

VITA

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Personal Information

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Education

Graduate: Ph.D., 1977
University of North Carolina, Chapel Hill
Major: Quantitative Psychology

M.A., 1974
University of North Carolina, Chapel Hill
Major: Quantitative Psychology

Undergraduate: B.S., 1972
Duke University, Durham, North Carolina
Major: Psychology and Mathematics

Academic Honors

Fellow, Division 5, American Psychological Association
Fellow, Association for Psychological Science
College of Social Sciences Teaching Excellence Award, University of Houston, 1981
President, Educational Statisticians Special Interest Group of American Educational
Research Association, 1985-1986
Member, Behavioral Medicine Study Section, National Institutes of Health, 1985-1990
Raymond B. Cattell Award, Society of Multivariate Experimental Psychology, 1990
Graduate School Award, University of Notre Dame, 1993
Member, BMRD Study Section, National Institutes of Health, 2004-2006
Trustee, James McKeen Cattell Fund, 2005-present
Samuel J. Messick Award for Distinguished Scientific Contributions, American Psychological
Association, 2010
President, Society of Multivariate Experimental Psychology, 2011-2012

Editorships

Associate Editor for Quantitative Methods, Psychological Bulletin, 1994-1996
Associate Editor, Psychological Methods, 2001-2007
Editor, Psychological Methods, 2008-2012
Associate Editor, Archives of Scientific Psychology, 2012-2015

Positions Held

1991-1994, 1995-1998	Chairperson Department of Psychology University of Notre Dame
1988-Present:	Professor Department of Psychology University of Notre Dame
1982-1988:	Associate Professor, Department of Psychology, University of Notre Dame
1977-1982:	Assistant Professor, Department of Psychology, University of Houston
1976-1977:	Lecturer in Psychology, Duke University

Professional Affiliations

Society of Multivariate Experimental Psychology, American Psychological Association, Psychometric Society, American Statistical Association, American Educational Research Association, American Psychological Society

Books

Bray, J. H., & Maxwell, S. E. (1985). Multivariate analysis of variance. Beverly Hills, CA: Sage.

Maxwell, S. E., & Delaney, H. D. (1990). Designing experiments and analyzing data: A model comparison perspective. Belmont, CA: Wadsworth.

Maxwell, S. E., & Delaney, H. D. (2004). Designing experiments and analyzing data: A model comparison perspective (2nd ed.). Mahwah, NJ: Erlbaum.

Maxwell, S. E., Delaney, H. D., & Kelley, K. (in press). Designing experiments and analyzing data: A model comparison perspective (3rd ed.). New York: Routledge.

Journal Articles and Book Chapters

*Indicates co-author was a student when the research was conducted

Maxwell, S. E. & Cramer, E. M. (1975). A note on analysis of covariance. Psychological Bulletin, 82, 187-190.

Maxwell, S. E. & Jones, L. V. (1976). Female and male admission to graduate school: An illustrative inquiry. Journal of Educational Statistics, 1, 1-37.

Carroll, J. B. & Maxwell, S. E. (1979). Individual differences in cognitive abilities. Annual Review of Psychology, 30, 603-640.

Howard, G. S., Ralph, K. M., Gulanick, N. A., Maxwell, S. E., Nance, D. W., & Gerber, S. K. (1979). Internal invalidity in pretest-posttest self-report evaluations and a reevaluation of retrospective pre-tests. Applied Psychological Measurement, 3, 1-23.

Arvey, R. D., Maxwell, S. E., & Mossholder, K. M. (1979). Even more ideas about methodologies for determining job differences and similarities. Personnel Psychology, 32, 529-538.

Terborg, J. R., Howard, G. S., & Maxwell, S. E. (1980). Evaluating planned organizational change: A method for assessing alpha, beta, and gamma change. Academy of Management Review, 5, 109-121.

Bray, J. H.* , Maxwell, S. E., & Schmeck, R. R. (1980). A psychometric investigation of the Survey of Study Habits and Attitudes. Applied Psychological Measurement, 4, 195-202.

Maxwell, S. E. (1980). Dependent variable reliability and determination of sample size. Applied Psychological Measurement, 4, 253-260.

Delaney, H. D. & Maxwell, S. E. (1980). The use of analysis of covariance in tests of attribute-by-treatment interactions. Journal of Educational Statistics, 5, 115-128.

Howard, G. S., Maxwell, S. E., Wiener, R. L.* , Boynton, K. S.* , & Rooney, W. M.* (1980). Is a behavioral measure the best estimate of behavioral parameters? Perhaps not. Applied Psychological Measurement, 4, 293-311.

Maxwell, S. E. (1980). Pairwise multiple comparisons in repeated measures designs. Journal of Educational Statistics, 5, 269-287.

- Howard, G. S. & Maxwell, S. E. (1980). The correlation between student satisfaction and grades: A case of mistaken causation? Journal of Educational Psychology, 1980, 72, 810-820.
- Delaney, H. D. & Maxwell, S. E. (1981). On using analysis of covariance in repeated measures designs. Multivariate Behavioral Research, 16, 105-124.
- Maxwell, S. E. & Howard, G. S. (1981). Change scores--necessarily anathema? Educational and Psychological Measurement, 41, 747-756.
- Cole, D. A.,* Howard, G. S., & Maxwell, S. E. (1981). The effects of mono versus multiple operationalization in construct validation efforts. Journal of Consulting and Clinical Psychology, 49, 395-405.
- Evans, R. I., Rozelle, R. M., Maxwell, S. E., Raines, B. E., Dill, C. A., Guthrie, T. J., Henderson, A. H., & Hill, P. C. (1981). Social modeling films to deter smoking in adolescents: Results of a three-year field investigation. Journal of Applied Psychology, 66, 399-414.
- Camp, C. J.* & Maxwell, S. E. (1981). Nonrandom assignment and the analysis of covariance in aging research. Experimental Aging Research, 7, 169-173.
- McGowan, R. J.*, Johnson, D. L., & Maxwell, S. E. (1981). Relations between infant behavior ratings and concurrent and subsequent mental test scores. Developmental Psychology, 17, 542-553.
- Arvey, R. D., Maxwell, S. E., Gutenberg, R. L.*, & Camp, C. J.* (1981). Detecting job differences: A Monte Carlo study. Personnel Psychology, 34, 709-730.
- Maxwell, S. E., Arvey, R. D., & Camp, C. J.* (1981). Measures of strength of association: A comparative examination. Journal of Applied Psychology, 66, 525-534.
- Howard, G. S. & Maxwell, S. E. (1982). Do grades contaminate student evaluations of instruction? Research in Higher Education, 16, 175-188.
- Howard, G. S. & Maxwell, S. E. (1982). Linked raters' judgments: A more sensitive index of change. Evaluation Review, 6, 140-146.
- Terborg, J. R., Maxwell, S. E., & Howard, G. S. (1982). On the measurement and control of beta change: Problems with the Bedeian, Armenakis and Gibson technique. Academy of Management Review, 7, 292-295.
- Bray, J. H.* & Maxwell, S. E. (1982). Analyzing and interpreting significant MANOVAs. Review of Educational Research, 52, 340-367.
- Maxwell, S. E. & Arvey, R. D. (1982). Small sample profile analysis with many variables. Psychological Bulletin, 92, 778-785.

- Camp, C. J. & Maxwell, S. E. (1983). A comparison of various strength of association measures commonly used in gerontological research. Journal of Gerontology, 38, 3-7.
- Howard, G. S., Obledo, F. H.*, Cole, D. A.*, & Maxwell, S. E. (1983). Linked raters' judgments: Combating problems of statistical conclusion validity. Applied Psychological Measurement, 7, 57-62.
- Cousins, J. H.*, Siegel, A. W., & Maxwell, S. E. (1983). Way finding and cognitive mapping in large-scale environments: A test of a developmental model. Journal of Experimental Child Psychology, 35, 1-20.
- Steinbrueck, S. M.*, Maxwell, S. E., & Howard, G. S. (1983). A meta-analysis of psychotherapy and drug therapy in the treatment of unipolar depression with adults. Journal of Consulting and Clinical Psychology, 51, 856-863.
- Maxwell, S. E., Delaney, H. D., & Dill, C. A. (1984). Another look at ANCOVA versus blocking. Psychological Bulletin, 95, 136-147.
- Pritchard, R. D., Maxwell, S. E., & Jordan, W. C. (1984). Interpreting relationships between age and promotion in age discrimination cases. Journal of Applied Psychology, 69, 199-206.
- Bray, J. H., Maxwell, S. E., & Howard, G. S. (1984). Methods of analysis with response-shift bias. Educational and Psychological Measurement, 44, 781-804.
- Howard, G. S., Maxwell, S. E., Berra, S. M.*, & Sternitzke, M. E.* (1985). Institutional research productivity in industrial/organizational psychology. Journal of Applied Psychology, 70, 233-236.
- Maxwell, S. E. & Delaney, H. D. (1985). Measurement and statistics: An examination of construct validity. Psychological Bulletin, 97, 85-93.
- Borkowski, J. G., & Maxwell, S. E. (1985). Looking for Mr. Good-g. The Behavioral and Brain Sciences, 8, 221-222. (commentary)
- Howard, G. S., Conway, C. G.*, & Maxwell, S. E. (1985). Construct validity of measures of college teaching effectiveness. Journal of Educational Psychology, 77, 187-196.
- Borkowski, J. G., Krause, A., & Maxwell, S. E. (1985). On multiple determinants of racial differences in intelligence: A reply to Jensen. Intelligence, 9, 41-49.
- Cole, D. A. & Maxwell, S. E. (1985). Multitrait-multimethod comparisons across populations: A confirmatory factor analytic approach. Multivariate Behavioral Research, 20, 389-417.

- Maxwell, S. E., Delaney, H. D., & Manheimer, J. M. (1985). ANOVA of residuals and ANCOVA: Correcting an illusion by using model comparisons and graphs. Journal of Educational Statistics, 10, 197-209.
- Dunn, P. H.*, Maxwell, S. E., & Santos, J. F. (1985). Interpretation of interpersonal interactions: The influence of loneliness. Personality and Social Psychology Bulletin, 11, 445-456.
- Arvey, R. D., Maxwell, S. E., & Abraham, L. M. (1985). Reliability artifacts in comparable worth procedures. Journal of Applied Psychology, 70, 695-705.
- Maxwell, S. E. & Bray, J. H. (1986). Robustness of the quasi F statistic to violations of sphericity. Psychological Bulletin, 99, 416-421.
- Maxwell, S. E. & Howard, G. S. (1987). Institutional research productivity in quantitative psychology. Educational and Psychological Measurement, 46, 845-852.
- Kerwin, M. L. E.*, Howard, G. S., Maxwell, S. E., & Borkowski, J. G. (1987). Implications of covariance structure analysis (LISREL) versus regression models for counseling research. The Counseling Psychologist, 15, 287-310.
- Whitman, T. W., Spence, B. H., & Maxwell, S. E. (1987). A comparison of external and self-instructional teaching formats with mentally retarded adults in a vocational training setting. Research in Developmental Disabilities, 8, 371-388.
- Maxwell, S. E., & Howard, G. S. (1987). On the underdetermination of theory by evidence. Journal of Educational Psychology, 79, 331-332.
- Howard, G. S., Cole, D. A., & Maxwell, S. E. (1987). Research productivity in psychology based on publications in the journals of the American Psychological Association. American Psychologist, 42, 975-986.
- Evangelisti, D., Whitman, T. L., & Maxwell, S. E. (1987). A comparison of external and self-instructional formats with children of different ages and tasks of varying complexity. Cognitive Therapy and Research, 11, 419-436.
- Keogh, D. A., Whitman, T. L., & Maxwell, S. E. (1988). Self-instruction versus external instruction: Individual differences and training effectiveness. Cognitive Therapy and Research, 12, 591-610.
- Francis, D. J., Fletcher, J. M., Maxwell, S. E., & Satz, P. (1989). A structural model for developmental changes in the determinants of reading achievement. Journal of Clinical Child Psychology, 18, 44-51.
- Maxwell, S. E. (1990). Why are interactions so difficult to detect? Behavioral and Brain Sciences, 13, 140-141. (commentary)

- Maxwell, S. E., & Howard, G. S. (1990). Thoughts on Meehl's vision of psychological research for the future. Psychological Inquiry, 1, 162-164. (commentary)
- Carr, M.*, Borkowski, J. G., & Maxwell, S. E. (1991). Motivational components of underachievement. Developmental Psychology, 27, 108-118.
- Maxwell, S. E., Cole, D. A., Arvey, R. D., & Salas, E. (1991). A comparison of methods for increasing power in randomized between-subjects designs. Psychological Bulletin, 110, 328-337.
- Maxwell, S. E. (1992). Recent developments in MANOVA applications. In B. Thompson (Ed.), Advances in social science methodology.
- Arvey, R. D., Maxwell, S. E., & Salas, E. (1992). The relative power of training evaluation designs under different cost configurations. Journal of Applied Psychology, 77, 155-160.
- Arvey, R. D., Landon, T. E., Nutting, S. M., & Maxwell, S. E. (1992). Development of physical ability tests for police officers: A construct validation approach. Journal of Applied Psychology, Monograph, 77, 996-1009.
- Maxwell, S. E., & Delaney, H. D. (1993). Bivariate median splits and spurious statistical significance. Psychological Bulletin, 113, 181-190.
- Maxwell, S. E. (1993). Covariate imbalance and conditional size: Dependence on model-based adjustments. Statistics in Medicine, 12, 101-109.
- Passino, A. W.*, Whitman, T. L., Borkowski, J. G., Schellenbach, C. J., Maxwell, S. E., Keough, D., & Rellinger, E. (1993). Personal adjustment during pregnancy and adolescent parenting. Adolescence, 28, 97-122.
- Sommer, K.*, Whitman, T. L., Borkowski, J. G., Schellenbach, C., Maxwell, S., & Keogh, D. (1993). Cognitive readiness and adolescent parenting. Developmental Psychology, 29, 389-398.
- Maxwell, S. E., Delaney, H. D., & O'Callaghan, M. F.* (1993). Analysis of covariance. In L. K. Edwards (Ed.), Applied analysis of variance in behavioral science.
- Maxwell, S. E., & Arvey, R. D. (1993). The search for predictors with high validity and low adverse impact: Compatible or incompatible goals? Journal of Applied Psychology, 78, 433-437.
- Cole, D. A., Maxwell, S. E., Arvey, R. D., & Salas, E. (1993). Multivariate group comparisons of variable systems: MANOVA and structural equation modeling. Psychological Bulletin, 114, 174-184.

- Nailos, M., Whitman, T. L., & Maxwell, S. E. (1994). Verbal and visual instruction with mental retardation: The role of subject characteristics and task factors. Journal of Behavioral Education, 4, 201-216.
- Quintana, S.*, & Maxwell, S. E. (1994). A Monte Carlo comparison of six ϵ -adjustment procedures in repeated measures designs with small sample sizes. Journal of Educational Statistics, 19, 57-71.
- Cole, D. A., Maxwell, S. E., Arvey, R. D., & Salas, E. (1994). How the power of MANOVA can both increase and decrease as a function of the intercorrelations among the dependent variables. Psychological Bulletin, 115, 465-474.
- Maxwell, S. E. (1994). Optimal allocation of assessment time in randomized pretest-posttest designs. Psychological Bulletin, 115, 142-152.
- Wong, C. M. T.*, Day, J. D., Meara, N. M., & Maxwell, S. E. (1995). A multitrait-multimethod study of general academic and social intelligence in college students. Journal of Educational Psychology, 87, 117-133
- Miller, C. L.*, White, R., Whitman, T. L., O'Callaghan, M. F., & Maxwell, S. E. (1995). The effects of cycled versus noncycled lighting on growth and development in preterm infants. Infant Behavior and Development, 18, 87-95.
- Bray, J. H., Maxwell, S. E., & Cole, D. A. (1995). Multivariate statistics for family psychology research, Journal of Family Psychology, 9, 144-160.
- Maxwell, S. E., & Cole, D. A. (1995). Tips for writing (and reading) methodological papers. Psychological Bulletin, 118, 193-198.
- Rudas, T., Vargha, A., Delaney, H. D. & Maxwell, S. E. (1996). Dichotomization partial correlation, and conditional independence. Journal of Educational and Behavioral Statistics, 21, 264-282.
- Day, J. D., Engelhardt, J., Maxwell, S. E., & Bolig, E. E*. (1997). Comparison of static and dynamic assessment procedures and their relation to independent performance. Journal of Educational Psychology, 89, 358-368.
- Cole, D. A., Maxwell, S. E., & Martin, J. M.* (1997). Reflected self-appraisals: Strength and structure of the relation of teacher, peer, and parent ratings to children's self-perceived competencies. Journal of Educational Psychology, 89, 55-70.
- Seroczynski, A. D.*, Cole, D. A., & Maxwell, S. E. (1997). Cumulative and compensatory effects of competence and incompetence on depressive symptoms in children. Journal of Abnormal Psychology, 106, 586-597.

- Maxwell, S. E. (1998). Longitudinal designs in randomized group comparisons: When will intermediate observations increase statistical power? Psychological Methods, 3, 275-290.
- O'Callaghan, M. F., Borkowski, J. G., Whitman, T. L., Maxwell, S. E., & Keogh, D. (1999). A model of adolescent parenting: The role of cognitive readiness to parent. Journal of Research on Adolescence, 9, 203-225.
- Venter, A., & Maxwell, S. E. (1999). Maximizing power in randomized designs when N is small. In R. Hoyle (Ed.), Statistical strategies for small sample research.
- Quintana, S., & Maxwell, S. E. (1999). Implications of recent developments in structural equation modeling for counseling psychology. The Counseling Psychologist, 27, 485-527.
- Sommer, K. S., Whitman, T. L., Borkowski, J. G., Gondoli, D. M., Burke, J., Maxwell, S. E., & Weed, K. (2000). Prenatal maternal predictors of cognitive and socioemotional functioning in children of adolescent mothers. Adolescence, 35, 87-112.
- Lee, J., Wong, C. M. T., Day, J. D., Maxwell, S. E., & Thorpe, P. (2000). Social and academic intelligences: A multitrait-multimethod study of their crystallized and fluid characteristics. Personality and Individual Differences, 29, 539-553.
- Cole, D. A., Hoffman, K., Tram, J. M., & Maxwell, S. E. (2000). Structural differences in parent and child reports of children's symptoms of depression and anxiety. Psychological Assessment, 12, 174-185.
- Venter, A., & Maxwell, S. E. (2000). Issues in the use and application of multiple regression analysis. In H. Tinsley & S. Brown (Eds.), Handbook of applied multivariate statistics and mathematical modeling (pages 151-182).
- Maxwell, S. E. (2000). Data analysis. In A.E. Kazdin (Ed.), Encyclopedia of Psychology. American Psychological Association.
- Howard, G. S., Maxwell, S. E., & Fleming, K.* (2000). The proof of the pudding: An illustration of the relative strengths of null hypothesis, meta-analysis, and Bayesian analysis. Psychological Methods, 5, 315-332.
- Maxwell, S. E. (2000). Sample size and multiple regression analysis. Psychological Methods, 5, 434-458.
- Cole, D. A., Maxwell, S. E., Martin, J. M., Peeke, L. G., Seroczynski, A. D., Tram, J. M., Hoffman, K. B., Ruiz, M. D., Jacquez, F., & Maschman, T. (2001). The development of multiple domains of child and adolescent self-concept: A cohort sequential longitudinal design. Child Development, 72, 1723-1746.

- Lee, J., Day, J. D., Meara, N. M., & Maxwell, S. E. (2002). Discrimination of social knowledge and its flexible application from creativity: A multitrait-multimethod approach. Personality and Individual Differences, 32, 913-928.
- Venter, A., Maxwell, S. E., & Bolig, E.* (2002). Power in randomized group comparisons: The value of adding a single intermediate timepoint to a traditional pretest-posttest design. Psychological Methods, 7, 194-209.
- Wallace, K. A.*, Bergeman, C., & Maxwell, S. E. (2003). Predicting well-being outcomes in later life: An application of classification and regression tree (CART) analysis. In Shohov, S. P. (Ed.), Advances in psychology research. Hauppauge NY: Nova Science Publishers.
- Rausch, J. R.*, Maxwell, S. E., & Kelley, K.* (2003). Analytic methods for questions pertaining to a pretest posttest follow-up design. Journal of Clinical Child and Adolescent Psychology, 32, 467-486.
- Kelley, K.* & Maxwell, S. E. (2003). Sample size for multiple regression: Obtaining regression coefficients that are accurate, not simply significant. Psychological Methods, 8, 305-321.
- 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.
- Kelley, K.*, Maxwell, S. E., & Rausch, J. R.* (2003). Obtaining power or obtaining precision: Delineating methods of sample size planning. Evaluation & the Health Professions, 26, 258-287.
- Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research: Causes, consequences, and remedies. Psychological Methods, 9, 147-163.
- Lounds, J. J.*, Borkowski, J. G., Whitman, T. L., Maxwell, S. E., & Weed, K. (2005). Adolescent parenting and attachment during infancy and early childhood. Parenting: Science and Practice, 5, 91-117.
- Yuan, K., & Maxwell, S. E. (2005). On the post hoc power in testing mean differences. Journal of Educational and Behavioral Statistics, 30, 141-167.
- Maxwell, S. E. (2005). Completely randomized designs. In B. S. Everitt & D. C. Howell (Eds.), Encyclopedia of Statistics in Behavioral Science. New York: Wiley.
- Maxwell, S. E. (2005). Randomized block designs. In B. S. Everitt & D. C. Howell (Eds.), Encyclopedia of Statistics in Behavioral Science. New York: Wiley.
- Maxwell, S. E., & Boker, S. M. (2007). Multilevel models of dynamical systems. In Boker, S. M., & Wenger, M. J. (Eds.), Data analytic techniques for dynamical systems. (pp. 161-187). Mahwah, NJ: Lawrence Erlbaum Associates.

- Maxwell, S. E., & Tiberio, S. * (2007). Multilevel models of change: Fundamental concepts and relationships to mixed models and latent growth-curve models. In A. Ong & M. H. M. van Dulmen (Eds.), Oxford handbook of methods in positive psychology. (pp. 439-452). New York, NY: Oxford University Press.
- Carothers, S.S.*, Farris, J. R. *, & Maxwell, S. E. (2007). Design and analytic approaches to research on resilience. In J. G. Borkowski, J. R. Farris, T. L. Whitman, S. S. Carothers, K. Weed, & D. A. Keogh (Eds.), Risk and resilience: Adolescent mothers and their children grow up. (pp. 233-257). Mahwah, NJ: Lawrence Erlbaum Associates.
- Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. Psychological Methods, 12, 23-44.
- Kelley, K., & Maxwell, S. E. (2008). Power and accuracy for omnibus and targeted effects: Issues of sampling size planning with application to multiple regression. In P. Alasuutari, L. Bickman, and J. Brannen (Eds.), The Sage handbook of social research methods. Newbury Park, CA: Sage.
- Kelley, K., & Maxwell, S. E. (2008). Delineating the average rate of change. Journal of Educational and Behavioral Statistics, 33, 307-332.
- Maxwell, S. E., Kelley, K., & Rausch, J. R. (2008). Sample size planning for statistical power and accuracy in parameter estimation. Annual Review of Psychology, 59, 537-563.
- APA Publications and Communications Board Working Group on Journal Article Reporting Standards (2008). Reporting standards for research in psychology: Why do we need them? What might they be? American Psychologist, 63, 839-851.
- Howard, G. S., Hill, T. L. *, Maxwell, S. E., Coulter-Kern, M., & Coulter-Kern, R. (2009). What's wrong with research literatures? And how to make them right. Review of General Psychology, 13, 146-166.
- Howard, G. S., Lau, M. Y. *, Maxwell, S. E., Venter, A., Lundy, R. *, & Sweeny, R. * (2009). Do research literatures give correct answers? Review of General Psychology, 13, 116-121.
- Lau, M. *, Howard, G. S., Maxwell, S. E., Delgado-Romero, E., Lundy, R. *, & Christopherson, C. * (2009). Does psi exist? A Bayesian approach to assessing psi Ganzfeld data. European Journal of Parapsychology, 24, 5-31.
- Cole, D. A., & Maxwell, S. E. (2009). Statistical methods for risk-outcome research: Being sensitive to longitudinal structure. Annual Review of Clinical Psychology, 5, 71-96.
- Kelley, K., & Maxwell, S. E. (2010). Multiple regression. In G. R. Hancock & R. O. Mueller (Eds.), The reviewer's guide to quantitative methods in the social sciences. New York: Taylor & Francis.

- Howard, G. S., Maxwell, S. E., Delgado-Romero, E. A., Lau, M., Lundy, R.*, & Christopherson, C.* (2010). Non-significant results: Can't live with them, Can't live without them. Journal of Non-Significant Results in Education, 1, 53-58.
- Ekas, N. V.* , Braungart-Rieker, J. M., Lickenbrock, D. M., Zentall, S. R., & Maxwell, S. E. (2011). Toddler emotion regulation with mothers and fathers: Temporal associations between negative affect and behavioral strategies. Infancy, 16, 266-294.
- Maxwell, S. E., & Kelley, K. (2011). Ethics and sample size planning. In A. Panter & S. Sterba (Eds.). Handbook of ethics in quantitative methodology. New York: Taylor & Francis.
- Maxwell, S. E. (2011). Introduction to the special section on Campbell's and Rubin's conceptualizations of causality. Psychological Methods, 15, 1-2.
- 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, 816-841.
(target article accompanied by three commentaries serve as a special section of the journal; selected by the members of SMEP for the Tanaka Award for Annual Best Article in MBR)
- Kelley, K., & Maxwell, S. E. (2012). Sample size planning. In H. Cooper (Ed.), APA Handbook of research methods in psychology. Washington, DC: APA.
- Mitchell, M. A.* , & Maxwell, S. E. (2013). A comparison of the cross-sectional and sequential designs when assessing longitudinal mediation. Multivariate Behavioral Research, 48, 301-339.
- Yuan, K.-H., Cheng, Y., & Maxwell, S. E. (2014). Moderation analysis using a two-level regression model. Psychometrika, 79, 701-732.
- Russell, A.* , Haefel, G. J., Hankin, B. L., Maxwell, S. E., & Perera, R. A.* (2014). Moving beyond main effects: A data analytic strategy for testing complex theories of clinical phenomena. Clinical Psychology: Science and Practice, 21, 385-397.
- Yang, M.* , & Maxwell, S. E. (2014). Treatment effects in randomized longitudinal trials with different types of non-ignorable dropout. Psychological Methods, 19, 188-210.
- Yang, M.* , Wang, L., & Maxwell, S. E. (2015). Bias in longitudinal data analysis with missing data using typical linear mixed-effects modeling and pattern-mixture approach: An analytical illustration. British Journal of Mathematical and Statistical Psychology, 68, 246-267.

- Wang, L., & Maxwell, S. E. (2015). On disaggregating between-person and within-person effects with longitudinal data using multilevel models. Psychological Methods, 20, 63-83.
- Maxwell, S. E., Howard, G. S., & Lau, M. Y. (2015). Is psychology suffering from a replication crisis? What does “failure to replicate” really mean? American Psychologist, 70, 487-498.
- Anderson, S. F.*, & Maxwell, S. E. (2016). There’s more than one way to conduct a replication study: Beyond statistical significance. Psychological Methods, 21, 1-12.
- Baird, R.*, & Maxwell, S. E. (2016). Performance of time varying predictors in multilevel models under an assumption of fixed or random effects. Psychological Methods, 21, 175-188.
- Anderson, S. F.*, & Maxwell, S. E. (2017). Addressing the “replication crisis”: Using original studies to design replication studies with appropriate statistical power. Multivariate Behavioral Research, 52, 305-324.
- Anderson, S. F.*, Kelley, K., & Maxwell, S. E. (2017). Sample-size planning for more accurate statistical power: A method adjusting sample effect sizes for publication bias and uncertainty. Psychological Science, 28, 1547-1562.
- Benjamin, D. J. et al. (2018). Redefine statistical significance. Nature Human Behaviour, 2, 6-10.

Selected Paper Presentations

- Delaney, H. D. & Maxwell, S. E. The use of analysis of covariance in ATI research, 1978 AERA Annual Meeting, Toronto.
- Maxwell, S. E. Dependent variable reliability and determination of sample size, 1979 AERA Annual Meeting, San Francisco.
- Arvey, R. D. & Maxwell, S. E. Comparative differences among quantitative methodologies of determining job differences/similarities, 1979 APA Annual Meeting, New York.
- Bray, J. H.* & Maxwell, S. E. Analyzing and interpreting significant MANOVAs, 1979 APA Annual Meeting, New York.
- Maxwell, S. E. & Bray, J. H.* Robustness of the quasi-F statistic to violations of compound symmetry, 1980 AERA Annual Meeting, Boston.
- Delaney, H. D. & Maxwell, S. E. The difference between ANOVA of residuals and ANCOVA, 1980 AERA Annual Meeting, Boston.

- Delaney, H. D. & Maxwell, S. E. On using analysis of covariance in repeated measures designs, 1980 ASA Annual Meeting, Houston.
- Maxwell, S. E. Pairwise multiple comparisons in repeated measures designs, 1980 ASA Annual Meeting, Houston.
- Maxwell, S. E. & Delaney, H. D. Another look at ANCOVA versus blocking, 1981 AERA Annual Meeting, Los Angeles.
- Bray, J. H.* & Maxwell, S. E. Causal models underlying MANOVA analyses, 1981 APA Annual Meeting, Los Angeles.
- Howard, G. S. & Maxwell, S. E. Linked raters' judgments: A more sensitive index of change, 1981 APA Annual Meeting, Los Angeles.
- Maxwell, S. E., Delaney, H. D., & Howard, G. S. Scales and statistics: Internal validity versus construct validity, 1982 AERA Annual Meeting, New York.
- Howard, G. S. & Maxwell, S. E. Validation of linked judgment procedure, 1982 AERA Annual Meeting, New York.
- Albright, C. L., Evans, R. I., Maxwell, S. E., Rozelle, R. M., & Jackson, A. The relationship between type A coronary prone behavior pattern and physiological reactivity on a verbal task. Annual Meeting of the Society of Behavioral Medicine, 1983.
- Bray, J. H., Maxwell, S. E., & Howard, G. S. A comparison of power of five methods of analysis with response-shift bias. 1983 AERA Annual Meeting, Montreal.
- Delaney, H. D. & Maxwell, S. E. ANCOVA and repeated measures: Dealing with heterogeneity of regression. 1983 AERA Annual Meeting, Montreal.
- Maxwell, S. E., Delaney, H. D., & Sternitzke, M. E. Complex multiple comparisons in repeated measures designs. 1984 AERA Annual Meeting, New Orleans.
- Quintana, S.* & Maxwell, S. E. A better than average estimate of e . 1985 AERA Annual Meeting, Chicago.
- Maxwell, S. E. Parametric procedures and ordinal indicators of latent variables. 1985 AERA Annual Meeting, Chicago.
- Maxwell, S. E. & Arvey, R. D. Psychometric artifacts in comparable worth procedures. 1985 American Statistical Association Annual Meeting, Las Vegas.
- Maxwell, S. E. & Delaney, H. D. Planned versus post hoc contrasts in repeated measures designs. 1986 AERA Annual Meeting, San Francisco.

- Delaney, H. D., & Maxwell, S. E. Alternative analyses of Latin Square designs. 1987 AERA Annual Meeting, Washington.
- Maxwell, S. E., & Delaney, H. D. Confounding of effects in equal n designs: Factorial ANCOVA. 1988 AERA Annual Meeting, New Orleans.
- Maxwell, S. E. Recent developments in MANOVA applications. 1988 AERA Annual Meeting, New Orleans.
- Delaney, H. D., & Maxwell, S. E. Testing contrasts among means with multiple regression. 1990 AERA Annual Meeting, Boston.
- Maxwell, S. E., & Delaney, H. D. Bivariate median splits and inflated Type I error rates. 1991 AERA Annual Meeting, Chicago.
- Maxwell, S. E., Bivariate median splits and spurious statistical significance. Invited paper at 1991 Annual Meeting of Society of Multivariate Experimental Psychology, Albuquerque, New Mexico.
- Maxwell, S. E., & O'Callaghan, M. S.* Analysis of covariance in randomized experiments. 1992 AERA Annual Meeting, San Francisco.
- Maxwell, S. E. The logic and principles of MANOVA. Invited workshop presented at Center on Aging and Health, Case Western Reserve University, 1993.
- Delaney, H. D., Maxwell, S. E., Rudas, T., & Vargha, A. Dichotomization, partial correlation, and conditional independence. 1993 AERA Annual Meeting, Atlanta.
- Maxwell, S. E. Optimal allocation of assessment time in randomized pretest-posttest designs. 1993 Annual meeting of Society of Multivariate Experimental Psychology, Los Angeles.
- Maxwell, S. E., & Cole, D. A. Multivariate Analysis in Family Research. Invited paper at Second Annual NIMH Workshop on the Role of Families in Preventing and Adapting to HIV/AIDS, Washington, D.C.
- Delaney, H. D., & Maxwell, S. E. Coding of predictors for regression-based analyses with nonorthogonal contrasts or unequal cell sizes. 1997 AERA Annual Meeting, Chicago.
- Maxwell, S. E. Longitudinal designs in randomized group comparisons. 1996 Annual meeting of Society of Multivariate Experimental Psychology, Evanston.
- Maxwell, S. E. Design and analysis of longitudinal group comparisons. Invited workshop presented at Center on Aging and Health, Case Western Reserve University, 1998.
- Maxwell, S. E. Sample size and multiple regression analysis. 1998 Annual meeting of Society of Multivariate Experimental Psychology.

- Maxwell, S. E. Increasing statistical power in randomized group comparisons. Invited workshop presented at Dole Life Span Institute, University of Kansas, 2000.
- Maxwell, S. E. Methods for increasing power in randomized experiments. Annual meeting of American Psychological Association, Washington, DC, 2000.
- Maxwell, S. E. Patterns of missing data in longitudinal designs. Annual meeting of Society of Multivariate Experimental Psychology, Saratoga Springs, NY, 2000.
- Maxwell, S. E. Detecting longitudinal mediational effects in cross-sectional designs. Annual Meeting of Society of Multivariate Experimental Psychology, Charlottesville, VA, 2002.
- Maxwell, S. E., & Boker, S. Multilevel Models of Dynamical Systems. Notre Dame Series on Quantitative Methodologies, Notre Dame, IN, 2003.
- Maxwell, S. E., & Rausch, J. R.* Analysis of Longitudinal Randomized Designs. Presented at 2005 SMEP Annual Meeting, Lake Tahoe.
- Maxwell, S. E. The persistence of underpowered studies in psychological research: Causes, consequences, and remedies. Invited address as recipient of 2005 Department of Psychology Alumni Award, University of North Carolina at Chapel Hill.
- Maxwell, S. E. Common Methodological Errors and How to Avoid Them: Multiple Regression. Invited presenter at AERA Training Session, Chicago, 2007.
- Maxwell, S. E.. Advances in longitudinal mediation. Invited Address, 2009 American Psychological Association. Toronto, Canada.
- Yang, M.*, & Maxwell, S. E. Treatment effect in randomized longitudinal experiment with non-ignorable dropout and different missing patterns across groups. 2009 SMEP Student Graduate Student Preconference.
- Maxwell, S. E., & Yang, M.* Estimation of treatment effects in randomized longitudinal designs with different types of non-ignorable dropout. 2010 SMEP Annual Meeting, Atlanta.
- Maxwell, S. E. Planning and interpreting replication studies: Replicability or accuracy? Presidential Address, Society of Multivariate Experimental Psychology. Vancouver, Canada. October, 2012
- Maxwell, S. E. Methodological issues in planning and interpreting replication studies. Invited Address, American Psychological Association. Honolulu, Hawaii. August 2013.
- Maxwell, S. E., & Anderson, S. F.* The role of statistical power in apparent replication failures. Invited Address, Association for Psychological Science, Chicago, Illinois. May 2016

External Funding

- “Precursors of Retardation in Children with Teen Mothers” (co-investigator statistical consultant; John Borkowski = PI), NIH Research Grant, 1991-1996, \$1,000,000 total direct costs.
- “A Competency-Based Model of Child Depression” (statistical consultant; David Cole = PI). NIMH Research Grant, 1991 - 1996, \$500,000 total direct costs.
- “Precursors of Developmental Delay in Children with Teen Mothers” (co-investigator statistical consultant; John Borkowski = PI), NIH Research Grant, 1996-2001, \$1,400,000 total direct costs.
- “A Competency-Based Model of Child Depression” (co-investigator statistical consultant; David Cole = PI). NIMH Research Grant, 1996 - 2001, \$1,300,000 total direct costs.
- “Marital Conflict Resolution and Child Development” (co-investigator statistical consultant; Mark Cummings = PI). NIH Research Grant, 1999- 2004, \$900,000, total direct costs.
- “Conjugal Loss in Later Life: A Dynamical Systems Approach” (co-investigator statistical consultant, Cindy Bergeman = PI). NIA R03 Research Grant, 2000-2002
- “Precursors of Developmental Delay in Children with Teen Mothers” (co-investigator statistical consultant; John Borkowski = PI), NIH Research Grant, 2001-2006, \$1,500,000 total direct costs.
- “Predicting and Preventing Neglect in Teen Mothers” (co-investigator statistical consultant, John Borkowski = PI), NICHD Research Grant, 2001-2006
- “Preventing Child Neglect in High-Risk Mothers” (co-investigator statistical consultant; John Borkowski = PI), NICHD Research Grant, 2003-2008, \$7,500,000 total direct costs.
- “Children and Political Violence in Northern Ireland” (co-investigator statistical consultant, Mark Cummings = PI), NICHD Research Grant, 2005 – 2013
- “Notre Dame Study of Health and Well-Being” (co-investigator statistical consultant, Cindy Bergeman = PI), NIH Research Grant.
- “Glucocorticoid Sensitivity and Well-Being in Aging: Bi-Directional Relationships” (co-investigator statistical consultant, Michelle Wirth = PI), NIH Research Grant, 2013-2014.
- “Fostering healthy development among maltreated preschool-aged children” (co-investigator statistical consultant, Kristin Valentino = PI), NIH Research Grant, 2013-2017.

Student Supervision and Committees, 2005-2016

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