betaMC: References

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References

Andrews, D. W. K. (1991). Heteroskedasticity and autocorrelation consistent covariance matrix estimation. *Econometrica*, *59*(3), 817. https://doi.org/10.2307/2938229

Andrews, D. W. K. (2000). Inconsistency of the bootstrap when a parameter is on the boundary of the parameter space. *Econometrica*, *68*(2), 399–405. https://doi.org/10.1111/1468-0262.00114

Andrews, D. W. K., & Monahan, J. C. (1992). An improved heteroskedasticity and autocorrelation consistent covariance matrix estimator. *Econometrica*, *60*(4), 953. https://doi.org/10.2307/2951574

Arbuckle, J. L. (1996). Full information estimation in the presence of incomplete data. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling*. https://doi.org/10.4324/9781315827414

Arbuckle, J. L. (2020). *Amos 27.0 user's guide*. Chicago, IBM SPSS.

Arbuckle, J. L. (2021). *Amos 28.0 user's guide*. Chicago, IBM SPSS.

Aroian, L. A. (1947). The probability function of the product of two normally distributed variables. *The Annals of Mathematical Statistics*, *18*(2), 265–271. https://doi.org/10.1214/aoms/1177730442

Asparouhov, T., Hamaker, E. L., & Muthén, B. (2017). Dynamic structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *25*(3), 359–388. https://doi.org/10.1080/10705511.2017.1406803

Asparouhov, T., & Muthén, B. O. (2022). *Multiple imputation with Mplus* (tech. rep.). http: www.statmodel.com. http://www.statmodel.com/download/Imputations7.pdf

Baltes, P. B., & Nesselroade, J. R. (1979). History and rationale of longitudinal research. In J. R. Nesselroade & P. B. Baltes (Eds.), *Longitudinal research in the study of behavior and development*. Academic Press.

Barnard, G. A., Collins, J. R., Farewell, V. T., Field, C. A., Kalbfleisch, J. D., Nash, S. W., Parzen, E., Prentice, R. L., Reid, N., Sprott, D. A., Switzer, P., Warren, W. G., & Weldon, K. L. (1981). Nonparametric standard errors and confidence intervals: Discussion. *The Canadian Journal of Statistics / La Revue Canadienne de Statistique*, *9*(2), 158–170. https://doi.org/10.2307/3314609

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, *11*(2), 142–163. https://doi.org/10.1037/1082-989x.11.2.142

Beran, R. (2003). The impact of the bootstrap on statistical algorithms and theory. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994972

Biesanz, J. C., Falk, C. F., & Savalei, V. (2010). Assessing mediational models: Testing and interval estimation for indirect effects. *Multivariate Behavioral Research*, *45*(4), 661–701. https://doi.org/10.1080/00273171.2010.498292

Blanca, M. J., Arnau, J., López-Montiel, D., Bono, R., & Bendayan, R. (2013). Skewness and kurtosis in real data samples. *Methodology*, *9*(2), 78–84. https://doi.org/10.1027/1614-2241/a000057

Boettiger, C., & Eddelbuettel, D. (2017). An introduction to Rocker: Docker containers for R. *The R Journal*, *9*(2), 527. https://doi.org/10.32614/rj-2017-065

Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology*, *20*, 115. https://doi.org/10.2307/271084

Boos, D. D. (2003). Introduction to the bootstrap world. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994971

Bradley, J. V. (1978). Robustness? *British Journal of Mathematical and Statistical Psychology*, *31*(2), 144–152. https://doi.org/10.1111/j.2044-8317.1978.tb00581.x

Browne, M. W. (1984). Asymptotically distribution-free methods for the analysis of covariance structures. *British Journal of Mathematical and Statistical Psychology*, *37*(1), 62–83. https://doi.org/10.1111/j.2044-8317.1984.tb00789.x

Casella, G. (2003). Introduction to the silver anniversary of the bootstrap. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994967

Chen, G., Glen, D. R., Saad, Z. S., Hamilton, J. P., Thomason, M. E., Gotlib, I. H., & Cox, R. W. (2011). Vector autoregression, structural equation modeling, and their synthesis in neuroimaging data analysis. *Computers in Biology and Medicine*, *41*(12), 1142–1155. https://doi.org/10.1016/j.compbiomed.2011.09.004

Cheong, J., MacKinnon, D. P., & Khoo, S. T. (2003). Investigation of mediational processes using parallel process latent growth curve modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, *10*(2), 238–262. https://doi.org/10.1207/s15328007sem1002_5

Chesher, A., & Jewitt, I. (1987). The bias of a heteroskedasticity consistent covariance matrix estimator. *Econometrica*, *55*(5), 1217. https://doi.org/10.2307/1911269

Cheung, G. W., & Lau, R. S. (2007). Testing mediation and suppression effects of latent variables. *Organizational Research Methods*, *11*(2), 296–325. https://doi.org/10.1177/1094428107300343

Cheung, M. W.-L. (2007). Comparison of approaches to constructing confidence intervals for mediating effects using structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(2), 227–246. https://doi.org/10.1080/10705510709336745

Cheung, M. W.-L. (2009a). Comparison of methods for constructing confidence intervals of standardized indirect effects. *Behavior Research Methods*, *41*(2), 425–438. https://doi.org/10.3758/brm.41.2.425

Cheung, M. W.-L. (2009b). Constructing approximate confidence intervals for parameters with structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *16*(2), 267–294. https://doi.org/10.1080/10705510902751291

Cheung, M. W.-L. (2021). Synthesizing indirect effects in mediation models with meta-analytic methods. *Alcohol and Alcoholism*, *57*(1), 5–15. https://doi.org/10.1093/alcalc/agab044

Cheung, S. F., & Pesigan, I. J. A. (2023a). FINDOUT: Using either SPSS commands or graphical user interface to identify influential cases in structural equation modeling in AMOS. *Multivariate Behavioral Research*, 1–5. https://doi.org/10.1080/00273171.2022.2148089

Cheung, S. F., & Pesigan, I. J. A. (2023b). semlbci: An R package for forming likelihood-based confidence intervals for parameter estimates, correlations, indirect effects, and other derived parameters. *Structural Equation Modeling: A Multidisciplinary Journal*, 1–15. https://doi.org/10.1080/10705511.2023.2183860

Cheung, S. F., Pesigan, I. J. A., & Vong, W. N. (2022). DIY bootstrapping: Getting the nonparametric bootstrap confidence interval in SPSS for any statistics or function of statistics (when this bootstrapping is appropriate). *Behavior Research Methods*, *55*(2), 474–490. https://doi.org/10.3758/s13428-022-01808-5

Chow, S.-M., Ho, M.-h. R., Hamaker, E. L., & Dolan, C. V. (2010). Equivalence and differences between structural equation modeling and state-space modeling techniques. *Structural Equation Modeling: A Multidisciplinary Journal*, *17*(2), 303–332. https://doi.org/10.1080/10705511003661553

Chow, S.-M., Losardo, D., Park, J., & Molenaar, P. C. M. (2023). Continuous-time dynamic models: Connections to structural equation models and other discrete-time models. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (2nd ed.). The Guilford Press.

Cochran, W. G. (1952). The χ^2 test of goodness of fit. *The Annals of Mathematical Statistics*, *23*(3), 315–345. https://doi.org/10.1214/aoms/1177729380

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. https://doi.org/10.4324/9780203771587

Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, *112*(4), 558–577. https://doi.org/10.1037/0021-843x.112.4.558

Craig, C. C. (1936). On the frequency function of xy. *The Annals of Mathematical Statistics*, *7*(1), 1–15. https://doi.org/10.1214/aoms/1177732541

Cribari-Neto, F. (2004). Asymptotic inference under heteroskedasticity of unknown form. *Computational Statistics & Data Analysis*, *45*(2), 215–233. https://doi.org/10.1016/s0167-9473(02)00366-3

Cribari-Neto, F., & da Silva, W. B. (2010). A new heteroskedasticity-consistent covariance matrix estimator for the linear regression model. *AStA Advances in Statistical Analysis*, *95*(2), 129–146. https://doi.org/10.1007/s10182-010-0141-2

Cribari-Neto, F., Souza, T. C., & Vasconcellos, K. L. P. (2007). Inference under heteroskedasticity and leveraged data. *Communications in Statistics - Theory and Methods*, *36*(10), 1877–1888. https://doi.org/10.1080/03610920601126589

Cribari-Neto, F., Souza, T. C., & Vasconcellos, K. L. P. (2008). Errata: Inference under heteroskedasticity and leveraged data, Communications in Statistics, Theory and Methods, 36, 1877–1888, 2007. *Communications in Statistics - Theory and Methods*, *37*(20), 3329–3330. https://doi.org/10.1080/03610920802109210

Cronbach, L. J., & Furby, L. (1970). How we should measure "change": Or should we? *Psychological Bulletin*, *74*(1), 68–80. https://doi.org/10.1037/h0029382

Curran, P. J., & Bauer, D. J. (2011). The disaggregation of within-person and between-person effects in longitudinal models of change. *Annual Review of Psychology*, *62*(1), 583–619. https://doi.org/10.1146/annurev.psych.093008.100356

Davidson, R., & MacKinnon, J. G. (1993). *Estimation and inference in econometrics*. Oxford University Press.

Davison, A. C., & Hinkley, D. V. (1997). *Bootstrap methods and their application*. Cambridge University Press. https://doi.org/10.1017/CBO9780511802843

Davison, A. C., Hinkley, D. V., & Young, G. A. (2003). Recent developments in bootstrap methodology. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994969

Deboeck, P. R., & Preacher, K. J. (2015). No need to be discrete: A method for continuous time mediation analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, *23*(1), 61–75. https://doi.org/10.1080/10705511.2014.973960

Demeshko, M., Washio, T., Kawahara, Y., & Pepyolyshev, Y. (2015). A novel continuous and structural VAR modeling approach and its application to reactor noise analysis. *ACM Transactions on Intelligent Systems and Technology*, *7*(2), 1–22. https://doi.org/10.1145/2710025

Dudgeon, P. (2017). Some improvements in confidence intervals for standardized regression coefficients. *Psychometrika*, *82*(4), 928–951. https://doi.org/10.1007/s11336-017-9563-z

Eddelbuettel, D. (2013). *Seamless R and C++ integration with Rcpp*. Springer New York. https://doi.org/10.1007/978-1-4614-6868-4

Eddelbuettel, D., & Balamuta, J. J. (2017). Extending R with C++: A brief introduction to Rcpp. *PeerJ Preprints*, *3188v1*(3). https://doi.org/10.7287/peerj.preprints.3188v1

Eddelbuettel, D., Francois, R., Allaire, J., Ushey, K., Kou, Q., Russell, N., Ucar, I., Bates, D., & Chambers, J. (2023). *Rcpp: Seamless R and C++ integration*. https://CRAN.R-project.org/package=Rcpp

Eddelbuettel, D., & François, R. (2011). Rcpp: Seamless R and C++ integration. *Journal of Statistical Software*, *40*(8). https://doi.org/10.18637/jss.v040.i08

Eddelbuettel, D., & Sanderson, C. (2014). RcppArmadillo: Accelerating R with high-performance C++ linear algebra. *Computational Statistics & Data Analysis*, *71*, 1054–1063. https://doi.org/10.1016/j.csda.2013.02.005

Efron, B. (1979a). Bootstrap methods: Another look at the jackknife. *The Annals of Statistics*, *7*(1). https://doi.org/10.1214/aos/1176344552

Efron, B. (1979b). Computers and the theory of statistics: Thinking the unthinkable. *SIAM Review*, *21*(4), 460–480. https://doi.org/10.1137/1021092

Efron, B. (1981a). Nonparametric standard errors and confidence intervals. *Canadian Journal of Statistics / La Revue Canadienne de Statistique*, *9*(2), 139–158. https://doi.org/10.2307/3314608

Efron, B. (1981b). Nonparametric standard errors and confidence intervals: Rejoinder. *The Canadian Journal of Statistics / La Revue Canadienne de Statistique*, *9*(2), 170–172. https://doi.org/10.2307/3314610

Efron, B. (1987). Better bootstrap confidence intervals. *Journal of the American Statistical Association*, *82*(397), 171–185. https://doi.org/10.1080/01621459.1987.10478410

Efron, B. (1988). Bootstrap confidence intervals: Good or bad? *Psychological Bulletin*, *104*(2), 293–296. https://doi.org/10.1037/0033-2909.104.2.293

Efron, B. (2003). Second thoughts on the bootstrap. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994968

Efron, B. (2012). Bayesian inference and the parametric bootstrap. *The Annals of Applied Statistics*, *6*(4). https://doi.org/10.1214/12-aoas571

Efron, B., & Tibshirani, R. J. (1993). *An introduction to the bootstrap*. Chapman & Hall. https://doi.org/10.1201/9780429246593

Enders, C. K. (2010). *Applied missing data analysis*. Guilford Publications.

Epskamp, S., Waldorp, L. J., M ottus, R., & Borsboom, D. (2018). The Gaussian graphical model in cross-sectional and time-series data. *Multivariate Behavioral Research*, *53*(4), 453–480. https://doi.org/10.1080/00273171.2018.1454823

Ernst, M. D., & Hutson, A. D. (2003). Utilizing a quantile function approach to obtain exact bootstrap solutions. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994978

Fairchild, A. J., & MacKinnon, D. P. (2014). Using mediation and moderation analyses to enhance prevention research. In *Defining prevention science* (pp. 537–555). Springer US. https://doi.org/10.1007/978-1-4899-7424-2_23

Ferrer, E., & McArdle, J. (2003). Alternative structural models for multivariate longitudinal data analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, *10*(4), 493–524. https://doi.org/10.1207/s15328007sem1004_1

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science*, *18*(3), 233–239. https://doi.org/10.1111/j.1467-9280.2007.01882.x

Fritz, M. S., Taylor, A. B., & MacKinnon, D. P. (2012). Explanation of two anomalous results in statistical mediation analysis. *Multivariate Behavioral Research*, *47*(1), 61–87. https://doi.org/10.1080/00273171.2012.640596

Gates, K. M., Molenaar, P. C., Hillary, F. G., Ram, N., & Rovine, M. J. (2010). Automatic search for fMRI connectivity mapping: An alternative to Granger causality testing using formal equivalences among SEM path modeling, VAR, and unified SEM. *NeuroImage*, *50*(3), 1118–1125. https://doi.org/10.1016/j.neuroimage.2009.12.117

Goodman, L. A. (1960). On the exact variance of products. *Journal of the American Statistical Association*, *55*(292), 708–713. https://doi.org/10.1080/01621459.1960.10483369

Graham, J. W., Olchowski, A. E., & Gilreath, T. D. (2007). How many imputations are really needed? some practical clarifications of multiple imputation theory. *Prevention Science*, *8*(3), 206–213. https://doi.org/10.1007/s11121-007-0070-9

Hall, P. (2003). A short prehistory of the bootstrap. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994970

Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. P. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods*, *20*(1), 102–116. https://doi.org/10.1037/a0038889

Harvey, A. C. (1990). *Forecasting, structural time series models and the Kalman filter*. Cambridge University Press. https://doi.org/10.1017/cbo9781107049994

Hatemi-J, A. (2003). A new method to choose optimal lag order in stable and unstable VAR models. *Applied Economics Letters*, *10*(3), 135–137. https://doi.org/10.1080/1350485022000041050

Hatemi-J, A. (2004). Multivariate tests for autocorrelation in the stable and unstable VAR models. *Economic Modelling*, *21*(4), 661–683. https://doi.org/10.1016/j.econmod.2003.09.005

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*(4), 408–420. https://doi.org/10.1080/03637750903310360

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.

Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, *39*(4), 709–722. https://doi.org/10.3758/bf03192961

Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis. *Psychological Science*, *24*(10), 1918–1927. https://doi.org/10.1177/0956797613480187

Hesterberg, T. C. (2014). What teachers should know about the bootstrap: Resampling in the undergraduate statistics curriculum. https://arxiv.org/abs/1411.5279

Hesterberg, T. C. (2015). What teachers should know about the bootstrap: Resampling in the undergraduate statistics curriculum. *The American Statistician*, *69*(4), 371–386. https://doi.org/10.1080/00031305.2015.1089789

Hinkley, D. V. (1977). Jackknifing in unbalanced situations. *Technometrics*, *19*(3), 285–292. https://doi.org/10.1080/00401706.1977.10489550

Holmes, S. (2003a). Bootstrapping phylogenetic trees: Theory and methods. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994979

Holmes, S. (2003b). Bradley Efron: A conversation with good friends. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994981

Horn, S. D., Horn, R. A., & Duncan, D. B. (1975). Estimating heteroscedastic variances in linear models. *Journal of the American Statistical Association*, *70*(350), 380–385. https://doi.org/10.1080/01621459.1975.10479877

Horowitz, J. L. (2003). The bootstrap in econometrics. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994976

Hunter, M. D. (2017). State space modeling in an open source, modular, structural equation modeling environment. *Structural Equation Modeling: A Multidisciplinary Journal*, *25*(2), 307–324. https://doi.org/10.1080/10705511.2017.1369354

Iacus, S. M. (2008). *Simulation and inference for stochastic differential equations*. Springer New York. https://doi.org/10.1007/978-0-387-75839-8

James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, *69*(2), 307–321. https://doi.org/10.1037/0021-9010.69.2.307

Jones, J. A., & Waller, N. G. (2013a). Computing confidence intervals for standardized regression coefficients. *Psychological Methods*, *18*(4), 435–453. https://doi.org/10.1037/a0033269

Jones, J. A., & Waller, N. G. (2013b). *The normal-theory and asymptotic distribution-free (ADF) covariance matrix of standardized regression coefficients: Theoretical extensions and finite sample behavior* (tech. rep.). University of Minnesota-Twin Cities. Retrieved July 22, 2022, from http://users.cla.umn.edu/~nwaller/downloads/techreports/TR052913.pdf

Jones, J. A., & Waller, N. G. (2015). The normal-theory and asymptotic distribution-free (ADF) covariance matrix of standardized regression coefficients: Theoretical extensions and finite sample behavior. *Psychometrika*, *80*(2), 365–378. https://doi.org/10.1007/s11336-013-9380-y

Jorgensen, T. D., Pornprasertmanit, S., Schoemann, A. M., & Rosseel, Y. (2022). *semTools: Useful tools for structural equation modeling*. https://CRAN.R-project.org/package=semTools

Judd, C. M., & Kenny, D. A. (1981). Process analysis. *Evaluation Review*, *5*(5), 602–619. https://doi.org/10.1177/0193841x8100500502

Kalman, R. E. (1960). A new approach to linear filtering and prediction problems. *Journal of Basic Engineering*, *82*(1), 35–45. https://doi.org/10.1115/1.3662552

Kauermann, G., & Carroll, R. J. (2001). A note on the efficiency of sandwich covariance matrix estimation. *Journal of the American Statistical Association*, *96*(456), 1387–1396. https://doi.org/10.1198/016214501753382309

Kim, C.-J., & Nelson, C. R. (1999). *State-space models with regime switching: Classical and Gibbs-sampling approaches with applications*. The MIT Press. https://doi.org/10.7551/mitpress/6444.001.0001

Kisbu-Sakarya, Y., MacKinnon, D. P., & Miočević, M. (2014). The distribution of the product explains normal theory mediation confidence interval estimation. *Multivariate Behavioral Research*, *49*(3), 261–268. https://doi.org/10.1080/00273171.2014.903162

Koopman, J., Howe, M., & Hollenbeck, J. R. (2014). Pulling the Sobel test up by its bootstraps. In *More statistical and methodological myths and urban legends: Doctrine, verity and fable in organizational and social sciences* (pp. 224–243). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780203775851

Koopman, J., Howe, M., Hollenbeck, J. R., & Sin, H.-P. (2015). Small sample mediation testing: Misplaced confidence in bootstrapped confidence intervals. *Journal of Applied Psychology*, *100*(1), 194–202. https://doi.org/10.1037/a0036635

Kuiper, R. M., & Ryan, O. (2018). Drawing conclusions from cross-lagged relationships: Re-considering the role of the time-interval. *Structural Equation Modeling: A Multidisciplinary Journal*, *25*(5), 809–823. https://doi.org/10.1080/10705511.2018.1431046

Kurtzer, G. M., cclerget, Bauer, M., Kaneshiro, I., Trudgian, D., & Godlove, D. (2021). hpcng/singularity: Singularity 3.7.3. https://doi.org/10.5281/ZENODO.1310023

Kurtzer, G. M., Sochat, V., & Bauer, M. W. (2017). Singularity: Scientific containers for mobility of compute (A. Gursoy, Ed.). *PLOS ONE*, *12*(5), e0177459. https://doi.org/10.1371/journal.pone.0177459

Kwan, J. L. Y., & Chan, W. (2011). Comparing standardized coefficients in structural equation modeling: A model reparameterization approach. *Behavior Research Methods*, *43*(3), 730–745. https://doi.org/10.3758/s13428-011-0088-6

Kwan, J. L. Y., & Chan, W. (2014). Comparing squared multiple correlation coefficients using structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, *21*(2), 225–238. https://doi.org/10.1080/10705511.2014.882673

Lahiri, P. (2003). On the impact of bootstrap in survey sampling and small-area estimation. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994975

Lele, S. R. (2003). Impact of bootstrap on the estimating functions. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994973

Li, K. H., Raghunathan, T. E., & Rubin, D. B. (1991). Large-sample significance levels from multiply imputed data using moment-based statistics and an F reference distribution. *Journal of the*

American Statistical Association, *86*(416), 1065–1073. https://doi.org/10.1080/01621459.1991.10475152

Li, Y., Oravecz, Z., Zhou, S., Bodovski, Y., Barnett, I. J., Chi, G., Zhou, Y., Friedman, N. P., Vrieze, S. I., & Chow, S.-M. (2022). Bayesian forecasting with a regime-switching zero-inflated multilevel poisson regression model: An application to adolescent alcohol use with spatial covariates. *Psychometrika*, *87*(2), 376–402. https://doi.org/10.1007/s11336-021-09831-9

Li, Y., Wood, J., Ji, L., Chow, S.-M., & Oravecz, Z. (2021). Fitting multilevel vector autoregressive models in Stan, JAGS, and Mplus. *Structural Equation Modeling: A Multidisciplinary Journal*, *29*(3), 452–475. https://doi.org/10.1080/10705511.2021.1911657

Little, R. J. A., & Rubin, D. B. (2019). *Statistical analysis with missing data* (3rd ed.). Wiley. https://doi.org/10.1002/9781119482260

Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician*, *54*(3), 217–224. https://doi.org/10.1080/00031305.2000.10474549

Lütkepohl, H. (2005). *New introduction to multiple time series analysis*. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-27752-1

MacKinnon, D. P. (1994). Analysis of mediating variables in prevention and intervention research. *NIDA research monograph*, *139*, 127–153.

MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. Erlbaum Psych Press. https://doi.org/10.4324/9780203809556

Mackinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, *17*(2), 144–158. https://doi.org/10.1177/0193841x9301700202

MacKinnon, D. P., Fritz, M. S., Williams, J., & Lockwood, C. M. (2007). Distribution of the product confidence limits for the indirect effect: Program PRODCLIN. *Behavior Research Methods*, *39*(3), 384–389. https://doi.org/10.3758/bf03193007

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*(1), 83–104. https://doi.org/10.1037/1082-989x.7.1.83

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, *39*(1), 99–128. https://doi.org/10.1207/s15327906mbr3901_4

MacKinnon, J. G., & White, H. (1985). Some heteroskedasticity-consistent covariance matrix estimators with improved finite sample properties. *Journal of Econometrics*, *29*(3), 305–325. https://doi.org/10.1016/0304-4076(85)90158-7

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, *12*(1), 23–44. https://doi.org/10.1037/1082-989x.12.1.23

Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research*, *46*(5), 816–841. https://doi.org/10.1080/00273171.2011.606716

McArdle, J. J. (2009). Latent variable modeling of differences and changes with longitudinal data. *Annual Review of Psychology*, *60*(1), 577–605. https://doi.org/10.1146/annurev.psych.60.110707.163612

McNeish, D., & Hamaker, E. L. (2020). A primer on two-level dynamic structural equation models for intensive longitudinal data in Mplus. *Psychological Methods*, *25*(5), 610–635. https://doi.org/10.1037/met0000250

McNeish, D., & MacKinnon, D. P. (2022). Intensive longitudinal mediation in Mplus. *Psychological Methods*. https://doi.org/10.1037/met0000536

Merkel, D. (2014). Docker: Lightweight Linux containers for consistent development and deployment. *Linux Journal*, *2014*(239), 2. https://www.linuxjournal.com/content/docker-lightweight-linux-containers-consistent-development-and-deployment

Micceri, T. (1989). The unicorn, the normal curve, and other improbable creatures. *Psychological Bulletin*, *105*(1), 156–166. https://doi.org/10.1037/0033-2909.105.1.156

Muthén, B. O., & Curran, P. J. (1997). General longitudinal modeling of individual differences in experimental designs: A latent variable framework for analysis and power estimation. *Psychological Methods*, *2*(4), 371–402. https://doi.org/10.1037/1082-989x.2.4.371

Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide. Eighth edition.* Los Angeles, CA, Muthén & Muthén.

National Research Council. (1982). *An assessment of research-doctorate programs in the United States: Social and behavioral sciences.* National Academies Press. https://doi.org/10.17226/9781

Neale, M. C., Hunter, M. D., Pritikin, J. N., Zahery, M., Brick, T. R., Kirkpatrick, R. M., Estabrook, R., Bates, T. C., Maes, H. H., & Boker, S. M. (2015). OpenMx 2.0: Extended structural equation and statistical modeling. *Psychometrika*, *81*(2), 535–549. https://doi.org/10.1007/s11336-014-9435-8

Nesselroade, J. R., & Cable, D. G. (1974). Sometimes, it's okay to factor difference scores" - the separation of state and trait anxiety. *Multivariate Behavioral Research*, *9*(3), 273–284. https://doi.org/10.1207/s15327906mbr0903_3

Newey, W. K., & West, K. D. (1987). A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. *Econometrica*, *55*(3), 703. https://doi.org/10.2307/1913610

Nüst, D., Eddelbuettel, D., Bennett, D., Cannoodt, R., Clark, D., Daróczi, G., Edmondson, M., Fay, C., Hughes, E., Kjeldgaard, L., Lopp, S., Marwick, B., Nolis, H., Nolis, J., Ooi, H., Ram, K., Ross, N., Shepherd, L., Sólymos, P., ... Xiao, N. (2020). The Rockerverse: Packages and applications for containerisation with R. *The R Journal*, *12*(1), 437. https://doi.org/10.32614/rj-2020-007

Oravecz, Z., Tuerlinckx, F., & Vandekerckhove, J. (2011). A hierarchical latent stochastic differential equation model for affective dynamics. *Psychological Methods*, *16*(4), 468–490. https://doi.org/10.1037/a0024375

O'Rourke, H. P., & MacKinnon, D. P. (2018). Reasons for testing mediation in the absence of an intervention effect: A research imperative in prevention and intervention research. *Journal of Studies on Alcohol and Drugs*, *79*(2), 171–181. https://doi.org/10.15288/jsad.2018.79.171

O'Rourke, H. P., & MacKinnon, D. P. (2019). The importance of mediation analysis in substance-use prevention. In *Advances in prevention science* (pp. 233–246). Springer International Publishing. https://doi.org/10.1007/978-3-030-00627-3_15

Ou, L., Hunter, M. D., & Chow, S.-M. (2019). What's for dynr: A package for linear and nonlinear dynamic modeling in R. *The R Journal*, *11*(1), 91. https://doi.org/10.32614/rj-2019-012

Oud, J. H., van den Bercken, J. H., & Essers, R. J. (1990). Longitudinal factor score estimation using the Kalman filter. *Applied Psychological Measurement*, *14*(4), 395–418. https://doi.org/10.1177/014662169001400406

Oud, J. H. L., & Jansen, R. A. R. G. (2000). Continuous time state space modeling of panel data by means of SEM. *Psychometrika*, *65*(2), 199–215. https://doi.org/10.1007/bf02294374

Pawitan, Y. (2013). *In all likelihood: Statistical modelling and inference using likelihood*. Oxford University Press.

Pesigan, I. J. A. (2022). *Confidence intervals for standardized coefficients: Applied to regression coefficients in primary studies and indirect effects in meta-analytic structural equation modeling* [Doctoral dissertation, University of Macau].

Pesigan, I. J. A., & Cheung, S. F. (2020). SEM-based methods to form confidence intervals for indirect effect: Still applicable given nonnormality, under certain conditions. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.571928

Pesigan, I. J. A., & Cheung, S. F. (2023). Monte Carlo confidence intervals for the indirect effect with missing data. *Behavior Research Methods*. https://doi.org/10.3758/s13428-023-02114-4

Pesigan, I. J. A., Sun, R. W., & Cheung, S. F. (2023). betaDelta and betaSandwich: Confidence intervals for standardized regression coefficients in R. *Multivariate Behavioral Research*, 1–4. https://doi.org/10.1080/00273171.2023.2201277

Peugh, J. L., & Enders, C. K. (2004). Missing data in educational research: A review of reporting practices and suggestions for improvement. *Review of Educational Research*, *74*(4), 525–556. https://doi.org/10.3102/00346543074004525

Politis, D. N. (2003). The impact of bootstrap methods on time series analysis. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994977

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731. https://doi.org/10.3758/bf03206553

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891. https://doi.org/10.3758/brm.40.3.879

Preacher, K. J., & Selig, J. P. (2012). Advantages of monte carlo confidence intervals for indirect effects. *Communication Methods and Measures*, *6*(2), 77–98. https://doi.org/10.1080/19312458.2012.679848

R Core Team. (2021). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/

R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/

R Core Team. (2023). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/

Raghunathan, T. E., Lepkowski, J. M., Hoewyk, J. V., & Solenberger, P. (2001). A multivariate technique for multiply imputing missing values using a sequence of regression models. *Survey Methodology*, *27*(1), 85–95.

Rasmussen, J. L. (1987). Estimating correlation coefficients: Bootstrap and parametric approaches. *Psychological Bulletin*, *101*(1), 136–139. https://doi.org/10.1037/0033-2909.101.1.136

Robey, R. R., & Barcikowski, R. S. (1992). Type I error and the number of iterations in Monte Carlo studies of robustness. *British Journal of Mathematical and Statistical Psychology*, *45*(2), 283–288. https://doi.org/10.1111/j.2044-8317.1992.tb00993.x

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, *48*(2). https://doi.org/10.18637/jss.v048.i02

Rousselet, G. A., Pernet, C. R., & Wilcox, R. R. (2021). The percentile bootstrap: A primer with step-by-step instructions in R. *Advances in Methods and Practices in Psychological Science*, *4*(1), 1–10. https://doi.org/10.1177/2515245920911881

Rubin, D. B. (1976). Inference and missing data. *Biometrika*, *63*(3), 581–592. https://doi.org/10.1093/biomet/63.3.581

Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. John Wiley & Sons, Inc. https://doi.org/10.1002/9780470316696

Ryan, O., & Hamaker, E. L. (2021). Time to intervene: A continuous-time approach to network analysis and centrality. *Psychometrika*, *87*(1), 214–252. https://doi.org/10.1007/s11336-021-09767-0

Savalei, V., & Rosseel, Y. (2021). Computational options for standard errors and test statistics with incomplete normal and nonnormal data in SEM. *Structural Equation Modeling: A Multidisciplinary Journal*, *29*(2), 163–181. https://doi.org/10.1080/10705511.2021.1877548

Schafer, J. L. (1997). *Analysis of incomplete multivariate data*. Chapman; Hall/CRC. https://doi.org/10.1201/9780367803025

Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, *7*(2), 147–177. https://doi.org/10.1037/1082-989x.7.2.147

Schenker, N. (1987). Better bootstrap confidence intervals: Comment. *Journal of the American Statistical Association*, *82*(397), 192. https://doi.org/10.2307/2289150

Schouten, R. M., Lugtig, P., & Vink, G. (2018). Generating missing values for simulation purposes: A multivariate amputation procedure. *Journal of Statistical Computation and Simulation*, *88*(15), 2909–2930. https://doi.org/10.1080/00949655.2018.1491577

Selig, J. P., & Preacher, K. J. (2009). Mediation models for longitudinal data in developmental research. *Research in Human Development*, *6*(2-3), 144–164. https://doi.org/10.1080/15427600902911247

Serlin, R. C. (2000). Testing for robustness in Monte Carlo studies. *Psychological Methods*, *5*(2), 230–240. https://doi.org/10.1037/1082-989x.5.2.230

Serlin, R. C., & Lapsley, D. K. (1985). Rationality in psychological research: The good-enough principle. *American Psychologist*, *40*(1), 73–83. https://doi.org/10.1037/0003-066x.40.1.73

Shao, J. (2003). Impact of the bootstrap on sample surveys. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994974

Shiffman, S. (2009). Ecological momentary assessment (EMA) in studies of substance use. *Psychological Assessment*, *21*(4), 486–497. https://doi.org/10.1037/a0017074

Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological momentary assessment. *Annual Review of Clinical Psychology*, *4*(1), 1–32. https://doi.org/10.1146/annurev.clinpsy.3.022806.091415

Shrout, P. E. (2011). Commentary: Mediation analysis, causal process, and cross-sectional data. *Multivariate Behavioral Research*, *46*(5), 852–860. https://doi.org/10.1080/00273171.2011.606718

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, *7*(4), 422–445. https://doi.org/10.1037/1082-989x.7.4.422

Shumway, R. H., & Stoffer, D. S. (2017). *Time series analysis and its applications: With R examples*. Springer International Publishing. https://doi.org/10.1007/978-3-319-52452-8

Smith, K. E., & Juarascio, A. (2019). From ecological momentary assessment (EMA) to ecological momentary intervention (EMI): Past and future directions for ambulatory assessment and interventions in eating disorders. *Current Psychiatry Reports*, *21*(7). https://doi.org/10.1007/s11920-019-1046-8

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, *13*, 290. https://doi.org/10.2307/270723

Sobel, M. E. (1986). Some new results on indirect effects and their standard errors in covariance structure models. *Sociological Methodology*, *16*, 159. https://doi.org/10.2307/270922

Sobel, M. E. (1987). Direct and indirect effects in linear structural equation models. *Sociological Methods & Research*, *16*(1), 155–176. https://doi.org/10.1177/0049124187016001006

Soltis, P. S., & Soltis, D. E. (2003). Applying the bootstrap in phylogeny reconstruction. *Statistical Science*, *18*(2). https://doi.org/10.1214/ss/1063994980

Stoffer, D. S., & Wall, K. D. (1991). Bootstrapping state-space models: Gaussian maximum likelihood estimation and the Kalman filter. *Journal of the American Statistical Association*, *86*(416), 1024–1033. https://doi.org/10.1080/01621459.1991.10475148

Taylor, A. B., & MacKinnon, D. P. (2012). Four applications of permutation methods to testing a single-mediator model. *Behavior Research Methods*, *44*(3), 806–844. https://doi.org/10.3758/s13428-011-0181-x

Taylor, A. B., MacKinnon, D. P., & Tein, J.-Y. (2007). Tests of the three-path mediated effect. *Organizational Research Methods*, *11*(2), 241–269. https://doi.org/10.1177/1094428107300344

Tofighi, D., & Kelley, K. (2019). Indirect effects in sequential mediation models: Evaluating methods for hypothesis testing and confidence interval formation. *Multivariate Behavioral Research*, *55*(2), 188–210. https://doi.org/10.1080/00273171.2019.1618545

Tofighi, D., & Kelley, K. (2020). Improved inference in mediation analysis: Introducing the model-based constrained optimization procedure. *Psychological Methods*, *25*, 496–515. https://doi.org/10.1037/met0000259

Tofighi, D., & MacKinnon, D. P. (2015). Monte Carlo confidence intervals for complex functions of indirect effects. *Structural Equation Modeling: A Multidisciplinary Journal*, *23*(2), 194–205. https://doi.org/10.1080/10705511.2015.1057284

Uhlenbeck, G. E., & Ornstein, L. S. (1930). On the theory of the brownian motion. *Physical Review*, *36*(5), 823–841. https://doi.org/10.1103/physrev.36.823

van Buuren, S. (2018). *Flexible imputation of missing data* (2nd ed.). Chapman; Hall/CRC. https://doi.org/10.1201/9780429492259

van Buuren, S., Brand, J. P. L., Groothuis-Oudshoorn, C. G. M., & Rubin, D. B. (2006). Fully conditional specification in multivariate imputation. *Journal of Statistical Computation and Simulation*, *76*(12), 1049–1064. https://doi.org/10.1080/10629360600810434

van Buuren, S., & Groothuis-Oudshoorn, K. (2011). mice: Multivariate imputation by chained equations in R. *Journal of Statistical Software*, *45*(3). https://doi.org/10.18637/jss.v045.i03

van Montfort, K., Oud, J. H. L., & Voelkle, M. C. (Eds.). (2018). *Continuous time modeling in the behavioral and related sciences*. Springer International Publishing. https://doi.org/10.1007/978-3-319-77219-6

Venables, W. N., & Ripley, B. D. (2002). *Modern applied statistics with S*. Springer New York. https://doi.org/10.1007/978-0-387-21706-2

Venzon, D. J., & Moolgavkar, S. H. (1988). A method for computing profile-likelihood-based confidence intervals. *Applied Statistics*, *37*(1), 87. https://doi.org/10.2307/2347496

Voelkle, M. C., & Oud, J. H. L. (2012). Continuous time modelling with individually varying time intervals for oscillating and non-oscillating processes. *British Journal of Mathematical and Statistical Psychology*, *66*(1), 103–126. https://doi.org/10.1111/j.2044-8317.2012.02043.x

Voelkle, M. C., Oud, J. H. L., Davidov, E., & Schmidt, P. (2012). An SEM approach to continuous time modeling of panel data: Relating authoritarianism and anomia. *Psychological Methods*, *17*(2), 176–192. https://doi.org/10.1037/a0027543

Waller, N. G. (2022). *fungible: Psychometric functions from the Waller Lab*. The R Foundation. https://CRAN.R-project.org/package=fungible

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. https://doi.org/10.1037/met0000235

White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica*, *48*(4), 817–838. https://doi.org/10.2307/1912934

Wright, S. (1918). On the nature of size factors. *Genetics*, *3*(4), 367–374. https://doi.org/10.1093/genetics/3.4.367

Wright, S. (1934). The method of path coefficients. *The Annals of Mathematical Statistics*, *5*(3), 161–215. https://doi.org/10.1214/aoms/1177732676

Wu, W., & Jia, F. (2013). A new procedure to test mediation with missing data through nonparametric bootstrapping and multiple imputation. *Multivariate Behavioral Research*, *48*(5), 663–691. https://doi.org/10.1080/00273171.2013.816235

Yuan, K.-H., & Bentler, P. M. (2000). Three likelihood-based methods for mean and covariance structure analysis with nonnormal missing data. *Sociological Methodology*, *30*(1), 165–200. https://doi.org/10.1111/0081-1750.00078

Yuan, K.-H., & Chan, W. (2011). Biases and standard errors of standardized regression coefficients. *Psychometrika*, *76*(4), 670–690. https://doi.org/10.1007/s11336-011-9224-6

Yzerbyt, V., Muller, D., Batailler, C., & Judd, C. M. (2018). New recommendations for testing indirect effects in mediational models: The need to report and test component paths. *Journal of Personality and Social Psychology*, *115*(6), 929–943. https://doi.org/10.1037/pspa0000132

Zeileis, A. (2004). Econometric computing with HC and HAC covariance matrix estimators. *Journal of Statistical Software*, *11*(10). https://doi.org/10.18637/jss.v011.i10

Zeileis, A. (2006). Object-oriented computation of sandwich estimators. *Journal of Statistical Software*, *16*(9). https://doi.org/10.18637/jss.v016.i09

Zeileis, A., Köll, S., & Graham, N. (2020). Various versatile variances: An object-oriented implementation of clustered covariances in R. *Journal of Statistical Software*, *95*(1). https://doi.org/10.18637/jss.v095.i01

Zhang, Z., & Wang, L. (2012). Methods for mediation analysis with missing data. *Psychometrika*, *78*(1), 154–184. https://doi.org/10.1007/s11336-012-9301-5

Zhang, Z., Wang, L., & Tong, X. (2015). Mediation analysis with missing data through multiple imputation and bootstrap. In *Quantitative psychology research* (pp. 341–355). Springer International Publishing. https://doi.org/10.1007/978-3-319-19977-1_24