Ivan Jacob Agaloos Pesigan

June 24, 2024

References

- Aalen, O. O., Røysland, K., Gran, J. M., Kouyos, R., & Lange, T. (2016). Can we believe the DAGs?
 A comment on the relationship between causal DAGs and mechanisms. Statistical Methods in Medical Research, 25(5), 2294–2314. https://doi.org/10.1177/0962280213520436
- Aalen, O. O., Røysland, K., Gran, J. M., & Ledergerber, B. (2012). Causality, mediation and time: A dynamic viewpoint. Journal of the Royal Statistical Society. Series A (Statistics in Society), 175(4), 831–861. https://doi.org/10.1111/j.1467-985X.2011.01030.x
- 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
- 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., Lopez-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
- 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
- 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 Equa-*

- tion Modeling: A Multidisciplinary Journal, 17(2), 303-332. https://doi.org/10.1080/10705511003661553
- 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
- de Haan-Rietdijk, S., Voelkle, M. C., Keijsers, L., & Hamaker, E. L. (2017). Discrete- vs. continuoustime modeling of unequally spaced experience sampling method data. Frontiers in Psychology, 8. https://doi.org/10.3389/fpsyg.2017.01849
- Deboeck, P. R., & Boulton, A. J. (2016). Integration of stochastic differential equations using structural equation modeling: A method to facilitate model fitting and pedagogy. Structural Equation Modeling: A Multidisciplinary Journal, 23(6), 888–903. https://doi.org/10.1080/10705511.2016.1218763
- 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
- Driver, C. C., Oud, J. H. L., & Voelkle, M. C. (2017). Continuous time structural equation modeling with R package ctsem. *Journal of Statistical Software*, 77(5). https://doi.org/10.18637/ jss.v077.i05
- Driver, C. C., & Voelkle, M. C. (2018). Hierarchical Bayesian continuous time dynamic modeling. Psychological Methods, 23(4), 774–799. https://doi.org/10.1037/met0000168
- 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., & 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., & 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. (2012). Bayesian inference and the parametric bootstrap. The Annals of Applied Statistics, 6(4). https://doi.org/10.1214/12-aoas571
- Enders, C. K., Fairchild, A. J., & MacKinnon, D. P. (2013). A Bayesian approach for estimating mediation effects with missing data. *Multivariate Behavioral Research*, 48(3), 340–369. https://doi.org/10.1080/00273171.2013.784862
- Epskamp, S., Borsboom, D., & Fried, E. I. (2017). Estimating psychological networks and their accuracy: A tutorial paper. *Behavior Research Methods*, 50(1), 195–212. https://doi.org/10.3758/s13428-017-0862-1
- 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
- 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
- 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

- Gu, F., Preacher, K. J., & Ferrer, E. (2014). A state space modeling approach to mediation analysis.
 Journal of Educational and Behavioral Statistics, 39(2), 117–143. https://doi.org/10.3102/1076998614524823
- Hamaker, E. L., Ceulemans, E., Grasman, R. P. P. P., & Tuerlinckx, F. (2015). Modeling affect dynamics: State of the art and future challenges. *Emotion Review*, 7(4), 316–322. https://doi.org/10.1177/1754073915590619
- 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
- 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
- Hecht, M., & Voelkle, M. C. (2019). Continuous-time modeling in prevention research: An illustration. International Journal of Behavioral Development, 45(1), 19–27. https://doi.org/10.1177/0165025419885026
- 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
- Hingson, R., Zha, W., & Smyth, D. (2017). Magnitude and trends in heavy episodic drinking, alcohol-impaired driving, and alcohol-related mortality and overdose hospitalizations among emerging adults of college ages 18–24 in the United States, 1998–2014. Journal of Studies on Alcohol and Drugs, 78(4), 540–548. https://doi.org/10.15288/jsad.2017.78.540
- 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
- Jensen, M. P., & Turk, D. C. (2014). Contributions of psychology to the understanding and treatment of people with chronic pain: Why it matters to ALL psychologists. American Psychologist, 69(2), 105–118. https://doi.org/10.1037/a0035641

- Jones, J. A., & Waller, N. G. (2013). 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. (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
- 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., & 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
- Kossakowski, J. J., Groot, P. C., Haslbeck, J. M. B., Borsboom, D., & Wichers, M. (2017). Data from 'Critical slowing down as a personalized early warning signal for depression'. *Journal* of Open Psychology Data, 5. https://doi.org/10.5334/jopd.29
- 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
- Kuppens, P. (2015). It's about time: A special section on affect dynamics. *Emotion Review*, 7(4), 297–300. https://doi.org/10.1177/1754073915590947
- 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
- Leffingwell, T. R., Cooney, N. J., Murphy, J. G., Luczak, S., Rosen, G., Dougherty, D. M., & Barnett, N. P. (2012). Continuous objective monitoring of alcohol use: Twenty-first century measurement using transdermal sensors. *Alcoholism: Clinical and Experimental Research*, 37(1), 16–22. https://doi.org/10.1111/j.1530-0277.2012.01869.x
- 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
- 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
- Miocevic, M., Gonzalez, O., Valente, M. J., & MacKinnon, D. P. (2017). A tutorial in Bayesian potential outcomes mediation analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 25(1), 121–136. https://doi.org/10.1080/10705511.2017.1342541
- Molenaar, P. C. M. (2017). Equivalent dynamic models. *Multivariate Behavioral Research*, 52(2), 242–258. https://doi.org/10.1080/00273171.2016.1277681
- Moneta, A., Chlaß, N., Entner, D., & Hoyer, P. (2011). Causal search in structural vector autoregressive models. *Journal of Machine Learning Research Proceedings Track*, 12, 95–114.
- 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
- O'Laughlin, K. D., Martin, M. J., & Ferrer, E. (2018). Cross-sectional analysis of longitudinal mediation processes. *Multivariate Behavioral Research*, 53(3), 375–402. https://doi.org/10.1080/00273171.2018.1454822

- 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.
- O'Rourke, H. P., & MacKinnon, D. P. (2019). The importance of mediation analysis in substanceuse 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
- Piasecki, T. M. (2019). Assessment of alcohol use in the natural environment. *Alcoholism: Clinical and Experimental Research*, 43(4), 564–577. https://doi.org/10.1111/acer.13975
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16(2), 93–115. https://doi.org/10.1037/a0022658
- 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
- Reichardt, C. S. (2011). Commentary: Are three waves of data sufficient for assessing mediation?

 Multivariate Behavioral Research, 46(5), 842–851. https://doi.org/10.1080/00273171.2011.

 606740
- 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
- Sacks, J. J., Gonzales, K. R., Bouchery, E. E., Tomedi, L. E., & Brewer, R. D. (2015). 2010 national and state costs of excessive alcohol consumption. American Journal of Preventive Medicine, 49(5), e73–e79. https://doi.org/10.1016/j.amepre.2015.05.031

- Schermerhorn, A. C., Chow, S.-M., & Cummings, E. M. (2010). Developmental family processes and interparental conflict: Patterns of microlevel influences. *Developmental Psychology*, 46(4), 869–885. https://doi.org/10.1037/a0019662
- 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
- Schultzberg, M., & Muthén, B. (2017). Number of subjects and time points needed for multilevel time-series analysis: A simulation study of dynamic structural equation modeling. Structural Equation Modeling: A Multidisciplinary Journal, 25(4), 495–515. https://doi.org/10.1080/10705511.2017.1392862
- Schuurman, N. K., & Hamaker, E. L. (2019). Measurement error and person-specific reliability in multilevel autoregressive modeling. *Psychological Methods*, 24(1), 70–91. https://doi.org/10.1037/met0000188
- Schuurman, N. K., Houtveen, J. H., & Hamaker, E. L. (2015). Incorporating measurement error in n = 1 psychological autoregressive modeling. Frontiers in Psychology, 6. https://doi.org/ 10.3389/fpsyg.2015.01038
- 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
- Singer, H. (2012). SEM modeling with singular moment matrices part II: ML-estimation of sampled stochastic differential equations. The Journal of Mathematical Sociology, 36(1), 22–43. https://doi.org/10.1080/0022250x.2010.532259
- 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

- 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
- Tibshirani, R. (2011). Regression shrinkage and selection via the lasso: A retrospective. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, 73(3), 273–282. https://doi.org/10.1111/j.1467-9868.2011.00771.x
- 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., & 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
- Usami, S., Murayama, K., & Hamaker, E. L. (2019). A unified framework of longitudinal models to examine reciprocal relations. *Psychological Methods*, 24(5), 637–657. https://doi.org/10.1037/met0000210
- 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
- Ver Hoef, J. M. (2012). Who invented the delta method? The American Statistician, 66(2), 124–127. https://doi.org/10.1080/00031305.2012.687494
- 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
- Vuorre, M., & Bolger, N. (2017). Within-subject mediation analysis for experimental data in cognitive psychology and neuroscience. *Behavior Research Methods*, 50(5), 2125–2143. https://doi.org/10.3758/s13428-017-0980-9

- Wichers, M., Groot, P. C., Psychosystems, ESM Group, & EWS Group. (2016). Critical slowing down as a personalized early warning signal for depression. *Psychotherapy and Psychosomatics*, 85(2), 114–116. https://doi.org/10.1159/000441458
- 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., & 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
- 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
- Zyphur, M. J., Allison, P. D., Tay, L., Voelkle, M. C., Preacher, K. J., Zhang, Z., Hamaker, E. L., Shamsollahi, A., Pierides, D. C., Koval, P., & Diener, E. (2019). From data to causes I: Building a general cross-lagged panel model (GCLM). Organizational Research Methods, 23(4), 651–687. https://doi.org/10.1177/1094428119847278
- Zyphur, M. J., Voelkle, M. C., Tay, L., Allison, P. D., Preacher, K. J., Zhang, Z., Hamaker, E. L., Shamsollahi, A., Pierides, D. C., Koval, P., & Diener, E. (2019). From data to causes II: Comparing approaches to panel data analysis. Organizational Research Methods, 23(4), 688–716. https://doi.org/10.1177/1094428119847280