA.

Wang, Y., & Kim, E. S. (2016 April). Evaluating model fit and structural coefficient bias: A Bayesian approach to multilevel bifactor model misspecification. Paper presented at American Educational Research Association (AERA), Washington, D.C., USA.

Kim, E. S., Cao, C., **Wang, Y.**, & Nguyen, D. T. (2016 April). Testing measurement invariance with many groups: An empirical comparison of five approaches. Poster presented at American Educational Research Association (AERA), Washington, D.C.

Nguyen, D. T., Kim, E. S., **Wang, Y.**, Pham, T. V., Kromrey, J., & Chen, Y-H. (2016 April). Testing mean equality under heterogeneity and nonnormality: An empirical comparison of tests for one-factor ANOVA models. Paper presented at American Educational Research Association (AERA), Washington, D.C., USA.

Wang, Y., Li, I., & Kim, E. S. (2015 November). A cro

Li, J., White, C. E., & **Wang, Y.** (2014 April). Urban adolescents' stories about new technologies and their applications for literacy instruction and learning. Paper presented at American Educational Research Association (AERA), Philadelphia, USA.

Li, I., Che

PSYC.4860 Community Service Learning

Spring 2019 (1 student, 3 credits, evaluation not conducted for service learning courses)

Spring 2020 (1 student, 3 credits, evaluation not conducted for service learning courses)

PSYC.7030 Selected Topics in Applied Psychology & Prevention Science (APPS): Multilevel Modeling

Spring 2021 (12 students, 3 credits, evaluation 4.89/5)

PSYC.6930 Directed Study in APPS

Spring 2021 (1 student, 3 credits, evaluation not conducted for Directed Studies)

MENTORING

Doctoral Students

Primary and Secondary Advisor

2021— Alexandria Winstt3 Tft*(2021) Tj(—) Tj[-2(ns)] reiea X(e)] TJ-uEMCBT/Head2 TJ TJ] TJ(t3 T

SERVICE ACTIVITIES

Profession

Editorial Board

- 2022— Editorial advisory board member, School Psychology Review
 2020— Consulting editor, Behavior Research Methods

Ad Hoc Review

- 2021— Urban Education
 2021— PLOS ONE
 2021— Cyberpsychology: Journal of Psychosocial Research on Cyberspace
 2020— Sociological Methods and Research
 2020— Frontiers in Psychology
 2020— BMC Public Health
 2018—2020 Behavior Research Methods
 2018— Structural Equation Modeling: A Multidisciplinary Journal
 2017— Educational and Psychological Measurement
 2017— Journal of Psychoeducational Assessment
 2015— American Educational Research Association Conference
 2014 American Evaluation Association Conference

Grant Proposal Review

- 2021 Reviewer, virtual panel for the National Science Foundation, Directorate for Engineering, Engineering Education and Centers
 - Reviewed six grant proposals
 - Discussed and rated 12 proposals in the two-day panel
 2020 Reviewer, virtual panel for the National Science Foundation, Directorate for Education & Human Resources
 - Reviewed seven grant proposals
 - Discussed and rated 14 proposals in the two-day panel

Professional Conferences

- 2022— Secretary/Treasurer, Special Interest Group – Multilevel Modeling, AERA
 2022 Chair, Paper session (Methodological Considerations and Guidance for Estimating Longitudinal/Growth Models), AERA Annual Meeting
 2021 Chair, Paper session (Experiment Designs of Educational Research Studies), AERA Annual Meeting
 2021 Chair, Roundtable session (Advanced Structural Equation Modeling and Hierarchical Modeling at Roundtable), AERA Annual Meeting

Memberships in Professional Organizations

- 2014— American Educational Research Association (AERA)
 - Division D: Measurement and Research Methodology
 - SIG-Structural Equation Modeling
 - SIG-Multilevel Modeling
 - SIG-Educational Statisticians

- SIG-Systematic Reviews and Meta-Analysis
- 2019— American Psychological Association (APA)
- Division 5: Quantitative and Qualitative Methods

Department

- 2020— Member, Undergraduate Program Committee
- 2018— Member, Applied Psychology and Prevention Science Ph.D. Program Committee
- Sent emails requesting professional organizations to post advertisements for the program
 - Disseminated advertisements for the program to colleagues and potential applicants
 - Gave a talk to APPS students regarding the preparation of CV, research, and teaching statements for job searches in academia
 - Developed an advanced statistical course on multilevel modeling at the request of the committee

College

- 2020— Faculty advisor, FAHSS Ph.D. Student Advisory Board
- Met board members (6 doctoral students from the three Ph.D. programs under FAHSS) to discuss and help coordinate events

University

- 2021— Core (and founding) faculty member, Center for Health Statistics
- Discussed the purpose and scope of the center
 - Edited the application document for the center
 - Initiate and co-organize (with Hsien-Yuan Hsu) a Quantitative Series that consists of monthly presentations on advanced quantitative methodology
- 2021— Member, Faculty Senate, University of Massachusetts Lowell
- 2021— Associate member, Center for Program Evaluation (CPE)
- Participated in CPE sponsored events such as Brown Bags and Writer's Blocks
- 2020— Member, Committee on Interdisciplinary Offerings in Data Science/Analytics/Computation
- Attended meetings to discuss interdisciplinary course offerings
- 2018— Member, Center for Population Health (CPH)
- Participated in CPH meetings to provide consultation on research projects
 - Collaborated with center members on grants and papers

Community

- 2019— WOC (without compensation) appointee, VA Medical Center at Bedford MA
- Assisted with Dr. Hong Yu (UML, Computer Science) on research projects including study design, data analysis, and manuscript reviewing/writing