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EDUCATION

Ph.D., Quantitative Psychology, University of Virginia, Charlottesville, VA, 2008

Advisors: Dr. John R. Nesselrode & Dr. John J. McArdle

M.A., Quantitative Psychology, University of Virginia, Charlottesville, VA, 2006

Advisor: Dr. John J. McArdle

M.S., Statistics, Renmin University of China, Beijing, 2003

Advisor: Dr. Yanyun Zhao

B.S., Statistics (minor in Finance), Renmin University of China, Beijing, 2000

ACADEMIC POSITIONS

2020 - Professor, Department of Psychology, University of Notre Dame

2015 - 2020 Associate Professor, Department of Psychology, University of Notre Dame

2008 - 2015 Assistant Professor, Department of Psychology, University of Notre Dame

SELECTED DISTINCTIONS, HONORS, AND AWARDS

- 2019 SMEP Early Career Research Award, Society of Multivariate Experimental Psychology
- 2019 - 2020 Consulting Editor, *Cultural Diversity and Ethnic Minority Psychology*
- 2018 Joyce Award for Excellence in Undergraduate Teaching, University of Notre Dame
- 2018- Editorial Board, *Multivariate Behavioral Research*
- 2016 - 2023 Associate Editor, *Psychological Methods*
- 2016 - Elected member, Society of Multivariate Experimental Psychology
- 2014 NSF Graduate Research Fellowship (Role: Mentor)
- 2007, 2005 Competitive Society of Multivariate Experimental Psychology Travel Award
- 2006 - 2008 Fellow, International Max Planck Research School on the Life Course
- 2007 ETS Summer Internship Award
- 2006 National First-class Award on Statistical Research Books, National Bureau of Statistics of China
- 2000 Excellent Senior Thesis Award, School of Statistics, Renmin University of China

EXTERNAL RESEARCH GRANTS

2023-2028. *Racial discrimination, intergenerational cultural conflict and Asian American mental health*. NIH R01MH132730. Role: Statistical Consultant; PI: Yoonsun Choi at University of Chicago.

2023-2025. *Identifying adolescent social media response in real-time: Risk and protective factors for Asian American mental health*. NIH R21HD115355. Role: Co-I, PI of the ND sub-award; PI: Cindy Liu at The Brigham and Women's Hospital and Harvard University.

2023 - 2026. *Longitudinal associations between maternal and child emotion regulation: Examining the role of maternal emotion-related socialization behaviors*. NIH 1F31HD110172. Role: Statistics Mentor; PI: Katherine Edler.

2022 - 2027. *An evidence-based family support program for parents and children in Palestine: A theory-based intervention*. NIH R01MH128929. Role: Co-I; MPIs: Mark Cummings and Laura Miller-Graff.

2022-2027. *Discrimination and racial socialization on Asian American parent and youth mental health*. NIH R01MH129360. Role: Co-I, PI of the ND sub-award; PI: Cindy Liu at The Brigham and Women's Hospital and Harvard University.

2021-2025. *Methods and software for handling network data and text data in structural equation modeling*. IES R305D210023. Role: Co-PI; PI: Johnny Zhang.

2020-2025. *Latino youths coping with discrimination: A multi-level investigation in micro- and macro-time*. NIH R01MD014737. Role: Co-I, Co-PI of the ND sub-award; PI: Margarita Alegria at Harvard University.

2021-2022. *Intervening during the prenatal period with women exposed to intimate partner violence to improve maternal functioning and infant adjustment*. NIH R01HD98092-03S1. Role: Co-I; PI: Laura Miller-Graff.

2019-2025. *Intervening during the prenatal period with women exposed to intimate partner violence to improve maternal functioning and infant adjustment*. NIH R01HD098092. Role: Co-I; PI: Laura Miller-Graff.

2019-2024. *Psychosocial stress, epigenetics and health disparity in hypertension*. NIH R01MD013307. Role: Methodology consultant; PI: Shaoyong Su at Georgia Prevention Institute.

2018-2023. *Pathways linking early adversity and support to behavioral and physical health*. NIH R01HD091235. Role: Co-I; PI: Kristin Valentino.

2017-2022. *Families of youth with developmental disabilities: A theory-based intervention*. NIH R01HD088482. Role: Statistical consultant; PI: E. Mark Cummings.

2017-2021. *Efficacy of family programs for improving child and family health and development*. NIH R01HD087319. Role: Co-I; PI: Julie Braungart-Rieker.

2013-2016. *Discrimination and mental health in Latino families: Mediators and moderators*. NIH R21MH097675. Role: Co-I, PI of the ND sub-award; PI: Irene Park.

2011-2014. *The science of honesty*. John Templeton Foundation #23014. Role: Co-PI; PI: Anita Kelly.

2011-2013. *Creativity of college students in China and USA: A cross-cultural comparison study*. Sponsor: Renmin University of China. Role: PI.

PUBLICATIONS

***Indicates a co-author who was a graduate student when the research was initiated; Beginning 2020, I switched from second to last author to signal senior authorship.**

***@Indicates a quantitative minor student.**

Refereed Journal Articles

1. Alegría, M., Cruz-Gonzalez, M., Yip, T., Wang, L., Park, I. J. K., Fukuda, M., Valentino, K., Giraldo-Santiago, N., Zhen-Duan, J., Alvarez, K., Barrutia, X., & Shrout, P. E. (in press). Yearly and daily discrimination-related stressors and Mexican youth's mental health and sleep: Insights from the first wWave of a three-wave family study. *Journal of the American Academy of Child and Adolescent Psychiatry*.
2. *Murray, S., *Nowak, A., *O'Neill, M., Wang, L., Cummings, E. M., & Braungart-Rieker, J. M. (in press). Parents' postpartum romantic attachment and constructiveness: The protective effects of a communication intervention for parents' relationship functioning over one year. *Developmental Science*.
3. *Fang, Y., & Wang, L. (in press). Dynamic structural equation modeling with missing data: Data requirements for N and T . *Structural Equation Modeling*.
4. *Murray, S., Wang, L., Cummings, E. M., & Braungart-Rieker, J. M. (in press). Infant externalizing behavior and parent depressive symptoms: Prospective predictors of parental pandemic related distress. *Infancy*. <https://doi.org/10.1111/infa.12541>
5. *Liu, X., Zhang, Z., Valentino, K., & Wang, L. (in press). The impact of omitting confounders in parallel process latent growth curve mediation models: Three sensitivity analysis approaches. *Structural Equation Modeling*. <https://doi.org/10.1080/10705511.2023.2189551>
6. Qin, X., & Wang, L. (2023). Causal moderated mediation analysis: Methods and software. *Behavior Research Methods*. <https://doi.org/10.3758/s13428-023-02095-4>
7. *Liu, X., Liu, F., Miller-Graff, L., Howell, K., & Wang, L. (2023). Causal inference for treatment effects in partially nested designs. *Psychological Methods*. DOI: 10.1037/met0000565

8. *Edler, K., *Behrens, B., Wang, L., & Valentino, K. (2023). Validation of the Parental Reflective Functioning Questionnaire among maltreating and nonmaltreating mothers. *Journal of Family Psychology, 37*(3), 324-334.
9. *Liu, X., Zhang Z., & Wang, L. (2023). Bayesian hypothesis testing of mediation: Methods and the impact of prior odds specifications. *Behavior Research Methods, 55*(3), 1108-1120.
10. *Wilcox, K. T., & Wang, L. (2023). Modeling approaches for cross-sectional integrative data analysis: Evaluations and Recommendations. *Psychological Methods, 28*(1), 242-261.
11. *Devonshire, J. M., Cummings, E. M., & Wang, L. (2023). Long-term interparental conflict behavior and knowledge change after a brief family intervention. *Journal of Family Psychology, 37*(1), 92–104.
12. *Liu, X., Valentino, K., & Wang, L. (2022). The impact of omitting confounders in latent growth curve mediation modeling: Analytical examination and methods for sensitivity analysis. *Multivariate Behavioral Research, 57*(1), 153-154.
13. *Wilcox, K. T., & Wang, L. (2022). Jointly modeling participant-level data and summary statistics for treatment differences. *Multivariate Behavioral Research, 57*(1), 175-176.
14. Narvaze, D., Gleason, T., *Tarsha, M., *Woodbury, R., Cheng, Y., & Wang, L. (2021). Sociomoral Temperament: A mediator between wellbeing and social outcomes in young children. *Frontiers in Psychology*. doi: 10.3389/fpsyg.2021.742199
15. *Tran, D., Braungart-Rieker, J., & Wang, L. (2021). Indirect effects of parental physical discipline on child literacy through child externalizing and internalizing problems: A longitudinal mediation. *Developmental Psychology, 57*(1), 47-59.
16. *Liu, X., & Wang, L. (2021). The impact of measurement error and omitting confounders on statistical inference of mediation effects and tools for sensitivity analysis. *Psychological Methods, 26*(3), 327-342.
17. *Liu, Q., & Wang, L. (2021). T-test and ANOVA for data with ceiling and/or floor effects. *Behavior Research Methods, 53*, 264-277.
18. *Speidel, R., Wang, L., Cummings, E. M., & Valentino, K. (2020). Longitudinal pathways of family influence on child self-regulation: The roles of parenting, family expressiveness, and maternal sensitive guidance in the context of child maltreatment. *Developmental Psychology, 56*(3), 608-622.
19. Wang, L., & Zhang, Q. (2020). Investigating the impact of the time interval selection on autoregressive mediation modeling: Result interpretations, effect reporting, and temporal designs. *Psychological Methods, 25*(3), 271–291.
20. *Liu, X., & Wang, L. (2020). The combined effects of omitting confounders and measurement error on statistical inference of mediation and a new tool for sensitivity analysis. *Multivariate Behavioral Research, 55*(1), 137–138.
21. *Du, H., & Wang, L. (2020). Testing variance components in linear mixed modeling using permutation. *Multivariate Behavioral Research, 55*(1), 120-136.

22. Narvaez, D., Wang, L., Cheng, A., Gleason, T., *Woodbury, R., *Kurth, A., & Lefever, J.B. (2019). The importance of early life touch for psychosocial and moral development. *Psicologia: Reflexão e Crítica*. doi:10.1186/s41155-019-0129-0
23. *Liu, X., & Wang, L. (2019). Sample size planning for detecting mediation effects: A power analysis procedure considering uncertainty in effect size estimates. *Multivariate Behavioral Research*, 54(6), 822-839.
24. Wang, L., Zhang, Q., Maxwell, S. E., & Bergeman, C. S. (2019). On standardizing within-person effects: Potential problems of global standardization. *Multivariate Behavioral Research*, 54(3), 382-403.
25. Narvaez, D., *Woodbury, R., Cheng, Y., Wang, L., *Kurth, A., Gleason, T., Deng, L., Gutzwiller-Helfenfinger, E., Christen, M. and Näpflin, C. (2019). Evolved Developmental Niche provision report: Moral socialization, social thriving, and social maladaptation in three countries. *SAGE Open*, 9(2), p.2158244019840123.
26. *Zhang, Q., Yuan, K.-H., & Wang, L. (2019). Asymptotic bias of normal-distribution-based maximum likelihood estimates of moderation effects with missing at random data. *British Journal of Mathematical and Statistical Psychology*, 72, 334-354.
27. Wang, L., *Yang, M., & *Liu, X. (2019). The impact of over-simplifying the between-subject covariance structure on inferences of fixed effects in modeling nested data. *Structural Equation Modeling*, 26(1), 1-11.
28. Park, I. J. K., *Du, H., Wang, L., Williams, D. R., & Alegría, M. (2019). The role of parents' ethnic-racial socialization practices in the discrimination—depression link among Mexican-Origin adolescents. *Journal of Clinical Child and Adolescent Psychology*. doi: 10.1080/15374416.2018.1547969.
29. *Blaxton, J., Bergeman, C. S., & Wang, L. (2018). Daily stress reactivity across the lifespan: Longitudinal and cross-sectional effects of age. *Journal of Gerontology: Psychological Sciences*. doi: 10.1093/geronb/gby046
30. *Du, H., & Wang, L. (2018) Reliabilities of intraindividual variability indicators with autocorrelated longitudinal data: Implications for longitudinal study designs. *Multivariate Behavioral Research*, 53(4), 502-520.
31. *Joiner, R., Bergeman, C. S., & Wang, L. (2018). Affective experience across the adult lifespan: An accelerated longitudinal design. *Psychology and Aging*, 33(3), 399-412.
32. *@Hornburg, C., Wang, L., & McNeil, N. (2018). Comparing meta-analysis and individual person data analysis using raw data on children's understanding of equivalence. *Child Development*, 89(6), 1983-1995. Hornburg's quantitative-minor project.
33. Park, I. J. K., *Du, H., Wang, L., Williams, D. R., & Alegría, M. (2018). Racial/ethnic discrimination and mental health in Mexican-origin youths and their parents: Testing the "linked lives" hypothesis. *Journal of Adolescent Health*, 62(4), 480-487.
34. *Zhang, Q., Wang, L., & Bergeman, C. S. (2018). Multilevel autoregressive mediation models: Specification, estimation, and applications. *Psychological Methods*, 23(2), 278 - 297.

35. Park, I. J. K., Wang, L., Williams, D. R., & Alegria, M. (2017). Coping with racism: Moderators of the discrimination-adjustment link among Mexican-origin adolescents. *Child Development, 89*(3), e293-e310.
36. *Du, H., Liu, F., & Wang L. (2017). A Bayesian "fill in" method for correcting or publication bias in meta-analysis. *Psychological Methods, 22*(4), 799 -817.
37. *Zhang, Q. & Wang, L. (2017). Moderation analysis with missing data in the predictors. *Psychological Methods, 22*(4), 649 - 666.
38. Park, I. J. K., Wang, L., Williams, D. R., & Alegria, M. (2017). Does anger regulation mediate the discrimination-mental health link among Mexican-origin adolescents? A longitudinal mediation analysis using multilevel modeling. *Developmental Psychology, 53*(2), 340-352.
39. *@Planalp, E. M., *Du, H., Braungart-Rieker, J. M., & °Wang, L. (2017). Growth curve modeling to studying change: A comparison of approaches using longitudinal dyadic data with distinguishable dyads. *Structural Equation Modeling, 24*(1), 129-147. Planalp's quantitative-minor project. °contact author.
40. *Du, H. & Wang L. (2017). Investigating reliabilities of intraindividual variability indicators with autocorrelated longitudinal data. *Multivariate Behavioral Research, 52*(1), 120-121.
41. *Du, H. & Wang, L. (2016b). A Bayesian power analysis procedure considering uncertainty in effect size estimates from a meta-analysis. *Multivariate Behavioral Research, 51*(5), 589-605.
42. Narvaez, D., Wang, L., & Cheng, A. (2016). Evolved Developmental Niche History: Relation to adult psychopathology and morality. *Applied Developmental Science, 20* (4), 294-309.
43. Deng, L., °Wang, L., & Zhao, Y. (2016). How creativity was affected by environmental factors and individual characteristics: A cross-cultural comparison perspective. *Creativity Research Journal. 28*(3), 357-366. °contact author.
44. *Du, H., & Wang, L. (2016a). The impact of the number of dyads on estimation of dyadic data analysis using multilevel modeling. *Methodology, 12*, 21-31.
45. *Nuttall, A. K., Valentino, K., Wang, L., Lefever, J. B., & Borkowski, J. G. (2015). Maternal history of parentification and maternal warm responsiveness across the transition to parenthood: The mediating role of maternal knowledge of infant development. *Journal of Family Psychology, 29*(6), 863-872.
46. Wang, L. & Maxwell, S. E. (2015). On disaggregating between-person and within-person effects with longitudinal data using multilevel models. *Psychological Methods, 20*(1), 63-83.
47. *Ke, Z. & Wang, L. (2015). Detecting individual differences in change: Methods and comparisons. *Structural Equation Modeling, 22*(3), 382-400.
48. Wang, L. & Preacher, K. J. (2015). Moderated mediation analysis using Bayesian methods. *Structural Equation Modeling, 22*(2), 249-263.

49. *Yang, M., Wang, L., & Maxwell, S. E. (2015). Bias in longitudinal data analysis with missing data using typical linear mixed-effects modeling and pattern-mixture approach: An analytical illustration. *British Journal of Mathematical and Statistical Psychology*, *68*(2), 246-267.
50. *Zhang, Q. & Wang, L. (2015). Evaluating methods for moderation analysis with missing data in the predictors. *Multivariate Behavioral Research*, *50*(1), 144-145.
51. *Zhang, Q. & Wang, L. (2014). Aggregating and testing intra-individual correlations: Methods and comparisons. *Multivariate Behavioral Research*, *49*(2), 130-148.
52. Narvaez, D., Gleason, T., Wang, L., Brooks, J., Lefever, J. B., Cheng, Y. & Centers for the Prevention of Child Neglect (2013). The evolved development niche: Longitudinal effects of caregiving practices on early childhood psychosocial development. *Early Childhood Research Quarterly*, *28*(4), 759-773.
53. Narvaez, D., Wang, L., Gleason, T., Cheng, Y., Lefever, J., & Deng, L. (2013). The evolved developmental niche and child socio-moral outcomes in Chinese 3-year-olds. *European Journal of Developmental Psychology*, *10*(2), 106-127.
54. Zhang, Z., & Wang, L. (2013). Methods for mediation analysis with missing data. *Psychometrika*, *78*(1), 154-184.
55. *Ke, Z. & Wang, L. (2013). Investigating methods for detecting interindividual differences in intraindividual change. *Multivariate Behavioral Research*, *48*(1), 162-163.
56. Wang, L. & Grimm, K. J. (2012). Investigating reliabilities of intraindividual variability indicators. *Multivariate Behavioral Research*, *47*(5), 771-802.
57. Wang, L., Hamaker, E., & Bergeman, C. (2012). Investigating inter-individual differences in short-term intra-individual variability. *Psychological Methods*, *17*(4), 567-581.
58. Zhang, Z., & Wang, L. (2012). A note on the robustness of a full Bayesian method for non-ignorable missing data analysis. *Brazilian Journal of Probability and Statistics*, *26*(3), 244-264.
59. *Macready, D. E., *Cheung, R., Kelly, A. E., & Wang, L. (2011). Can public versus private disclosure cause greater psychological symptom reduction? *Journal of Social and Clinical Psychology*, *30*(10), 1015-1042.
60. Driscoll, K.C., Wang, L., Mashburn, A.J., & Pianta, R.C. (2011). Fostering supportive teacher-child relationships: Intervention implementation in a state-funded preschool program. *Early Education and Development*, *22*(4), 593-619.
61. Wang, L. & Zhang, Z. (2011). Estimating and testing mediation effects with censored data. *Structural Equation Modeling*, *18*(1), 18-34.
62. Wang, L. (2010). IRT-ZIP modeling for multivariate zero-inflated count data. *Journal of Educational and Behavioral Statistics*, *35*(6), 671-692.
63. MacCann, C., Wang, L., Matthews, G., & Roberts, R. D. (2010). Emotional intelligence and the eye of the beholder: Comparing self- and parent-rated situational judgments in adolescents. *Journal of Research in Personality*, *44*(5), 673-676.

64. Zhang, Z. & Wang, L. (2009). Statistical power analysis for longitudinal data using SAS. *Behavioral Research Methods*, 41(4), 1083-1094.
65. Wang, L., Zhuang, X., Liu, O., MacCann, C., & Roberts, R. (2009). Assessing teamwork and collaboration in high school students: A multimethod approach. *Canadian Journal of School Psychology*, 24(2), 108-124.
66. Wang, L., Zhang, Z., McArdle, J. J., & Salthouse, T. A. (2008). Investigating ceiling effects in longitudinal data analysis. *Multivariate Behavioral Research*, 43(3), 476-496.
67. Zhang, Z., McArdle, J. J., Wang, L., & Hamagami, F. (2008). A SAS interface for Bayesian analysis with WinBUGS. *Structural Equation Modeling*, 15(4), 705-728.
68. Wang, L., & McArdle, J. J. (2008). A simulation study comparison of Bayesian estimation with conventional methods for estimating unknown change points. *Structural Equation Modeling*, 15(1), 52-74.
69. Zhang, Z., Hamagami, F., Wang, L., Grimm, K. J., & Nesselroade, J. R. (2007). Bayesian analysis of longitudinal data using growth curve models. *International Journal of Behavioral Development*, 31(4), 374-383.
70. Schwenzer, K. J., & Wang, L. (2006). Assessing moral distress in respiratory care practitioners. *Critical Care Medicine*, 34(12), 2967-2973.
71. Ram, N., Chow, S. M., Bowles, R. P., Wang, L., Grimm, K. J., Fujita, F., & Nesselroade, J. R. (2005). Examining interindividual differences in cyclicity of pleasant and unpleasant affect using spectral analysis and item response modeling. *Psychometrika*, 70(4), 773-790.

Books, Book Chapters, Book Reviews, and Conference Proceedings

72. *Liu, X., & Wang, L. (2019). Latent growth curve models with VAR residuals for longitudinal mediation analysis. In Z. Zhang, K. Yuan, Y. Wen, & J. Tang (Eds.), *Proceedings of the 2019 Meeting of International Society for Data Science and Analytics* (pp. 9-22). Granger, IN: ISDSA Press.
73. Wang, L., & *Yang, M. (2018). On interindividual differences in intraindividual changes. In E. Ferrer, S. M. Boker, & K. J. Grimm (Eds.), *Advances in Longitudinal Models for Multivariate Psychology* (pp. 166 – 188). New York: Taylor & Francis.
74. Zhang, Z., & Wang, L. (2017-2022). *Advanced statistics using R*. [<https://advstats.psychstat.org>]. Granger, IN: ISDSA Press. ISBN: 978-1-946728-01-2.
75. Wang, L., & *Anderson, S. F. (2016). A Review of Intensive Longitudinal Methods: An Introduction to Diary and Experience Sampling Research. *Journal of Educational and Behavioral Statistics*, 41(6), 653-658.
76. Gleason, T., Narvaez, D., Cheng, A., Wang, L., & Brooks, J. (2016). Wellbeing and sociomoral development in preschoolers: The role of maternal parenting attitudes consistent with the Evolved Developmental Niche. In D. Narvaez, J. Braungart-Rieker, L. Miller, L. Gettler, & P. Hastings (Eds.), *Contexts for young child flourishing: Evolution, family and society* (pp. 166-184). New York, NY: Oxford University Press.

77. Narvaez, D., Gleason, T., Lefever, J.B., Wang, L., & Cheng, A. (2016). Early experience and ethical orientation. In D. Narvaez, *Embodied morality: Protectionism, engagement and imagination* (pp. 73-98). New York, NY: Palgrave-Macmillan.
78. Zhang, Z., Wang, L., & *Tong, X. (2015). Mediation Analysis with Missing Data through Multiple Imputation and Bootstrap. In L. A. van der Ark, D. M. Bolt, W.-C. Wang, J. A. Douglas, & S.-M. Chow (Eds.) *Quantitative Psychology Research: the 79th Annual Meeting of the Psychometric Society* (pp. 341–355). Springer Proceedings in Mathematics & Statistics.
79. Wang, L., Zhang, Z., & Estabrook, R. (2009). Longitudinal mediation analysis of training intervention effects. S-M. Chow, E. Ferrer, & F. Hsieh (Eds), *Statistical methods for modeling human dynamics: An interdisciplinary dialogue* (pp. 349-380). New York, NY: Taylor & Francis.
80. Zhuang, X., MacCann, C., Wang, L., Liu, L., & Roberts, R. D. (2008). Development and validity evidence supporting a teamwork and collaboration assessment for high school students. *ETS Research Report Series*, RR-08-50.
81. Zhang, Z., & Wang, L. (2008). Methods for evaluating mediation effects: Rationale and comparison. In K. Shigemasu, A. Okada, T. Imaizumi, & T. Hoshino (Eds.), *New trends in psychometrics* (pp. 595-604), Tokyo: Universal Academy Press.
82. McArdle, J. J., & Wang, L. (2008). Modeling age-based turning points in longitudinal life-span growth curves of cognition. In P. Cohen (Ed.), *Applied data analytic techniques for turning point research* (pp. 105-128). New York, NY: Taylor & Francis.
83. Wang, L., & Zhao, Y. (2005). Modeling economic growth competitiveness of China using structural equation models (in Chinese). In Y. Zhao (Ed.), *International Competitiveness: Statistical models and application research* (Chapter 5, pp. 72-100). Beijing, China: Standard Press of China.

ACADEMIC PRESENTATIONS

- * indicates a co-presenter who was a graduate student when the research was initiated;**
***@ indicates quantitative minor student.**

Wang, L., and *Li, R. (October 2023). *Investigating data quality in daily diary data: A case study*. Talk presented at the 2023 Annual Society of Multivariate Experimental Psychology (SMEP) meeting.

*Li, R., and Wang, L. (October 2023). *An analytical comparison of the cross-lagged, latent growth curve, and latent difference score models for longitudinal mediation analysis*. Poster presented at the 21st Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Iowa City, Iowa. ~Competitively selected poster presentation with Ruoxuan Li winning a travel award (up to \$2000).

*Fang, Y., and Wang, L. (October 2023). *A comparison of approaches to modeling intraindividual variability as predictors in longitudinal studies*. Poster presented at the 21st

Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Iowa City, Iowa. ~Competitively selected poster presentation with Yuan Fang winning a travel award (up to \$2000).

Wang, L., and *Liu, X. (July 2023). Modeling intraindividual variability as a predictor with longitudinal data: Methods and evaluations. Talk presented at the 2023 International Society for Data Science and Analytics (ISDSA) Conference, Shanghai, China.

Wang, L., & *Fang, Y. (January 2023). *Dynamic structural equation modeling with missing data*. Talk presented at the NIH R01MD014737 annual grant meeting at Harvard University.

Wang, L. (November 2022). Some development and applications of *longitudinal data analysis methods in psychology research*. Invited talk presented at the University of Southern California.

* Liu, X., and Wang, L. (June 2022). *Causal mediation analysis with the latent growth curve mediation model*. Talk presented at the 2022 International Society for Data Science and Analytics (ISDSA) Conference, Notre Dame, IN.

*Wilcox, K. T., and Wang, L. (October 2021). *Jointly modeling participant-level data and summary statistics for treatment differences*. Poster presented at the 19th Annual C (SMEP) Graduate Student Conference (virtual meeting).

*Liu, X., Valentino, K., & Wang, L. (October 2021). *The impact of omitting confounders in the parallel latent growth curve mediation model: Analytical examination and methods for sensitivity analysis*. Poster presented at the 19th Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference (virtual meeting).

*Wilcox, K. T., & Wang, L. (July 2021). *Modeling approaches for cross-sectional integrative data analysis*. Talk presented at the 86th annual Meeting of the Psychometric Society (virtual meeting).

*Liu, X., Wang, L., & Zhang, Z. (July 2021). *Bayesian hypothesis testing of mediation: Methods and the impact of prior odds specifications*. Talk presented at the 86th annual Meeting of the Psychometric Society (virtual meeting).

*Doolen, A. C., Radvansky, G. A., & Wang, L. (April 2021). A fine-grained study of forgetting. Talk presented at the 2021 annual Meeting of the Midwestern Psychological Association (virtual meeting).

Wang, L. (January 2021). *Mediation and moderation analysis: Methodological developments and applications*. Invited online talk presented at the Department of Human Development and Family Studies at the Pennsylvania State University.

Wang, L. (October 2020). *Several issues of modeling intra-individual variability*. Talk presented at the 2020 Annual Society of Multivariate Experimental Psychology (SMEP) meeting (virtual meeting).

*Liu, X., Wang, L., Liu, F., Miller-Graff, L. & Howell, K. H. (July 2020). *Causal inference with partially nested designs and an inverse-property-weighted estimation approach*. Talk presented at the 85th annual Meeting of the Psychometric Society (virtual meeting).

*Liu, X., & Wang, L. (October 2019). *The combined effects of omitting confounders and measurement error on statistical inference of mediation and a new tool for sensitivity analysis*.

Poster presented at the 17th Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Baltimore, MA. ~Competitively selected poster presentation with Xiao Liu winning a travel award (up to \$1500).

Wang, L. (November 2018). *Discussion of study design and methodological considerations*. Invited scholar for a full day working meeting of the Midwest Longitudinal Study of Asian American Families (ML-SAAF), University of Chicago, Chicago, IL.

Wang, L. & Zhang, Q. (October 2018). *Investigating the impact of time intervals and time lags on autoregressive mediation modeling: Implications and recommendations*. Talk presented at the 2018 SMEP meeting, Albuquerque, NW.

*Du, H., & Wang, L. (July 2018). *Testing variance components in linear mixed modeling using permutation*. Talk presented at the 83th annual Meeting of the Psychometric Society, New York City, New York.

*Liu, Q., & Wang, L. (July 2018). *T-test and ANOVA for data with ceiling and floor effects*. Talk presented at the 83th annual Meeting of the Psychometric Society, New York City, New York.

Wang, L. (July 2018). *Longitudinal data analysis methods for studying intra-individual change, variability, and relations*. Talk presented at the 2018 International Forum on Statistics, Beijing, China.

Wang, L. (June 2018). *The impact of time intervals and time lags on autoregressive mediation modeling (AMM)*. Invited talk presented at the School of Psychology, Jiangxi Normal University, Nanchang, Jiangxi, China.

*Joiner, R. J., Bergeman, C. S., & Wang, L. (May 2018). *Support dynamics in the stress-negative affect link: Within individuals, within dyadic pairs, and across dyads*. Paper presented at the 30th Association for Psychological Science Annual Convention, New San Francisco, CA.

*@Hornburg, C. B., McNeil, N. M., & Wang, L. (November 2017). *Problem encoding does not always drive problem solving: Evidence from children's performance on mathematical equivalence problems*. Poster presented the 2017 Psychonomics conference.

*@Hornburg, C. B., McNeil, N. M., & Wang, L. (October 2017). *The role of encoding in children's understanding of mathematical equivalence depends on problem format*. Poster presented the 2017 Cognitive Development Society Biennial Conference, Portland, Oregon.

Wang, L. & *Yang, M. (August 2017). *Approaches of modeling intraindividual variability as a predictor*. Invited talk presented at the symposium of methodological advances for modeling and characterizing repeated intraindividual observations, APA, Washington D.C. ~The symposium was the most attended methodological symposium at the 2017 APA convention.

*Du, H., & Wang, L. (July 2017). *Investigating reliabilities of intraindividual variability indicators with autocorrelated longitudinal data*. Talk presented at the 82th annual Meeting of the Psychometric Society, Zürich, Switzerland.

Wang, L. Zhang, Q., Maxwell, S. E., & Bergeman, C. S. (June 2017). *On estimating within-person relations using mixed-effects modeling*. Invited talk presented at the 2017 ICSA applied statistics symposium, Chicago, IL.

- *O'Rear C. D., McNeil, N. M., & Wang, L. (April 2017). *Arithmetic fluency and understanding of math equivalence interact to predict children's use of inversion*. Poster presented the 2017 SRCD Biennial Meeting, Austin, Texas.
- Park, I. J. K., Wang, L., *Schmid, M., Alegria, M., & Williams, D. R. (April 2017). *Coping with racism – adjustment link among Mexican –origin adolescents*. Poster presented the 2017 SRCD Biennial Meeting, Austin, Texas.
- *Joiner, R., Bergeman, C., & Wang, L. (November 2016). *Emotional experience across the adult lifespan: An accelerated longitudinal design*. Talk presented at the Gerontological Society of America Annual Scientific Meeting, New Orleans, LA.
- Wang, L. & *Yang, M. (October 2016). *Impact of over-simplified covariance structures on statistical inference in linear latent curve modeling*. Invited talk presented at the Advances in Longitudinal Models for Multivariate Psychology conference: A Festschrift for Jack McArdle, Richmond, VA.
- *Du, H., & Wang L. (October 2016). *Investigating reliabilities of intraindividual variability indicators with autocorrelated longitudinal data*. Poster presented at the 14th Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Richmond, VA. ~Competitively selected poster presentation with Han Du winning a travel award (up to \$1500).
- Wang, L. & Zhang, Q. (October 2016). *Investigating different data handling approaches for modeling mediation effects using the autoregressive mediation model*. Talk presented at the 2016 SMEP meeting, Richmond, VA.
- *Nuttall, A. K., *Zhang, Q., *Du, H., Wang, L., & Maxwell, S. E. (September 2016). *Bias in cross-sectional examinations of longitudinal mediation with a time-invariant Predictor*. Poster presented at the 3rd Biennial Developmental Methods Conference, Whitefish, Montana.
- Wang, L. (June 2016). *Integrative mediation analysis*. Invited talk presented at the Big Statistics & Data Science Joint Conference, Beijing, China.
- *Zhang, Q., Wang, L., & Bergeman, C. (May 2016). *Multilevel autoregressive mediation models: Specification, estimation, and applications*. Talk presented at the Modern Modeling Methods (M3) conference, Storrs, Connecticut.
- Wang, L. (November 2015). *Bayesian power analysis*. Invited talk presented to the Department of Psychology at the University of North Carolina, Chapel Hill, NC.
- *Du, H., Liu, F., & Wang, L. (July 2015). *A Bayesian "fill in" method for correcting for publication bias in meta-analysis*. Talk presented at the 80th Annual Meeting of the Psychometric Society, Beijing, China.
- Wang, L. (June 2015). *From Statistics to Quantitative Psychology*. Invited talk presented at the Renmin University of China, Beijing, China.
- Wang, L. (November 2014). *Studying intra-individual change and variability and inter-individual differences in them for psychological research*. Invited talk presented at the University of California Davis, Davis, CA.

*Zhang, Q., & Wang, L. (October 2014). *Evaluating methods for moderation analysis with missing data in the predictors*. Poster presented at the 12th Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Nashville, TN. ~Competitively selected poster presentation with Qian Zhang winning a travel award (up to \$1500).

*@Planalp, B. M., Wang, L., & Braugart-Rieker, J. M. (September 2014). *An empirical comparison of different modeling approaches for longitudinal dyadic data*. Poster presented at the 2nd Biennial Developmental Methods Conference, San Diego, California.

Kelly, A. E. & Wang, L. (August 2014). *Health benefits of sincere communication*. Talk presented at the American Psychological Association's 121th Annual Convention, Washington, DC.

Wang, L. & Maxwell, S. E. (July 2014). *On disaggregating between-person and within-person effects with longitudinal data using multilevel models*. Talk presented at the 79th annual meeting of the Psychometric Society, Madison, Wisconsin.

*Zhang, Q. & Wang, L. (July 2014). *Methods for moderation analysis with missing data in the predictors*. Talk presented at the 79th annual meeting of the Psychometric Society, Madison, Wisconsin.

*Cunningham, C. M. & Wang, L. (July 2014). *Bayesian vs. Bootstrap Methods for mediation Analysis with Binary Outcomes*. Talk presented at the 79th annual meeting of the Psychometric Society, Madison, Wisconsin.

*Du, H., & Wang, L. (July 2014). *Power analysis with uncertainty in effect sizes*. Talk presented at the 79th Annual Meeting of the Psychometric Society, Madison, Wisconsin.

Wang, L. & *Du, H. (May 2014). *Bayesian power analysis with uncertainty considered*. Talk presented at the APS 26th Annual Convention, San Francisco, CA.

Wang, L. & Preacher, K. J. (2013). *Moderated mediation analysis using Bayesian methods*. Poster presented at the American Psychological Association's 120th Annual Convention, Honolulu, Hawaii.

Kelly, A. E., Wang, L., Gondoli, D. (2013). *Explaining the connection between fewer lies and better health*. Talk presented at the American Psychological Association's 120th Annual Convention, Honolulu, Hawaii.

*Du, H. & Wang, L. (2013). *Number of dyads needed in dyadic data analysis*. Poster presented at the APS 25th Annual Convention, Washington, DC.

*Zhang, Q. & Wang, L. (2013). *The analyses of time lag and model specification for longitudinal mediation under auto-regressive models*. Poster presented at the APS 25th Annual Convention, Washington, DC.

*Cunningham, C. M. & Wang, L. (2013) *An evaluation of using standardized bias to measure practical effects of bias*. Poster presented at the APS 25th Annual Convention, Washington, DC.

Kelly, A. E. & Wang, L. (2012). *A life without lies: can living more honestly improve health?* Invited talk presented at the American Psychological Association's 119th Annual Convention, Orlando, FL.

- *Ke, Z. & Wang, L. (2012). *Investigating methods for detecting interindividual differences in intraindividual change*. Paper presented at the 10th Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Vancouver, BC, Canada. ~Competitively selected presentation with Zijun Ke winning a travel award (up to \$1500).
- Wang, L. (2011). *Investigating reliabilities of intra-individual variability indicators*. Invited talk presented at the Nesselrode Festschrift, University of Virginia, Charlottesville, VA.
- Wang, L. (2011). *Mediation and moderation analysis in psychology*. Invited talk presented at the Beihang University, Beijing, China.
- Wang, L. (2011). *Estimating and testing mediation effects with censored data using Bayesian methods*. Talk presented at the American Psychological Association's 118th Annual Convention, Washington, DC.
- Wang, L. (2011). *Investigating inter-individual differences in short-term intra-individual variability*. Poster presented at the American Psychological Association's 118th Annual Convention, Washington, DC.
- *Zhang, Q. & Wang, L. (2011). *Methods for aggregating and testing intra-individual correlations*. Poster presented at the American Psychological Association's 118th Annual Convention, Washington, DC.
- Wang, L. (2010). *IRT-ZIP modeling for multivariate zero-inflated count data*. Poster presented at the American Psychological Association's 118th Annual Convention, San Diego, CA.
- Wang, L. (2009). *Bayesian analysis for zero-inflated data in WinBUGS*. Invited talk presented at the University of Southern California, Los Angeles, CA.
- Wang, L. (2009). *Structural equation modeling with censored data*. Invited talk presented at the Renmin University of China, Beijing, China.
- Wang, L. (2007-2008). *Modeling longitudinal ceiling data*. Invited talks presented at the University of Arizona, University of California, Los Angeles, University of Kansas, University of Notre Dame, and University of Miami, etc.
- Wang, L. (2007). *Generalized mixed models with mixture links for multivariate zero inflated count data*. Talk presented at the Society of Multivariate Experimental Psychology Student Pre-conference, Chapel Hill, North Carolina. ~Competitively selected talk presentation with winning a travel award.
- Wang, L., Zhuang, X., Liu, O., MacCann, C., & Roberts, R. (2007). *Assessing teamwork skills: A multi-method approach*. Talk presented at the Educational Testing Service. Princeton, NJ.
- Wang, L., Zhang, Z., & McArdle, J. J. (2006). *Investigating ceiling effects in longitudinal data analysis*. Talk presented at the 71st Annual Meeting of the Psychometric Society, Montreal, Canada.
- Wang, L., & Zhang, Z. (2006). *Memory training on individual learning performance for independent and vital older adults*. Poster presented at the Cognitive Aging Conference, Atlanta, Georgia.

Wang, L., & McArdle, J. J. (2005). *An investigation of the nonlinear mixed model for estimating change points in longitudinal life-span data*. Talk presented at the 3rd Annual Society of Multivariate Experimental Psychology (SMEP) Graduate Student Conference, Lake Tahoe, California. ~Competitively selected talk presentation with winning a travel award.

CLASSROOM TEACHING

Undergraduate Teaching

Advanced Statistics, University of Notre Dame.

Textbook webpage: <https://advstats.psychstat.org/>

Statistics for Behavioral Science, University of Notre Dame.

Graduate Teaching

Longitudinal Data Analysis, University of Notre Dame.

Advanced Longitudinal Methods, University of Notre Dame.

MENTORING AND ADVISING

Director, Dissertation Committee

Tyler Wilcox (2022; graduation-to-current: Postdoctoral fellow at Cornell University; 2023 APA Division 5 Anne Anastasi Dissertation Award winner)

Xiao Liu (2022; graduation-to-current: tenure-track assistant professor at UT-Austin; 2023 AERA Division D Outstanding Dissertation Award winner)

Qian Zhang (August 2015; graduation-to-current: tenure-track assistant professor then tenured associate professor at FSU)

Han Du (January 2018; graduation-to-current: tenure-track assistant professor then tenured associate professor at UCLA)

Director, Master's Thesis Committee

Xiao Liu (2020)

Han Du (2017)

Qian Zhang (2014)

Quantitative Minor Student Supervised

Jamie Trost (2023)

Alainna Wen (2022)

Mengyu (Miranda) Gao (2019)

Caroline Hornburg (2017)

Amy Nuttall (2015, co-advised with Prof. Scott Maxwell)

Elizabeth Planalp (2014)

Current Graduate Advisee

Ruoxuan Li

Yuan Fang

Member, Dissertation Committee

1. Ken McClure (2024)
2. Meng Qiu (2023)
3. Anne Knorr (2023)
4. Joel Devonshire (2023)
5. Sarah Hoegler (2023)
6. Katherine Edler (2023)
7. Mary Tarsha (2022)
8. Brenna Gomer (2021)
9. Lauren Trichtinger (2021)
10. Wen Qu (2021)
11. Dani Reboucas (2021)
12. Minami Hatorri (2021)
13. Abigail Mills (2021)
14. Julia Paulson (2021)
15. Kathryn Scrafford (2021)
16. Ruth Speidel (2020)
17. Amanda Nowak (2020)
18. Raquael Joiner (2020)
19. Haley Gedek (2019)
20. Angela Kurth (2019)
21. Miao Yang (2018)
22. Haiyan Liu (2018)
23. Dana Townsend (2018)
24. Samantha Anderson (2018)
25. Justin Lunningham (2018)
26. Patrick Miller (2017)
27. Jessica Blaxton (2017)
28. Caroline Hornburg (2017)
29. Lori F. Cummins (2017)
30. Rachel Baird (2016)
31. Michelle Comas (2016)
32. Amy Nuttall (2015)
33. Elizabeth Planalp (2014)
34. Rebecca Cheung (2014)
35. Robert Perera (2013)
36. Alissa Russell (2012)
37. Melissa A. Mitchell (2011)

38. Mary Wagner Fuhs (2010)
39. Manshu Yang (2010)
40. Jiyun Zu (2009)
41. Kathleen McCoy (2009)

Member, Master's Thesis Committee

1. Emily LaPorte (2022)
2. Samantha Murray (2022)
3. Katherine Edler (2021)
4. Samantha Murray (2020)
5. Lauren Trichtinger (2019)
6. Mary Tarsha (2020)
7. Molly O'Neill (2018)
8. Ruth Speidel (2018)
9. Dana Tran (2018)
10. Amanda Nowak (2018)
11. Ruth Speidel (2017-2018)
12. Raquael Joiner (2017-2018)
13. Angelica Frausto (2017)
14. Miranda Gao (2017)
15. Angela Kurth (2017)
16. Jessica Blaxton (2015)
17. Quinn Lathrop (2013)
18. Jeff Brooks (2011)
19. Alissa Russell (2009)

Committee of Evaluating a Research Paper for Fulfilling a Master's Requirement

1. Minami Hattori (2019)
2. Ian Campbell (2018)
3. Callie Baird (2015)

Preliminary Exam Committee

1. Kenneth Wilcox (2021)
2. Xiao Liu (2021)
3. Chang Che (2020)
4. Lauren Trichtinger (2020)
5. Brenna Gomer (2020)
6. Minami Hattori (2019)
7. Justin Lunningham (2017)
8. Miao Yang (2017)
9. Samantha Anderson (2017)
10. Han Du (2017)
11. Callie Baird (2016)
12. Qian Zhang

13. Jeff Patton
14. Zijun Ke
15. Melissa A. Mitchell
16. Manshu Yang
17. Jiyun Zu

Undergraduate Student Supervised

1. Emily Brigham (Spring 2021)
2. Lily Hallick (Fall 2019-Spring 2021)
3. Brittany Coffman (Fall 2019)
4. Emma Strouse (2018 – present)
5. Emmalyse Daniels (2018- present)
6. Rodolfo Ramos (2018)
7. William Sogge (2018)
8. Magaret Schmid (2015-2016)
9. Mengtian Zhao (2014 - 2015)
10. Mark Garcia (2014 - 2015)
11. Madeline Caballero (2014 - 2015)
12. Jonathan Bosk (2012)
13. Kaitlyn Egan (2012)
14. Oscar Gonzalez (2012)

SCIENTIFIC REVIEW

Journal Editing

2016 – 2023, Associate Editor, *Psychological Methods*

2018 – present, Editorial Board, *Multivariate Behavioral Research*

2019- 2020, Consulting Editor, *Cultural Diversity and Ethnic Minority Psychology*

Journal Article Review

- Quantitative Psychology or Educational Statistics (ordered by review frequency)
Multivariate Behavioral Research; Psychological Methods; Structural Equation Modeling; British Journal of Mathematical and Statistical Psychology; Behavior Research Methods; Psychometrika; Educational and Psychological Measurement; Journal of Educational and Behavioral Statistics; Methodology

- Other
Statistics: Communications in Statistics Theory and Methods; Journal of Applied Statistics; Journal of Computational and Graphical Statistics; Journal of Modern Applied Statistical Methods; Journal of the American Statistician Association: Theory & Methods; Medical Research Methodology; Statistics in Medicine

Substantive areas of behavioral and psychological research: *Addictive Behaviors; Archives of Scientific Psychology; Cultural Diversity and Ethnic Minority Psychology; Gerontology; Group*

Dynamics: Theory, Research, and Practice; International Journal of Behavioral Development; International Journal of Psychology; Journal of Educational Psychology

Grant Proposal Review

National Science Foundation

National Institute of Health

Indiana Clinical and Translational Sciences Institute

Natural Sciences and Engineering Research Council of Canada

Netherlands Organisation for Scientific Research

Medical Research Council of United Kingdom

Swiss National Science Foundation

OTHER PROFESSIONAL ACTIVITIES

University Committee Activities (University of Notre Dame)

- Departmental Service (Department of Psychology)

2023-2024, Developmental Psychology Faculty Search Committee

2021-2022, Assistant Professor of Psychology in Developmental or Child Clinical Science Faculty Search Committee

2019 - 2021, Program Director of Quantitative Psychology

2020 – 2023, the CAP Executive Committee

2018, Self-Study Committee for the decennial departmental external review

2018, GPD: Academic Job Market Panel

2017, SPF Reappointment Committees

2016, Assistant Professor in Quantitative Psychology Faculty Search Committee

2016, Prepared materials for nominating a senior professor for two teaching awards

2008 - 2009 & 2012 - 2015, Undergraduate Studies Committee

2009 - 2010, Colloquium Committee

- College and University Service

2022 - 2024, CRC Faculty Advisory Board

2022-2024, University Committee on Research and Sponsored Programs

2019-2020, Task Force of the Lucy Family Institute for Data and Society

2017 - present, Quantitative Reasoning Core subcommittee

2017- present, College Council, College of Arts and Letters

2016, Inquiry Committee