List of key references on Mediation Analysis

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Medicine: Mind the Gap Seminar
Applying Mediation Analysis to Understand How Interventions Work
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Almirall, D., Nahum-Shani, I., Sherwood, N. E., & Murphy, S. A. (2014). Introduction to SMART designs for the development of adaptive interventions: with application to weight loss research. *Translational Behavioral Medicine, 4*(3), 260-274.

Alwin, D. F., & Hauser, R. M. (1975). The decomposition of effects in path analysis. *American Sociological Review*, 37-47.

Angrist, J. D., Imbens, G. W., & Rubin, D. B. (1996). Identification of causal effects using instrumental variables (with comments). *Journal of the American Statistical Association, 91*, 444-472.

Baltes, P. B. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist, 52*(4), 366-380.

Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. *Successful Aging: Perspectives from the Behavioral Sciences, 1*, 1-34.

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*, 1173-1182.

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*, 142-163.

Blalock, H. M., Jr. (1979). Measurement and conceptualization problems: The major obstacle to integrating theory and research. *American Sociology Review, 44*, 881-894.

Bolger, N. & Laurenceau, J-P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research.* Guilford: New York.

Caffo, B., Chen, S., Stewart, W., Bolla, K., Yousem, D., Davatzikos, C., & Schwartz, B.S. (2008). Are brain volumes based on magnetic resonance imaging mediators of the associations of cumulative lead dose with cognitive function? *American Journal of Epidemiology, 167*(4), 429-437.

Cheong, J., MacKinnon, D. P., & Khoo, S. T., (2003). Investigation of mediational processes using parallel process latent growth curve modeling. *Structural Equation Modeling, 10,* 238-262.

Cheung, M. W.-L. (2009). Constructing approximate confidence intervals for parameters with structural equation models. *Structural Equation Modeling, 16,* 267-294.

Cicchetti, D. & Rogosch, F.A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology, 8,* 597-600.

Coffman, D. L. (2011). Estimating causal effects in mediation analysis using propensity scores. *Structural Equation Modeling, 18,* 357-369.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cole, S. R., & Hernán, M. A. (2008). Constructing inverse probability weights for marginal structural models. *American Journal of Epidemiology*, *168*(6), 656-664.

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,* 558-577.

Collins, L. M., & Graham, J. W. (2002). The effect of the timing and spacing of observations in longitudinal studies of tobacco and other drug use: temporal design considerations. *Drug and Alcohol Dependence, 68,* S85-S96.

Collins, L. M., & Lanza, S. T. (2010). *Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences.* New York: Wiley

Cox, M. G., Kisbu-Sakarya, Y., Miočević, M., & MacKinnon, D. P. (2014). Sensitivity plots for confounder bias in the single mediator model. *Evaluation Review*, *37*(5), 405-431. PMCID: PMC Journal – In Process doi: 10.1177/0193841X14524576

Coxe, S., & MacKinnon, D. P. (2010). Mediation analysis of Poisson distributed count outcomes. *Multivariate Behavioral Research, 45*(6), 1022. PMCID: PMC Journal – In Process doi: 10.1080/00273171.2010.534375

Criqui, M. H., Cowan, L. D., Tyroler, H. A., Bangdiwala, S., Heiss, G., Wallace, R. B., & Cohn, R. (1987). Lipoproteins as mediators for the effects of alcohol consumption and cigarette smoking on cardiovascular mortality: Results from the lipid research clinics follow-up study. *American Journal of Epidemiology*, *126*(4), 629-637.

Cronbach, L. J., & Furby, L. (1970). How we should measure "change": Or should we? *Psychological Bulletin*, *74*(1), 68.

Dodge K.A., Bates J.E., & Pettit G.S. (1990). Mechanisms in the cycle of violence. *Science 250*:1678–1683.

Echt, D. S., Liebson, P. R., Mitchell, L. B., Peters, R. W., Obias-Manno, D., Barker, A. H., et al. (1991). Mortality and morbidity in patients receiving encainide, flecainide or placebo. The cardiac arrhythmia suppression trial. *The New England Journal of Medicine, 324*, 781-788.

Fairchild, A. J., MacKinnon, D. P., Taborga, M. P., & Taylor, A. B. (2009). R 2 effect-size measures for mediation analysis. *Behavior Research Methods*, *41*(2), 486-498.

Folmer, H. (1981). Measurement of the effects of regional policy instruments by means of linear structural equation models and panel data. *Environment and Planning A, 13,* 1435-1448.

Frangakis, C. E., & Rubin, D. B. (2002). Principal stratification in causal inference. *Biometrics*, *58,* 21-29.

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science, 18*(3), 233-239.

Goldberg, L., Elliot, D., Clarke, G. N., MacKinnon, D. P., Moe, E., Zoref, L., ... & Lapin, A. (1996). Effects of a multidimensional anabolic steroid prevention intervention: The Adolescents Training and Learning to Avoid Steroids (ATLAS) Program. *JAMA*, *276*(19), 1555-1562.

Goldsmith, K., Chalder, T., White, P., Sharpe, M. & Pickles, A. (2013). *Exploration of instrumental variable method for estimation of causal mediation effects in the PACE trial of complex treatments for chronic fatigue syndrome.* Presented at the 2013 Causal Mediation Analysis Symposium, Gent, Belgium.

Gollob, H. F., & Reichardt, C. S. (1991). Best methods for the analysis of change: Recent advances, unanswered questions, future directions. In Collins, Linda M. (Ed); Horn, John L. (Ed), (1991). *Best methods for the analysis of change: Recent advances, unanswered questions, future directions*, (pp. 243-259). Washington, DC, US: American Psychological Association.

Greenland, S., & Morgenstern, H. (2001). Confounding in health research. *Annual Review of Public Health*, *22*, 189-212.

Hill, A. B. (1971). *Principles of medical statistics* (9th ed.). New York: Oxford.

Hinshaw, S. P. (2002). Intervention research, theoretical mechanisms, and causal processes related to externalizing behavior patterns. *Development and Psychopathology*, *14*, 789-818.

Holland, P. W. (1986). Statistics and causal inference (with comments). *Journal of the American Statistical Association, 81*, 945-970.

Horst, P. (1941). The role of predictor variables which are independent of the criterion. *Social Science Research Council Bulletin*, *48*, 431–436.

Horvitz, D. G., & Thompson, D. J. (1952). A generalization of sampling without replacement from a finite universe. *Journal of the American Statistical Association, 47*(260), 663-685.

Howe, G. W., Reiss, D., & Yuh, J. (2002). Can prevention trials test theories of etiology? *Development and Psychopathology, 14*, 673-694.

Hyman, H. H. (1955). *Survey design and analysis: Principles, cases, and procedures.* Glencoe, IL: Free Press.

Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological Methods, 15*, 309-334.

Jöreskog, K. G. (1974). Analyzing psychological data by structural analysis of covariance matrices. In: *Contemporary developments in mathematical psychology* – Volume II, W.H. Freeman Co., San Francisco.

Kenny, D. A., Bolger, N., & Korchmaros, J. D. (2003). Lower-level mediation in multilevel models. *Psychological Methods, 8*, 115-128.

Krantz, D. H. (1999). The null hypothesis testing controversy in psychology. *Journal of the American Statistical Association, 94,* 1372-1381.

Kisbu-Sakarya, Y., MacKinnon, D. P., & Aiken, L. S. (2013). A Monte Carlo comparison study of the power of the analysis of covariance, simple difference, and residual change scores in testing two-wave data. *Educational and Psychological Measurement, 73*(1), 47-62. PMCID: PMC Journal – In Process doi: 10.1177/0013164412450574

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. PMCID: PMC Journal – In Process doi: 10.1080/00273171.2014.903162

Last, J. M. (1988). *A dictionary of epidemiology* (2nd ed.). New York: Oxford University Press.

Lazarsfeld, P. F. (1955). Interpretation of statistical relations as a research operation. In P. F. Lazarsfeld & M. Rosenberg (Eds.), *The language of social research: A reader in the methodology of social research* (pp. 115-125). Glencoe, IL: Free Press.

Lynch, K. (2009, June). *Mediation methods in alcohol continuing care*. Presented at the 5th Annual Pre-Conference Satellite Meeting on Research on Mechanisms of Behavior Change: Focus on Methods. San Diego, CA.

Lynch, K. G., Cary, M., Gallop, R., & Ten Have, T. R. (2008). Causal mediation analyses for randomized trials. *Health Services & Outcomes Research Methodology, 8*(2), 57-76.

MacKinnon, D. P. (1994). Analysis of mediating variables in prevention and intervention studies. In L. Beatty and A. Cezares (Eds.), *Scientific methods in prevention research* (National Institute on Drug Abuse, Monograph #I 39, DHHS Publication No. 94-363 1, pp. 127-153). Washington, DC: U.S. Government Printing Office.

MacKinnon, D. P. (2011). Integrating mediators and moderators in research design. *Research on Social Work Practice, 21*(6), 675-681. PMCID: PMC3366634 doi: 10.1177/1049731511414148

MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. Mahwah, NJ: Lawrence Erlbaum Associates.

MacKinnon, D. P. (2013). [Peer commentary on the paper "Experimental designs for identifying causal mechanisms" by K. Imai, D. Tingley, and T. Yamamoto]. *Journal of the Royal Statistical Society A, 176*, 5-51. DOI: 10.1111/j.1467-985X.2012.01032.x

MacKinnon, D. P., Cheong, J., & *Pirlott, A. G. (2013). Mediation Analysis. In H. Cooper (Ed.) APA Handbook of Research Methods in Psychology. Washington, DC: American Psychological Association.

MacKinnon, D. P., & Cox, M. C. (2012). Commentary on "Mediation analysis and categorical variables: The final frontier" by Dawn Iacobucci [Peer commentary on "Mediation analysis and categorical variables: The final frontier" by D. Iacobucci]. *Journal of Consumer Psychology, 22*(4), 600. PMCID: PMC3501728 doi: 10.1016/j.jcps.2012.03.009

MacKinnon, D. P., Cox, M. G., Miocevic, M., & Kisbu-Sakarya, Y. (2012, March). *Methods to assess confounder bias applied to an anabolic steroid prevention program.* Paper presented at the Frontiers in Causal Inference Conference, Harvard University.

MacKinnon, D. P., Fairchild, A. J., Yoon, M., & Ryu, E. (2007). Evaluation of the proportion mediated effect size measure of mediation. *Unpublished manuscript.*

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, 384-389.

MacKinnon, D. P., Goldberg, L., Clarke, G. N., Elliot, D. L., Cheong, J., Lapin, A., ... & Krull, J. L. (2001). Mediating mechanisms in a program to reduce intentions to use anabolic steroids and improve exercise self-efficacy and dietary behavior. *Prevention Science, 2*(1), 15-28.

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*, 99-128.

MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding, and suppression effect. *Prevention Science, 1,* 173-181.

MacKinnon, D. P., & Luecken, L. J. (2011). Statistical analysis for identifying mediating variables in public health dentistry interventions. *Journal of Public Health Dentistry, 71*(s1), S37-S46. PMCID: PMC3366631 doi: 10.1111/j.1752-7325.2011.00252.x

MacKinnon, D. P., & Pirlott, A. G. (2015). Statistical approaches for enhancing causal interpretation of the M to Y relation in mediation analysis. *Personality and Social Psychology Review*. Advance online publication. PMCID: PMC Journal – In Process doi: 10.1177/1088868314542878

MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate Behavioral Research, 30,* 41-62.

MacKinnon, D. P., Coxe, S., & Baraldi, A. N. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of Business and Psychology, 27*(1), 1-14. PMCID: PMC4165346 doi: 10.1007/s10869-011-9248-z

MacKinnon, D. P., & Valente, M. J. (2014). Mediation from multilevel to structural equation modeling. *Annals of Nutrition and Metabolism, 65,* 196-202. PMCID: PMC Journal – In Process doi: 10.1159/000362505

MacKinnon, D. P., Wurpts, I. C., & Valente, M. J. (2014). *Imagery and memory theory as known effect validation for mediation analysis*. Unpublished Manuscript.

MacKinnon, D. P., Johnson, C. A., Pentz, M. A., Dwyer, J. H., Hansen, W. B., Flay, B. R., & Wang, E. (1991). Mediating mechanisms in a school-based drug prevention program: One year effects of the Midwestern Prevention Project. *Health Psychology, 10(3),* 164-172.

Mark, M. M. (1986). Validity typologies and the logic and practice of quasi-experimentation. In W. M. K. Trochim (Ed.), *Advances in quasi-experimental design and analysis* (pp. 47-66). San Francisco: Jossey-Bass.

Mark, M. M. (1990). From program theory to tests of program theory. *New Directions for Program Evaluation, 47,* 37-51. doi: 10.1002/ev.1553

Marsh, H. W. (1993). The effects of participation in sport during the last two years of high school. *Sociology of Sport Journal*, *10*(1), 18-43.

Masten, A. S., & Cicchetti, D., (2010). Developmental cascades. *Development and Psychopathology*, *22*, 491-495.

Mason, W. A., Kosterman, R., Haggerty, K. P., Hawkins, J. D., Redmond, C., Spoth, R. L., et al. (2009). Gender moderation and social development mediation of the effect of family-focused substance use preventive intervention on young adult alcohol abuse. *Addictive Behaviors, 34,* 599-605.

Mauro, R. (1990). Understanding L.O.V.E. (left out variables error): A method for estimating effects of omitted variables. *Psychological Bulletin, 108,* 314-329.

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological methods, 12*(1), 23.

McArdle, J. J. (2001). A latent difference score approach to longitudinal dynamic structural analysis. In R. Cudeck, S. du Toit, & D. Sörbom (Eds.) *Structural equation modeling: Present and future. A festschrift in honor of Karl Jöreskog* (pp. 341-380). Lincolnwood, IL: Scientific Software International.

McCarthy, D. E., Piasecki, T. M., Lawrence, D. L., Jorenby, D. E., Shiffman, S., & Baker, T. B. (2008). Psychological mediators of bupropion sustained-release treatment for smoking cessation. *Addiction, 103*(9), 1521-1533.

McDonald, R. P. (1997). Haldane's lungs: A case study in path analysis. *Multivariate Behavioral Research, 32,* 1-38.

Meinert, C. L. (with Tonascia, S.) (1986). *Clinical trials: Design, conduct, and analysis* (Monographs in epidemiology and biostatistics, Vol. 8). New York: Oxford University Press.

Meredith, W., & Tisak, J. (1990). Latent curve analysis. *Psychometrika, 55*(1), 107-122.

Miočević, M. (2014). *Obtaining accurate estimates of the mediated effect with and without prior information* (Master's Thesis). Available from ProQuest Dissertations and Theses database.

Miočević, M., & MacKinnon, D. P. (2014). SAS® for Bayesian mediation analysis. *Proceedings of the SAS Global Forum 2014 Conference,* 1569-2014. Cary NC: SAS Institute Inc.

Miočević, M., O'Rourke, H. P., MacKinnon, D. P., & Brown, H. C. (2014). *The bias and efficiency of five effect size measures for mediation models*. Manuscript submitted for publication.

Morgan-Lopez, A. A. (2003) A simulation study of the mediated baseline by treatment interaction effect in preventive intervention trials (Doctoral dissertation, Arizona State University, 2003). *Dissertation Abstracts International, 64,* 4673.

Morgan-Lopez, A. A., Castro, F. G., Chassin, L., & MacKinnon, D. P. (2003). A mediated moderation model of cigarette use among Mexican-American youth. *Addictive Behaviors, 28,* 583-589.

Morgan-Lopez, A. A., & MacKinnon, D. P. (2006). Demonstration and evaluation of a method for assessing mediated moderation. *Behavior Research Methods, 38,* 77-87.

Muthén, B. & Masyn, K. (2004). Discrete-time survival mixture analysis. *Journal of Educational and Behavioral Statistics, 30,* 27-58.

Muthén, L.K., & Muthén, B.O. (1998-2010). *Mplus user's guide* (6th Ed.). Los Angeles, CA: Muthén & Muthén.

Muthén, B. & Shedden, K. (1999). Finite mixture modeling with mixture outcomes using the EM algorithm. *Biometrics, 55,* 463-469.

Nock, M. K. (2007). Conceptual and design essentials for evaluating mechanisms of change. *Alcoholism: Clinical and Experimental Research, 31*(S3), 4S-12S.

O'Rourke, H. P., & MacKinnon, D. P. (2014). When the test of mediation is more powerful than the test of the total effect. *Behavior Research Methods*. Advance online publication. PMCID: PMC Journal – In Process doi: 10.3758/s13428-014-0481-z

Pearl, J. (2001, August). Direct and indirect effects. In *Proceedings of the seventeenth conference on uncertainty in artificial intelligence* (pp. 411-420). Morgan Kaufmann Publishers Inc.

Pearl, J. (2009). *Causality (2nd Edition).* New York: Cambridge.

Pearl, J. (2012). The causal mediation formula—a guide to the assessment of pathways and mechanisms. *Prevention Science, 13*(4), 426-436.

Pirlott, A. G., & MacKinnon, D. P. (in press). Approaches to experimental mediation. Manuscript submitted for publication. *Journal of Experimental Social Psychology*.

Pirlott, A. G., Kisbu-Sakarya, Y., DeFrancesco, C. A., Elliot, D. L., & MacKinnon, D. P. (2012). Mechanisms of motivational interviewing in health promotion: A Bayesian mediation analysis. *International Journal of Behavioral Nutrition and Physical Activity, 9*(1), 69-79. PMCID: PMC3439244 doi: 10.1186/1479-5868-9-69

Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological Methods, 16*(2), 93.

Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods, 15,* 209–233.

Ranby, K. W., Aiken, L. S., MacKinnon, D. P., Elliot, D. L., Moe, E. L., McGinnis, W., & Goldberg, L. (2009). A mediation analysis of the ATHENA intervention for female athletes: Prevention of athletic-enhancing substance use and unhealthy weight loss behaviors. *Journal of Pediatric Psychology, 34*(10), 1069-1083. PMCID: PMC2782253 doi: 10.1093/jpepsy/jsp025

Ranby, K. W., MacKinnon, D. P., Fairchild, A. J., Elliot, D. L., Kuehl, K. S., & Goldberg, L. (2011). The PHLAME (Promoting Healthy Lifestyles: Alternative Models' Effects) firefighter study: Testing mediating mechanisms. *Journal of Occupational Health Psychology, 16*(4), 501-513. PMCID: PMC3328097 doi: 10.1037/a0023002

Rejeski, W. J., Ip, E. H., Bertoni, A. G., Bray, G. A., Evans, G., Gregg, E. W., & Zhang, Q. (2012). Lifestyle change and mobility in obese adults with type 2 diabetes. *The New England Journal of Medicine, 366*(13), 1209-1217.

Robins J.M. (1986). A new approach to causal inference in mortality studies with sustained exposure periods – application to control of the healthy worker survivor effect. *Mathematical Modeling, 7,* 1393-1512.

Robins J.M. (1999). Marginal Structural Models versus Structural Nested Models as Tools for Causal Inference. *Statistical Models in Epidemiology: The Environment and Clinical Trials*. Halloran, M.E. and Berry, D., eds. NY: Springer-Verlag, pp. 95-134.

Robins, J. M., & Greenland, S. (1992). Identifiability and exchangeability for direct and indirect effects. *Epidemiology, 3,* 143-155.

Robins, J. M., Hernán, M. A., & Brumback, B. (2000). Marginal structural models and causal inference in epidemiology. *Epidemiology, 11,* 550-560.

Rogosa, D. (1988). Myths about longitudinal research. In K. W. Schaie, R. T. Campbell, W. Meredith, & S. C. Rawlings (Eds.), *Methodological issues in aging research* (pp. 171-209). New York: Springer.

Rosenherg, M. (1968). *The logic of survey analysis*. New York: Basic Books.

Salthouse, T. A. (1984). Effects of age and skill in typing. *Journal of Experimental Psychology: General, 113*(3), 345.

Sandler, I. N., Schoenfelder, E. N., Wolchik, S. A., & MacKinnon, D. P. (2011). Long-term impact of prevention programs to promote effective parenting: Lasting effects but uncertain processes. *Annual Review of Psychology, 62*, 299-329. PMCID: PMC3655082 doi: 10.1146/annurev.psych.121208.131619

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press.

Stanton, A. L., Luecken, L. J., MacKinnon, D. P., & Thompson, E. H. (2013). Mechanisms in psychological interventions for adults living with cancer: Opportunity for integration of theory, research, and practice. *Journal of Consulting and Clinical Psychology, 81*, 318-335. PMCID: PMC Journal - In Process doi: 10.1037/a0028833

Sobel, M. E. (1990). Effect analysis and causation in linear structural equation models. *Psychometrika, 55*, 495-515.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology* (pp.290-312). Washington, DC: American Sociological Association.

Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology, 89*, 845-851. doi: 10.1037/0022-3514.89.6.845

Stone-Romero, E. F. & Rosopa, P. J. (2008). The relative validity of inferences about mediation as a function of research design characteristics. *Organization Research Methods, 11*(2), 326-352. doi: 10.1177/1094428107300342

Taborga, M. P. (2003). *Toward a physical activity intervention model: Synthesizing theoretical and applied research* (Master's Thesis). Available from ProQuest Dissertations and Theses database.

Tang, T. Z., & DeRubeis, R. J. (1999). Sudden gains and critical sessions in cognitive–behavioral therapy for depression. *Journal of Consulting and Clinical Psychology, 67*, 894–904.

Ten Have, T. R., Joffe, M. M., Lynch, K. G., Brown, G. K., Maisto, S. A., & Beck, A. T. (2007). Causal mediation analysis with rank preserving models. *Biometrics: Journal of the International Biometric Society, 63*, 926-934.

Valente, M. J. (2015). *Testing the mediated effect in the pretest-posttest control group design* (Master's Thesis). Available from ProQuest Dissertations and Theses database.

VanderWeele, T. J. (2010). Bias formulas for sensitivity analysis for direct and indirect effects. *Epidemiology, 21*, 540-551.

VanderWeele, T. J. (2011). Causal mediation analysis with survival data. *Epidemiology, 22*, 582-585.

VanderWeele, T.J. & Hernández-Diaz, S. (2011). Is there a direct effect of preeclampsia on cerebral palsy not through preterm birth? *Pediatric and Perinatal Epidemiology, 25*,111-115.

VanderWeele, T.J., & Vansteelandt, S. (2009). Conceptual issues concerning mediation, interventions and composition. *Statistics and Its Interface (Special Issue on Mental Health and Social Behavioral Science), 2,* 457-468.

Vansteelandt, S., (2009). Estimating direct effects in cohort and case-control studies. *Epidemiology 20* (6), 851-860.

Wen, Z., & Fan, X., (2015). Monotonicity of effect sizes: questioning kappa-squared as a mediation effect size measure. *Psychological Methods. 2,* 193-203.

Witkiewitz, K.A., & Bowen, S. (2010). Depression, craving and substance use following a randomized trial of mindfulness-based relapse prevention. *Journal of Consulting and Clinical Psychology, 78,* 362-374.

Witkiewitz, K. A., & Marlatt, G. A. (2007). Modeling the complexity of post-treatment drinking: It's a rocky road to relapse. *Clinical Psychology Review, 27,* 724-738.

Wohlwill, J. F. (1973). *The study of behavioral development.* New York: Academic Press.

Woodworth, R. S. (1928). Dynamic psychology. In C. Murchison (Ed.), *Psychologies of 1925* (pp. 111-126). Worcester, MA: Clark University Press.