

**Han Du**

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**RESEARCHING INTERESTS**

Bayesian methods and statistical computing  
(Intensive) longitudinal data analysis and time series analysis  
Study design (e.g, sample size determination)  
Meta-analysis  
Missing data analysis

**EDUCATION**

<b>Ph.D. in Quantitative Psychology</b>	2018
University of Notre Dame	
<b>M.S. in Applied and Computational Mathematics and Statistics</b>	2016
University of Notre Dame	
<b>B.A. in Psychology</b>	2012
Beijing Normal University	

**ACADEMIC APPOINTMENTS**

<b>Assistant Professor</b>	04/2018 –
Department of Psychology University of California, Los Angeles	
<b>Acting Assistant Professor</b>	10/2017–3/2018
Department of Psychology University of California, Los Angeles	

## **PUBLICATIONS**

\* indicates student authors

Enders, C.K., Hayes, T., & **Du, H.** (in press). A comparison of multilevel imputation schemes for random coefficient models: Fully conditional specification and joint model imputation with random covariance matrices. *Multivariate Behavioral Research*.

\*Gao, M. M., **Du, H.**, Davies, P. T., Cummings, E. M. (accepted). Marital conflict behaviors and parenting: Dyadic links over time. *Family Relations*.

**Du, H.**, & Wang, L. (in press). Investigating reliabilities of intraindividual variability indicators with autocorrelated longitudinal data. *Multivariate Behavioral Research*.

Cummings, E. M., Taylor, L. K., **Du, H.**, Merrilees, C. E., Goeke-Morey, M., & Shirlow, P. A. (in press). Examining bidirectional pathways between political violence and child adjustment over time in Northern Ireland. *Journal of the American Academy of Child & Adolescent Psychiatry*.

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.

**Du, H.**, Liu, F., & Wang, L. (2017). A Bayesian "fill-in" method for correcting for publication bias in meta-analysis. *Psychological Methods, 22*(4), 799-817.

**Du, H.**, & Wang, L. (2017). Investigating reliabilities of intraindividual variability indicators with autocorrelated longitudinal data (abstract). *Multivariate Behavioral Research, 52*(1), 120-121.

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.

**Du, H.**, Zhang, Z., & Yuan, K.-H. (2016). Power analysis for t-test with non-normal data and unequal variances. In van der Ark, L.A., Culpepper, S., Douglas, J.A., Wang, W.-C., & Wiberg, M. (Eds.), *Proceedings of Quantitative Psychology: The 81st Annual Meeting of the psychometric Society* (pp.373-380). New York, NY: Springer.

**Du, H.**, & Wang, L. (2016). A Bayesian power analysis procedure considering

uncertainty in effect size estimates from a meta-analysis. *Multivariate Behavioral Research*, 51(1), 589-605.

**Du, H.,** & Wang, L. (2016). The impact of the number of dyads on estimation of dyadic data analysis using multilevel modeling. *Methodology*, 12(1), 21-31.

Jiang, T., Zhang, W., Wen, W., Zhu, H., **Du, H.**, Zhu, X., Gao, X., Zhang, H., Dong, Q., & Chen, C. (2016). Reevaluating the two-representation model of numerical magnitude processing. *Memory & Cognition*, 44(1), 162-170.

Li, J., Zhang, B., **Du, H.**, Zhu, Z., & Li, Y. (2015). Metacognitive planning: Development and validation of an online measure. *Psychological Assessment*, 27(1), 260-271.

**Du, H.**, Pang, B., Cheng, J., & Wang, A. (2013). Comparing online advertising with newspaper advertising in different presentation conditions: The evidence of memory and eye tracking experiments. *Psychological Exploration*, 33(4), 380-384.

**Du, H.** (2012). The difference in susceptibility to negative emotion between different adult attachment styles. *Journal of Occupational Health and Damage*, 26(6), 339-342.

Li, J., Pang, B., Zhang, B., & **Du, H.** (2011). Self-regulation: From basic theories to applications. *Journal of Beijing Normal University*, 6, 5-13.

## **MANUSCRIPT UNDER REVIEW AND IN PREPARATION**

**Du, H.,** & Wang, L. (under review). Testing variance components in linear mixed modeling using permutation.

**Du, H.,** Edwards, M.C., & Zhang, Z. (under review). The influence of prior distributions on the Bayes factor in one-sample tests of means.

**Du, H.,** Bradbury, T.N., Lavner, J.A., Meltzer, A.L., McNulty, J.K., Neff, L.A., & Karney, B.R. (under review). A comparison of Bayesian synthesis approaches for comparing two group means.

Enders, C.K., **Du, H.**, & Keller, B.T. (under review). Substantive model-compatible imputation for multilevel regression models with random coefficients, interaction effects, and other non-linear terms.

**Du, H.** (manuscript drafted). Statistical power analysis for t-tests. In Z. Zhang, & K.-H. Yuan, (Eds.), *Practical Statistical Power Analysis using WebPower and R* (pp.51-70).

**Du, H.**, Zhang, Z., & Yuan, K.-H. (manuscript drafted). Power analysis for t-test with non-normal data and unequal variances. In Z. Zhang, & K.-H. Yuan, (Eds.), *Practical Statistical Power Analysis using WebPower and R* (pp.277-283).

## **CONFERENCE PRESENTATIONS**

**Du, H.**, Bradbury, T.N., Lavner, J.A., Meltzer, A.L., McNulty, J.K., Neff, L.A., & Karney, B.R. (To be presented in September 2018). *A comparison of Bayesian synthesis approaches for comparing two group means*. Talk to be presented at the fourth Biennial Developmental Methods Conference, Whitefish, Montana.

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

Enders, C., **Du, H.**, & Keller, B. (2017, October). *A fully Bayesian imputation procedure for random coefficient models (and other pesky product terms)*. Paper presented at the annual meeting of the Society for Multivariate Experimental Psychology, Minneapolis, MN.

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

**Du, H.**, & Wang, L. (2016, October). *Investigating reliabilities of intraindividual variability indicators with autocorrelated longitudinal data*. Poster presented at the 2016 SMEP Graduate Student Conference, Richmond, Virginia.

Nuttall, A. K., Zhang, Q., **Du, H.**, Wang, L., & Maxwell, S. E. (2016, September). *Bias in cross-sectional examinations of longitudinal mediation with a time-invariant Predictor*. Poster presented at the third Biennial Developmental Methods Conference, Whitefish, Montana.

**Du, H.** (2016, July). *Power analysis for t-tests with non-normal data and unequal variances*. Talk presented at the 81th annual Meeting of the Psychometric Society, Asheville, North Carolina.

**Du, H.**, Liu, F., & Wang, L. (2015, July). *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.

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

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

## **SOFTWARE DEVELOPMENT**

**Du, H., & Wang, L.** (2016). An R function for determining minimum numbers of assessments for obtaining reliable intraindividual variability indicators. Retrievable from <https://ucla.box.com/s/j41idz4awhcn2n5k82p4vkb1027mq21q>

**Du, H., & Zhang, Z.** (2016). An R function for implementing a Monte Carlo based t-test power analysis. Retrievable from <https://ucla.box.com/s/c5wfloeb60a9vfhjggx7d9tb5bp2bg1f>

**Du, H., Liu, F., & Wang, L.** (2016). An R function for implementing a Bayesian "fill in" method for correcting for publication bias. Retrievable from <https://ucla.box.com/s/8507h6a1utake2fohh0bb51chgg4uqqo>

**Du, H., & Wang, L.** (2015). An R function for implementing a Bayesian power analysis procedure considering uncertainty in the effect size estimates from a <https://ucla.box.com/s/glmci2mpybnqmvaqjb4e1q55g878g71>