Gregory R. Hancock, Ph.D. Curriculum Vitae

"I certify that this vita is an accurate and complete representation of my scholarly work to the best of my knowledge."

Cyron Honor 4 May 2019

Contact

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PERSONAL INFORMATION

Current Positions	Program Director July, 2011 — present	Measurement, Statistics and Evaluation Program Dept. of Human Development and Quantitative Methodology College of Education, University of Maryland
	Professor, full time July, 2011 — present (with tenure)	Measurement, Statistics and Evaluation Program Dept. of Human Development and Quantitative Methodology College of Education, University of Maryland
	Director and Founder January, 2005 — present	Center for Integrated Latent Variable Research University of Maryland
	Affiliated Professor August, 1997 — present	Dept. of Human Development College of Education, University of Maryland
	Affiliated Professor November, 2005 — present	Center for Advanced Study of Language University of Maryland
Previous Positions	Department Chair July, 2008 — June, 2011	Dept. of Measurement, Statistics and Evaluation College of Education, University of Maryland
	Interim Associate Dean for Research & Graduate Education July, 2007 — July, 2008	College of Education, University of Maryland
	Professor, full time August, 2003 — June, 2011 (with tenure)	Dept. of Measurement, Statistics and Evaluation College of Education, University of Maryland
	Associate Professor, full time August, 1998 — August, 2003 (with tenure)	Dept. of Measurement, Statistics and Evaluation College of Education, University of Maryland
	Assistant Professor, full time August, 1995 — August, 1998	Dept. of Measurement, Statistics and Evaluation College of Education, University of Maryland

	Assistant Professor, full time August, 1991 — June, 1995	Educ. Foundations, Leadership, & Technology College of Education, Auburn University
	Visiting Assistant Professor June, 1994 — August, 1994 June, 1992 — August, 1992	Department of Educational Psychology College of Education, University of Washington
	Graduate Teaching Assistant June, 1988 — August, 1991	Department of Educational Psychology College of Education, University of Washington
	Student Teacher September, 1986 — June, 1987	Dept. of Mathematics and Dept. of Chemistry Ingraham High School (Seattle, WA)
Education	Doctor of Philosophy August, 1991	Statistics, Measurement, and Research Design Department of Educational Psychology College of Education, University of Washington
	Master of Education June, 1989	Statistics, Measurement, and Research Design Department of Educational Psychology College of Education, University of Washington
	Teaching Certif. (4 th -12 th) July, 1987	Mathematics and Chemistry University of Washington
	Bachelor of Science June, 1986	Department of Chemistry University of Washington
	Bachelor of Science June, 1986	Department of Mathematics University of Washington

RESEARCH AND SCHOLARSHIP

Books

- **Hancock, G. R.**, Harring, J. R., & Macready, G. B. (Eds.). (in press). *Advances in latent class analysis: A Festschrift in honor of C. Mitchell Dayton*. Charlotte, NC: Information Age Publishing, Inc.
- **Hancock, G. R.**, Stapleton, L. M., & Mueller, R. O. (Eds.). (2019). *The reviewer's guide to quantitative methods in the social sciences* (2nd ed.). New York: Routledge.
- **Hancock, G. R.**, & Mueller, R. O. (Eds.). (2013). *Structural equation modeling:* A second course (2nd ed.). Charlotte, NC: Information Age Publishing, Inc.
- Harring, J. R., & **Hancock, G. R.** (Eds.). (2012). *Advances in longitudinal methods in the social and behavioral sciences*. Charlotte, NC: Information Age Publishing, Inc.
- **Hancock, G. R.**, & Mueller, R. O. (Eds.). (2010). *The reviewer's guide to quantitative methods in the social sciences*. New York: Routledge.

- **Hancock, G. R.**, & Samuelsen, K. M. (Eds.). (2008). *Advances in latent variable mixture models*. Charlotte, NC: Information Age Publishing, Inc.
- **Hancock, G. R.**, & Mueller, R. O. (Eds.). (2006). *Structural equation modeling:* A second course. Greenwich, CT: Information Age Publishing, Inc.

Book Chapters

- Mueller, R. O., & **Hancock, G. R.** (2019). Structural equation modeling. In G. R. Hancock & R. O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (2nd ed.) (pp. 445-456). New York: Routledge.
- **Hancock, G. R.** (2018). Convergence. In B. Frey (Ed.), *The SAGE encyclopedia of educational research, measurement and evaluation*. Thousand Oaks, CA: SAGE Publications.
- Myers, N. D., Celimli, S., Martin, J. J., & Hancock, G. R. (2016). Sample size determination and power estimation in structural equation modeling. In N. Ntoumanis & N. D. Myers (Eds.), An introduction to intermediate and advanced statistical analyses for sport and exercise scientists. Chichester, UK: Wiley.
- Mueller, R. O., & **Hancock, G. R.** (2015). Factor analysis and latent structure: Confirmatory factor analysis. In J. D. Wright (Ed.), *International encyclopedia of the social and behavioral sciences* (2nd ed.) (pp. 686-690). Oxford, England: Pergamon.
- **Hancock, G. R.**, & French, B. F. (2013). Power analysis in covariance structure models. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (2nd ed.) (pp. 117-159). Charlotte, NC: Information Age Publishing, Inc.
- **Hancock, G. R.**, Harring, J. R., & Lawrence, F. R. (2013). Using latent growth models to evaluate longitudinal change. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (2nd ed.) (pp. 309-341). Charlotte, NC: Information Age Publishing, Inc.
- Preacher, K. J., & **Hancock**, **G. R.** (2012). On interpretable reparameterizations of linear and nonlinear latent growth curve models. In J. R. Harring & G. R. Hancock (Eds.), *Advances in longitudinal methods in the social and behavioral sciences* (pp. 25-58). Charlotte, NC: Information Age Publishing, Inc.
- **Hancock, G. R.**, & <u>Liu, M.</u> (2012). Bootstrapping standard errors and data-model fit statistics. In R. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 296-306). New York: Guilford Press.
- Mueller, R. O., & **Hancock, G. R.** (2010). Structural equation modeling. In G. R. Hancock & R. O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 371-383). New York: Routledge.

- **Hancock, G. R.**, Stapleton, L. M., & Arnold-Berkovits, I. (2009). The tenuousness of invariance tests within multisample covariance and mean structure models. In T. Teo & M. S. Khine (Eds.), *Structural equation modeling: Concepts and applications in educational research* (pp. 137-174). Rotterdam, Netherlands: Sense Publishers.
- Mueller, R. O., & **Hancock, G. R.** (2008). Best practices in structural equation modeling. In J. W. Osborne (Ed.), *Best practices in quantitative methods*. Thousand Oaks, CA: Sage Publications, Inc.
- **Hancock, G. R.** (2006). Power analysis in covariance structure models. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (pp. 69-115). Greenwood, CT: Information Age Publishing, Inc.
- **Hancock, G. R.** & Lawrence, F. R. (2006). Using latent growth models to evaluate longitudinal change. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (pp. 171-196). Greenwood, CT: Information Age Publishing, Inc.
- **Hancock, G. R.** (2004). Experimental, quasi-experimental, and nonexperimental design and analysis with latent variables. In D. Kaplan (Ed.), *The SAGE handbook of quantitative methodology for the social sciences* (pp. 317-334) Thousand Oaks, CA: SAGE Publications.
- **Hancock, G. R.** (2004). Errors (Type I and II). In W. E. Craighead & C. B. Nemeroff (Eds.), *The concise Corsini encyclopedia of psychology and behavioral science* (3rd ed.). New York: John Wiley & Sons, Inc.
- **Hancock, G. R.,** & Mueller, R. O. (2003). Path Analysis. In M. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *Sage encyclopedia of social science research methods*. Thousand Oaks, CA: SAGE Publications.
- **Hancock, G. R.** (2001). Errors (Type I and II). In W. E. Craighead & C. B. Nemeroff (Eds.), *Encyclopedia of psychology and neuroscience*. New York: John Wiley & Sons, Inc.
- **Hancock, G. R.**, & Mueller, R. O. (2001). Rethinking construct reliability within latent variable systems. In R. Cudeck, S. du Toit, & D. Sörbom (Eds.), *Structural equation modeling: Present and future A Festschrift in honor of Karl Jöreskog* (pp. 195-216). Lincolnwood, IL: Scientific Software International, Inc.
- Mueller, R. O., & **Hancock**, **G. R.** (2001). Factor analysis and latent structure: Confirmatory factor analysis. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences*. Oxford, England: Pergamon.

Methodological Articles (underline indicates student at time of work)

<u>Johnson, T. L.</u>, & **Hancock, G. R.** (in press). Time to criterion latent growth models. *Psychological Methods*.

- <u>Feng, Y.</u>, **Hancock, G. R.**, & Harring, J. R. (in press). Latent growth models with fixed floors and ceilings. *Multivariate Behavioral Research*.
- Liu, M., Harbaugh, A. G., Harring, J. R., **Hancock, G. R.** (in press). The effect of extreme response and non-extreme response styles on testing measurement invariance. *Frontiers in Psychology* (Quantitative Psychology and Measurement section).
- **Hancock, G. R.**, & <u>An, J.</u> (2018). Framing and improving scale reliability assessment using structural equation models. *Educational Measurement: Issues and Practice*.
- Little, T. D., Widaman, K. F., Levy, R., Rodgers, J. L., & **Hancock, G. R.** (2018). Error, error in my model, who's the fairest of them all? *Research on Human Development*, *14*, 271-286.
- McNeish, D., & **Hancock**, **G. R.** (2018). The effect of measurement quality on targeted structural model fit indices: A comment on Lance, Beck, Fan, and Carter (2016). *Psychological Methods*, 23, 184-190.
- <u>Kang, Y.</u>, & **Hancock, G. R.** (2017). The effect of scale referent on tests of mean structure parameters. *Journal of Experimental Education*, 85, 376-388.
- McNeish, D. M., <u>An, J.</u>, & **Hancock, G. R.** (2017). The thorny relation between measurement quality and fit index cutoffs in latent variable models. *Journal of Personality Assessment*, 100, 43-52.
- Harring, J. R., McNeish, D. M., & Hancock, G. R. (2017). Using phantom variables in structural equation modeling to assess model sensitivity to external misspecification. *Psychological Methods*, 22, 616-631.
- **Hancock, G. R.**, & McNeish, D. M. (2017). More powerful tests of simple interaction contrasts in the two-way factorial design. *Journal of Experimental Education*, 85, 24-35.
- Kang, Y., McNeish, D. M., & Hancock, G. R. (2016). The role of measurement quality on practical guidelines for assessing measurement and structural invariance. *Educational and Psychological Measurement*, 76, 533-561.
- Rhemtulla, M., & **Hancock, G. R.** (2016). Planned missing data designs in educational psychology research. *Educational Psychologist*, *51*, 305-316.
- Stapleton, L. M., Yang, J. S., & **Hancock, G. R.** (2016). Construct meaning in multilevel settings. *Journal of Educational and Behavioral Statistics*, 41, 481-520.

- Li, T., von Davier, M., **Hancock, G. R.**, & Kirsch, I. S. (2016). The prediction of labor force status: Implications from international adult skill assessments. *ETS Research Report Series*, 2016, 1-20. doi:10.1002/ets2.12097
- Hodis, F. A., & **Hancock, G. R.** (Eds.). (2016). Special issue: Advances in quantitative methods to further research in education and educational psychology. *Educational Psychologist*, *51*(3-4).
- Hodis, F. A., & **Hancock, G. R.** (2016). Introduction to the Special Issue: Advances in quantitative methods to further research in education and educational psychology. *Educational Psychologist*, *51*, 301-304.
- **Hancock, G. R.**, & Schoonen, R. (2015). Structural equation modeling: Possibilities for language learning researchers. *Language Learning* 65, 158-182.
- Mao, X., Harring, J. R., & **Hancock, G. R.** (2015). A note on the specification of error structures in latent interaction models. *Educational and Psychological Measurement*, 75, 5-21.
- Preacher, K. J., & **Hancock, G. R.** (2015). Meaningful aspects of change as novel random coefficients: A general method for reparameterizing longitudinal models. *Psychological Methods*, 20, 84-101.
- Liu, M., & Hancock, G. R. (2014). Unrestricted mixture models for class identification in growth mixture modeling. *Educational and Psychological Measurement*, 74, 557-584.
- **Hancock, G. R.**, <u>Mao, X.</u>, & Kher, H. (2013). On latent growth models for composites and their constituents. *Multivariate Behavioral Research*, 48, 619-638.
- Kohli, N., Harring, J. R., & **Hancock, G. R.** (2013). Piecewise linear-linear latent growth mixture models with unknown knots. *Educational and Psychological Measurement*, 73, 935-955.
- Fan, W., & **Hancock, G. R.** (2012). Robust means modeling: An alternative to hypothesis testing of independent means under variance heterogeneity and nonnormality. *Journal of Educational and Behavioral Statistics*, *37*, 137-156.
- **Hancock, G. R.**, & Mueller, R. O. (2011). The reliability paradox in assessing structural relations within covariance structure models. *Educational and Psychological Measurement*, 71, 306-324.
- Levy, R., & **Hancock, G. R.** (2011). An extended model comparison framework for covariance and mean structure models, accommodating multiple groups and latent mixtures. *Sociological Methods and Research*, 40, 256-278.

- <u>Liu, M.</u>, **Hancock, G. R.**, & Harring, J. R. (2011). Using finite mixture modeling to deal with systematic measurement error: A case study. *Journal of Modern Applied Statistical Methods*, *10*, 249-261.
- Koran, J., & Hancock, G. R. (2010). Using fixed thresholds with grouped data in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 17, 590-604.
- Choi, J., Harring, J. R., & **Hancock, G. R.** (2009). Latent growth modeling for logistic response functions. *Multivariate Behavioral Research*, *44*, 620-645.
- Mann, H. M., Rutstein, D. W., & Hancock, G. R. (2009). The potential for differential findings among invariance testing strategies for multisample measured variable path models. *Educational and Psychological Measurement*, 69, 603-612.
- Choi, J., Fan, W., & Hancock, G. R. (2009). A note on confidence intervals for two-group latent mean effect size measures. *Multivariate Behavioral Research*, 44, 396-406.
- **Hancock, G. R.** (2009). Diagnostic classification modeling: Opportunity for identity. *Measurement: Interdisciplinary Research and Perspectives*, 7, 62-64.
- **Hancock, G. R.**, & <u>Buehl, M. M.</u> (2008). Second-order latent growth models with shifting indicators. *Journal of Modern Applied Statistical Methods*, 7, 39-55.
- **Hancock, G. R.** (2007). Models for illuminating things otherwise unseen: Coeditor's introduction. *Contemporary Educational Psychology*, 32, 4-7.
- <u>Levy, R.</u>, & **Hancock, G. R.** (2007). A framework of statistical tests for comparing mean and covariance structure models. *Multivariate Behavioral Research*, 42, 33-66.
- **Hancock, G. R.**, & Choi, J. (2006). A vernacular for linear latent growth models. *Structural Equation Modeling: A Multidisciplinary Journal*, 13, 352-377.
- <u>Fan, W.</u>, & **Hancock, G. R.** (2006). Impact of post hoc measurement model overspecification on structural parameter integrity. *Educational and Psychological Measurement*, 66, 748-764.
- <u>Gagné, P. E.</u>, & **Hancock, G. R.** (2006). Measurement model quality, sample size, and solution propriety in confirmatory factor models. *Multivariate Behavioral Research*, 41, 65-83.
- Raykov, T., & **Hancock**, **G. R.** (2005). Examining change in maximal reliability for multiple-component measuring instruments. *British Journal of Mathematical and Statistical Psychology*, *58*, 65-82.

- Nevitt, J., & Hancock, G. R. (2004). Evaluating small sample approaches for model test statistics in structural equation modeling. *Multivariate Behavioral Research*, 39, 439-478.
- **Hancock, G. R.** (2003). Fortune cookies, measurement error, and experimental design. *Journal of Modern Applied Statistical Methods*, 2, 293-305.
- **Hancock, G. R.** (2001). Effect size, power, and sample size determination for structured means modeling and MIMIC approaches to between-groups hypothesis testing of means on a single latent construct. *Psychometrika*, 66, 373-388.
- **Hancock, G. R.**, & <u>Freeman, M. J.</u> (2001). Power and sample size for the RMSEA test of not close fit in structural equation modeling. *Educational and Psychological Measurement*, 61, 741-758.
- Nevitt, J., & Hancock, G. R. (2001). Performance of bootstrapping approaches to model test statistics and parameter standard error estimation in structural equation modeling. Structural Equation Modeling: A Multidisciplinary Journal, 8, 353-377.
- **Hancock, G. R.,** <u>Kuo, W.,</u> & <u>Lawrence, F. R.</u> (2001). An illustration of second-order latent growth models. *Structural Equation Modeling: A Multidisciplinary Journal*, 8, 470-489.
- Berkovits, I., Hancock, G. R., & Nevitt, J. (2000). Bootstrap resampling approaches for repeated measure designs: Relative robustness to sphericity and normality violations. *Educational and Psychological Measurement*, 60, 877-892.
- **Hancock, G. R.**, <u>Lawrence, F. R.</u>, & <u>Nevitt, J.</u> (2000). Type I error and power of latent mean methods and MANOVA in factorially invariant and noninvariant latent variable systems. *Structural Equation Modeling: A Multidisciplinary Journal*, 7, 534-556.
- Klockars, A. J., & **Hancock, G. R.** (2000). Scheffé's more powerful *F*-protected post hoc procedure. *Journal of Educational and Behavioral Statistics*, 25, 13-19.
- Nevitt, J., & Hancock, G. R. (2000). Improving the Root Mean Square Error of Approximation for nonnormal conditions in structural equation modeling. *Journal of Experimental Education*, 68, 251-268.
- **Hancock, G. R.**, & Nevitt, J. (1999). Bootstrapping and identification of exogenous latent variables within structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*, 394-399.
- <u>Lawrence</u>, F. R., & **Hancock**, **G. R.** (1999). Conditions affecting integrity of a factor solution under varying degrees of overextraction. *Educational and Psychological Measurement*, *59*, 549-579.
- **Hancock, G. R.** (1999). A sequential Scheffé-type respecification procedure for controlling Type I error in exploratory structural equation model

- modification. *Structural Equation Modeling: A Multidisciplinary Journal*, 6, 158-168.
- Nevitt, J., & Hancock, G. R. (1999). NNORMULT and PWRCOEFF: A set of GAUSS programs for simulating multivariate nonnormal data. *Applied Psychological Measurement*, 23, 54.
- Klockars, A. J., & **Hancock, G. R.** (1998). A more powerful post hoc multiple comparison procedure in analysis of variance. *Journal of Educational and Behavioral Statistics*, 23, 279-289.
- <u>Lawrence, F. R.</u>, & **Hancock, G. R.** (1998). Assessing change over time using latent growth modeling. *Measurement and Evaluation in Counseling and Development*, 30, 211-224.
- **Hancock, G. R.**, & Klockars, A. J. (1997). Finite Intersection Tests: A paradigm for optimizing simultaneous and sequential inference. *Journal of Educational and Behavioral Statistics*, 22, 291-307.
- **Hancock, G. R.** (1997). Structural equation modeling methods of hypothesis testing of latent variable means. *Measurement and Evaluation in Counseling and Development*, 30, 91-105.
- **Hancock, G. R.** (1997). Correlation/validity coefficients disattenuated for score reliability: A structural equation modeling approach. *Educational and Psychological Measurement*, *57*, 606-614.
- **Hancock, G. R.**, & Klockars, A. J. (1996). The quest for α : Developments in multiple comparison procedures in the quarter century since Games (1971). *Review of Educational Research*, 66, 269-306.
- Klockars, A. J., & **Hancock, G. R.** (1996). Power of a stagewise intersection protected multiple comparison procedure. *Communications in Statistics: Simulation and Computation*, 25, 953-960.
- **Hancock, G. R.**, <u>Butler, M. S.</u>, & Fischman, M. G. (1995). On the problem of two-dimensional error scores: Methods and analyses of accuracy, bias, and consistency. *Journal of Motor Behavior*, 27, 241-250.
- Klockars, A. J., **Hancock, G. R.**, & <u>McAweeney, M. J.</u> (1995). Power of unweighted and weighted versions of simultaneous and sequential multiple comparison procedures. *Psychological Bulletin*, *118*, 300-307.
- **Hancock, G. R.** (1994). Cognitive complexity and the comparability of multiple-choice and constructed-response test formats. *Journal of Experimental Education*, 62, 143-157.
- Klockars, A. J., & **Hancock**, **G. R.** (1994). Per experiment error rates: The hidden costs of several multiple comparison procedures. *Educational and Psychological Measurement*, *54*, 292-298.

- **Hancock, G. R.**, <u>Thiede, K. W.</u>, Sax, G., & Michael, W. B. (1993). Reliability of comparably written two-option multiple-choice and true-false test items. *Educational and Psychological Measurement*, *53*, 651-660.
- Klockars, A. J., & **Hancock, G. R.** (1993). Manipulations of evaluative rating scales to increase validity. *Psychological Reports*, 73, 1059-1066.
- Klockars, A. J., & **Hancock, G. R.** (1992). Power of recent multiple comparison procedures as applied to a complete set of planned orthogonal contrasts. *Psychological Bulletin*, *111*, 505-510.
- **Hancock, G. R.**, & Klockars, A. J. (1991). The effect of scale manipulations on validity: Targetting frequency rating scales for specific performance levels. *Applied Ergonomics*, 22, 147-154.

Supporting Work (underline indicates student at time of work)

- Gartstein, M. A., **Hancock, G. R.**, Potapova, N. V., Calkins, S. D., & Bell, M. A. (in press). Modeling development of frontal electroencephalogram (EEG) asymmetry: Sex differences and links with temperament. *Developmental Science*.
- Riggins, T., Geng, F., Botdorf, M., Canada, K., Cox, L., & **Hancock, G. R.** (in press). Protracted hippocampal development is associated with age-related improvements in memory during early childhood. *NeuroImage*.
- Quinn, S. C., Jamison, A., An, J., Freimuth, V. S., **Hancock, G. R.**, & Musa, D. (in press). Breaking down the monolith: Understanding flu vaccine uptake among African Americans. *Social Science & Medicine Population Health*.
- Quinn, S., Jamison, A., An, J., Freimuth, V., & **Hancock, G. R.** (in press). Determinants of influenza vaccination among high-risk black and white adults. *Vaccine*.
- Gartstein, M. A., & **Hancock, G. R.** (in press). Temperamental growth in infancy: Demographic, maternal symptom, and stress contributions to overarching and fine-grained dimensions. *Merrill-Palmer Quarterly*.
- Freimuth, V., Jamison, A., An, J., **Hancock, G. R.**, & Quinn, S. (in press). Determinants of trust in the flu vaccine for African Americans and whites. *Social Science & Medicine*.
- Smith, G., Hayslip, B., **Hancock, G. R.**, Merchant, W., Montoro-Rodriguez, J., & Strieder, F. (in press). The Family Stress Model as it applies to custodial grandfamilies: A cross-validation. *Journal of Child and Family Studies*.
- Holten, A-L., **Hancock, G. R.**, Persson, R., Hansen, Å. M., & Høgh, A. (2016). Knowledge hoarding: Antecedent or consequent of negative acts? The

- mediating role of trust and justice. *Journal of Knowledge Management*, 20, 215-229.
- Gartstein, M. A., **Hancock, G. R.**, & Iverson, S. L. (2018). Positive affectivity and fear trajectories in infancy: Contributions of mother-child interaction factors. *Child Development*, 89, 1519-1534.
- Freimuth, V., Jamison, A., **Hancock, G. R.**, Musa, D., Hilyard, K., & Quinn, S. (in press). The role of risk perception in flu vaccine behavior among African American and White Adults in the US. *Risk Analysis*.
- Quinn, S., Jamison, A., Freimuth, V., An, J., **Hancock, G. R.**, & Musa, D. (in press). Exploring racial influences on flu vaccine attitudes and behavior: Results of a national survey of African American and white adults. *Vaccine*.
- Holten, A., **Hancock, G. R.**, Hansen, A. M., Persson, R., Mikkelsen, E. G., & Høgh, A. (in press). The longitudinal effects of organisational change on experienced and enacted bullying behaviour. *Journal of Change Management*.
- Holten, A-L., **Hancock, G. R.**, Persson, R., Hansen, Å. M., & Høgh, A. (in press). Knowledge hoarding: Antecedent or consequent of negative acts? The mediating role of trust and justice. *Journal of Knowledge Management*.
- Smith, G. C., Merchant, W., Hayslip B. Jr., **Hancock, G. R.**, Strieder, F. H., & Montoro-Rodriguez, J. (2015). Measuring the parenting practices of custodial grandmothers. *Journal of Child and Family Studies*, 2, 3676-3689.
- Cabrera, N. J., Hofferth, S. L., & **Hancock, G. R.** (2014). Family structure, maternal employment, and change in children's externalizing problem behaviour: Differences by age and self-regulation. *European Journal of Developmental Psychology*, 11, 136-158.
- Trezek, B. J., & **Hancock, G. R.** (2013). Implementing instruction in the alphabetic principle within a sign bilingual setting. *Journal of Deaf Studies and Deaf Education*, *18*, 391-408. doi: 10.1093/deafed/ent016
- Cabrera, N. J., Tamis-LeMonda, C. S., Bradley, R. H., Shannon, J. D., & **Hancock, G. R.** (2012). Parenting during early childhood in low-income families: Variation by child gender. *Family Science*, *3*, 201-214.
- Smith, G., & **Hancock, G. R.** (2010). Custodial grandmother-grandfather dyads: Pathways among marital distress, grandparent dysphoria, parenting practice, and grandchild adjustment. *Family Relations*, *59*, 45-59.
- Harden, B. J., <u>Vick, J.</u>, **Hancock, G. R.**, & Wang, K. (2010). Quality of the early caregiving environment and preschool well-being: An examination of children entering the child welfare system during infancy. In M. B. Webb, K. L. Dowd, B. J. Harden, J. Landsverk, & M. Testa (Eds.), *Child welfare and*

- child well-being: New perspectives from the National Survey of Child and Adolescent Well-Being (pp. 55-82). Oxford: Oxford University Press.
- Nuijens, K. L., Teglasi, H., & **Hancock, G. R.** (2009). Self-perceptions, discrepancies between self- and other-perceptions, and children's self-reported emotions. *Journal of Psychoeducational Assessment*, 27, 477-493
- Tractenberg, R. E., Aisen, P. S., **Hancock, G. R.**, & Rebeck, G. W. (2009). No cross-sectional influence of APOE varepsilon4 dose on clinical tests in Alzheimer's disease. *Neurobiology of Aging*, 30, 1327-1328.
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- Myers, N. D., Feltz, D. L., Chase, M. A., Reckase, M. D., & **Hancock, G. R.** (2008). The Coaching Efficacy Scale II High School Teams. *Educational and Psychological Measurement*, 68, 1059-1076.
- Wimmers, P. F., Splinter, T. A. W., **Hancock, G. R.**, & Schmidt, H. G. (2007). Clinical competence: General ability or case specific? *Advances in Health Science Education*, *12*, 299-314.
- Chen, A., & **Hancock, G. R.** (2006). Conceptualizing a theoretical model for school-centered adolescent physical activity intervention research. *Quest*, 58, 355-376.
- Maibach, E. W., Weber, D., Massett, H., **Hancock, G. R.**, & Prince, S. (2006). Understanding consumers' health information preferences: Development and validation of a brief screening instrument. *Journal of Health Communication*, 11, 717-736.
- Tractenberg, R. E., Aisen, P. S., Weiner, M. F., Cummings, J. L., & **Hancock, G. R.** (2006). Independent contributions of neural and 'higher order' deficits to symptoms in Alzheimer's disease: A latent variable modeling approach. *Alzheimer's and Dementia*, 2, 303-313.
- Gelso, C. J., <u>Kelley, F. A.</u>, <u>Fuertes, J. N.</u>, Marmarosh, C., Holmes, S. E., Costa, C., & **Hancock, G. R.** (2005). Measuring the real relationship in psychotherapy: Initial validation of the therapist form. *Journal of Counseling Psychology*, *52*, 640-649.
- Mattanah, J. F., **Hancock, G. R.**, & Brand, B. L. (2004). Parental attachment, separation-individuation, and college student adjustment: A structural equation analysis of mediational effects. *Journal of Counseling Psychology*, 51, 213-225.
- **Hancock, G. R.** (2003, July). Six areas to cover in junior faculty mentoring. *Academic Leader*, 19(7), 4, 8.
- Guthrie, J. T., Van Meter, P., **Hancock, G. R.**, McCann, A., Anderson, E., & Alao, S. (1998). Does concept-oriented reading instruction increase

- strategy-use and conceptual learning from text? *Journal of Educational Psychology*, 90, 261-278.
- <u>Guo, J. J.</u>, Gibson, J. T., **Hancock, G. R.**, Barker, K. N., & May, T. (1997). Economic evaluation of retrospective Drug Utilization Review on Medicaid pharmacy dispensing behavior: An empirical marginal analysis. *Journal of Research in Pharmaceutical Economics*, 8, 25-41.
- Whang, P. A., & **Hancock, G. R.** (1997). Modeling the mathematics achievement of Asian-American elementary students. *Learning and Individual Differences*, *9*, 63-88.
- Shannon, D. S., Twale, D. J., & **Hancock, G. R.** (1996). Use of instructional feedback and modification methods among university faculty. *Assessment and Evaluation in Higher Education*, 21, 41-53.
- <u>Guo, J. J.</u>, Gibson, J. T., **Hancock, G. R.**, & Barker, K. N. (1995). Retrospective Drug Utilization Review and the behavior of Medicaid prescribers: An empirical marginal analysis. *Clinical Therapeutics*, *17*, 1174-1187.
- Whang, P. A., & **Hancock, G. R.** (1994). Motivation and mathematics achievement: Comparisons between Asian-American and non-Asian students. *Contemporary Educational Psychology*, *19*, 302-322.
- **Hancock, G. R.**, Shannon, D. M., & Trentham, L. L. (1993). Student and teacher gender in ratings of university faculty: Results from five colleges of study. *Journal of Personnel Evaluation in Education*, 6, 235-248.
- Kincade, D. H., <u>Redwine, A.</u>, & **Hancock, G. R.** (1992). Apparel product dissatisfaction and the post-complaint process. *International Journal of Retail & Distribution Management*, 20, 15-22.
- Clinton, B. L., & **Hancock, G. R.** (1991). The development of an understanding of comforting messages. *Communication Reports*, *4*, 55-63.

Book Reviews

- **Hancock, G. R.** (2011). Review of Adam Davey and Jyoti Savla's *Statistical* power analysis with missing data: A structural equation modeling approach. Journal of the American Statistical Association, 106, 1648.
- **Hancock, G. R.** (1999). Review of John C. Loehlin's *Latent variable models: An introduction to factor, path, and structural analysis (3rd edition). Structural Equation Modeling: A Multidisciplinary Journal*, 6, 400-402.
- **Hancock, G. R.** (1995). Review of Barbara M. Byrne's *Structural equation modeling with EQS and EQS/Windows*. *Structural Equation Modeling: A Multidisciplinary Journal*, 2, 73-78.

Professional Papers Presented or To Be Presented (underline indicates student at time of work)

- Feng, Y., & **Hancock, G. R.** (2019, April). Oh %&\$#!, they cut my funding: Using planned missing data methods to salvage longitudinal research. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Johnson, T. L., & **Hancock, G. R.** (2019, April). *Modeling population heterogeneity in Time to Criterion growth models*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Iles, I., Jin, Y., Austin, L., Liu, B., & Hancock, G. R. (2019, April). Coping with outbreaks: Towards an infectious disease threat (IDT) appraisal model for risk communication. Paper presented at the annual meeting of the DC Health Communication Conference, Fairfax, VA.
- Faust, L., Gladstone, J., **Hancock, G. R.**, Wigfield, A., & Eccles, J. (2019, March). Family ties: Examining the development of children's math self-concept using a latent change score approach. Paper presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD.
- Mayer, C., Trezek, B. J., & **Hancock, G. R.** (April, 2019). *Phonological awareness and reading: Lessons learned from deaf students with cochlear implants*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Canada, K., Geng, F., **Hancock, G. R.**, & Riggins, T. (2018, August). Longitudinal development of hippocampal subfields during early to midchildhood. Paper presented at the Annual Meeting of Flux: The Society for Developmental Cognitive Neuroscience, Berlin, Germany.
- **Hancock, G. R.**, & Johnson, T. L. (2018, April). Time to criterion: A useful reparameterization of the latent growth model. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- **Hancock, G. R.**, Feng, Y., Harring, J. R., & Kher, H. (2018, April). Latent growth models with fixed floors and ceilings. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Gartstein, M. A., Iverson, S. L., Desmarais, E. E., & **Hancock, G. R.** (2017, April). Mother-child interactions across the first year of life: Contributions of infant temperament. Presentation at the biennial convention of the Society for Research in Child Development, Austin, TX.
- Gartstein, M. A., Iverson, S. L., & **Hancock, G. R.** (2017, April). Mother-child interactions across the first year of life: Contributions of infant temperament. Paper presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.

- Gartstein, M. A. & **Hancock**, **G. R.** (2016, October). Growth of temperament in infancy: Implications for development of behavior problems. Presentation at the 21st meeting of the Occasional Temperament Conference, Seattle, WA.
- Stapleton, L. M., Yang, J. S., & **Hancock, G. R.** (October, 2016). *Considering construct meaning and validation in multilevel settings*. Paper presented at the 10th annual International Multilevel Conference, Utrecht, Netherlands.
- **Hancock, G. R.**, & An, J. (2016, April). *Closed-form alternatives for estimating omega reliability*. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.
- Hancock, G. R. (2016, April). Seven dirty secrets of structural equation modeling. Invited address for the Structural Equation Modeling Special Interest Group of the American Educational Research Association, Washington, DC.
- Cassiday, K., Lee, D. Y., & **Hancock, G. R.** (2016, April). *Error covariance structure in a latent quadratic effects model*. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.
- Smith, G. C., Hayslip, B. Jr., Strieder, F., Greenberg, P., Montoro-Rodriguez, J., **Hancock, G. R.**, & Merchant, W. (2015, November) Comparing Interventions to Improve the Well-Being of Custodial Grandmothers and Grandchildren: Changes from Baseline at Post-Intervention and Three Months Later. Paper presented at the annual meeting of the Gerontological Society of America, Baltimore, MD.
- Holten, A-L., **Hancock, G. R.**, Hogh, A., Persson, R., & Hansen, Å. (2015, May). *Knowledge hoarding and negative acts: the mediating role of trust and justice*. Paper presented at the annual meeting of the European Association of Work and Organizational Psychology, Oslo, Norway.
- Holten, A-L., **Hancock, G. R.**, & Bøllingtoft, A. (2015, May). *Organizational change prevalence, consequences and management in public and private organizations*. Paper presented at the annual meeting of the European Association of Work and Organizational Psychology, Oslo, Norway.
- Trezek, B. J., & **Hancock, G. R.** (April, 2015). Exploring the impact of summer regression/recoupment on the reading and mathematics achievement of deaf learners. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- McNeish, D. M., An, J., & Hancock, G. R. (April, 2015). Factor indicator reliability and fit indices: More evidence against golden rule cutoffs in latent variable models. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

- Kang, Y., & Hancock, G. R. (April, 2015). Sensitivity analysis of structural parameters to measurement noninvariance: A Bayesian approach. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Mao, X., & Hancock, G. R. (April, 2015). Robust means modeling: An alternative for repeated measures designs. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Merchant, W., Smith, G. C., Hayslip, B., Strieder, F., Montoro Rodriguez, J., & Hancock, G. R. (November, 2014). *Psychometric evidence for the use of parenting scales with custodial grandmothers*. Paper presented at the 67th Annual Scientific Meeting of the Gerontological Society of America, Washington, DC.
- Smith, G. C., Hayslip, B., Montoro-Rodriguez, J., Streider, F., Williamson, M., Greenberg, P., & **Hancock, G. R.** (November, 2014). *Comparative effectiveness of interventions for improving the well-being of custodial grandmothers and grandchildren*. Paper presented at the 67th Annual Scientific Meeting of the Gerontological Society of America, Washington, DC.
- Liu, H., & Hancock, G. R. (2014, April). Optimizing power for planned missing data with multi-form designs. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- McNeish, D., & Hancock, G. R. (2014, April). *The reliability paradox in multisample covariance structure models*. Paper to be presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Liu, M., Harbaugh, G., Harring, J. R., & **Hancock, G. R.** (2014, April). *The effect of extreme response and non-extreme response styles on measurement invariance*. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Yumoto, F., Tractenberg, R. E., & **Hancock, G. R.** (2014, April). *Effects of unmodeled latent classes in value-added modeling*. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Trezek, B. J., & **Hancock, G. R.** (2014, February). Exploring the impact of summer regression on reading achievement. Paper presented at the annual meeting of the Association of College Educators Deaf and Hard of Hearing. Washington, DC.
- Kang, Y., & Hancock, G. R. (2013, April). The role of measurement quality on practical guidelines for assessing measurement invariance. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

- **Hancock, G. R.**, & <u>Kang, Y.</u> (2013, April). *On optimal scaling for latent variables within structural equation models*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Hancock, G. R., & McNeish, D. (2013, April). More powerful tests of simple interaction contrasts for the two-way factorial design. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Mao, X., Harring, J. R., & **Hancock, G. R.** (2013, April). *Error structures in latent interaction models*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Kohli, N., Harring, J. R., & **Hancock, G. R.** (2013, April). *A two-phase linear-linear piecewise growth mixture model*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Hsu, J-C., Harring, J. R., & Hancock, G. R. (2013, April). Estimation and model selection for a mixture of latent interaction models. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- **Hancock, G. R.**, Mao, X., & Kher, H. (2012, April). *On latent growth models for formative factors*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- Hou, X., & Hancock, G. R. (2012, April). Evaluation of the ability estimates under the factor mixture model and mixture IRT model. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Trezek, B. J., & **Hancock, G. R.** (2012, April). *Implementing remedial phonologically based reading instruction for deaf and hard of hearing students educated in a sign bilingual setting*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- Kang, Y., & Hancock, G. R. (2012, April). The effect of scale referent on the testing of mean structure parameters. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- <u>Liu, M.</u>, & **Hancock, G. R.** (2012, April). *Using joint criteria for class enumeration in growth mixture modeling*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- **Hancock, G. R.**, & Harring, J. R. (2011, May). *Using phantom variables in structural equation modeling to assess model sensitivity to external misspecification*. Paper presented at the Modern Modeling Methods conference, Storrs, CT.

- Hou, X., & Hancock, G. R. (2011, April). Using factor mixture model and mixture item response theory model for latent variable mixture data with dichotomous outcomes. Paper to be presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Wang, H-F., & Hancock, G. R. (2011, April). The impact of preliminary model selection on growth mixture model parameter estimates. Paper to be presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- <u>Liu, M.</u>, & **Hancock, G. R.** (2011, April). The impact of model selection on mixture model parameter estimate bias and variability: The case of growth mixture models. Paper to be presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Hancock, G. R., & Wasko, J. A. (2010, April/May). Preliminary assessments of normality are useless in deciding whether or not to use rescaled model test statistics. Paper presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.
- Wang, H-F., & Hancock, G. R. (2010, April/May). The impact of preliminary model selection on latent growth model parameter estimates. Paper presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.
- <u>Liu, M.</u>, & **Hancock, G. R.** (2010, April/May). *Using latent profile models and unstructured growth mixture models to assess the number of latent classes in growth mixture modeling.* Paper presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.
- <u>Liu, M.</u>, **Hancock, G. R.**, & Harring, J. R. (2010, April/May). *A mixture modeling approach to systematic measurement error*. Paper presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.
- Hou, X., & Hancock, G. R. (2010, April/May). *Model selection methods for factor mixture models with dichotomous outcomes*. Paper presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.
- Koran, J., & Hancock, G. R. (2010, April/May). Specification of piecewise latent growth models. Paper presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.
- Smith, G., **Hancock, G. R.**, Kelley, S., Whitley, D., Doblin-MacNab, M. L., Hayslip, B., Davis, S., Goodman, C. C., & Strieder, F. (2009, November). Symposium: Family Dynamics and Interdependence within Custodial Grandparent Families. Creative Approaches to Healthy Aging, The Gerontological Society of America 62nd Annual Scientific Meeting, Atlanta GA.

- Wasko, J. A., & Hancock, G. R. (2009, April). Mixture models within experimental design to accommodate and assess potential treatment nonresponse. Paper presented at the 2009 annual meeting of the American Educational Research Association, San Diego, CA.
- Weiss, B. A., & Hancock, G. R. (2009, April). Latent variable models for estimating quadratic effects in structural equation modeling. Paper presented at the 2009 annual meeting of the American Educational Research Association, San Diego, CA.
- Levy, R., & **Hancock, G. R.** (2008, March). A generalized model comparison framework in structural equation modeling. Paper presented at the 2008 meeting of the American Educational Research Association, New York, NY.
- Koran, J., & Hancock, G. R. (2008, March). Using fixed thresholds for inherently quantitative but ordinally-scaled variables in covariance structure modeling. Paper presented at the 2008 meeting of the American Educational Research Association, New York, NY.
- Weiss, B. A., & Hancock, G. R. (2008, March). The two-point mixture index of fit for structural equation models. Paper presented at the 2008 meeting of the American Educational Research Association, New York, NY.
- Mann, H. M., & Hancock, G. R. (2008, March). A general Bayesian framework for modeling heterogeneity in random coefficient structural equation models. Paper presented at the 2008 meeting of the American Educational Research Association, New York, NY.
- **Hancock, G. R.**, & Mueller, R. O. (2007, April). *The reliability paradox in structural equation modeling fit indices*. Paper presented at the 2007 meeting of the American Educational Research Association, Chicago, IL.
- Choi, J., Levy, R., & **Hancock, G. R.** (2007, April). A numerical approach to the categorization effect on the moments estimates of the SEM indicators. Paper presented at the 2007 meeting of the American Educational Research Association, Chicago, IL.
- Mann, H. M., Rutstein, D. W., & Hancock, G. R. (2007, April). A comparison of invariance testing strategies for multisample covariance structure analysis. Paper presented at the 2007 meeting of the National Council on Measurement in Education, Chicago, IL.
- Hancock, G. R., & <u>Fan, W.</u> (2007, April). Repeated robust means modeling: An alternative to hypothesis testing of repeated measures under variance heterogeneity and nonnormality. Paper presented at the 2007 meeting of the American Educational Research Association, Chicago, IL.
- <u>Levy, R.</u>, & **Hancock, G. R.** (2006, May). A generalized framework of statistical tests for comparing mean and covariance structure models. Paper presented at the 2006 meeting of the Psychometric Society, Montréal, Canada.

- <u>Fan, W.</u>, & **Hancock, G. R.** (2006, April). *The robustness of test statistics to nonnormality in assessing partial invariance*. Paper presented at the 2006 meeting of the American Educational Research Association, San Francisco, CA.
- Fan, W., & Hancock, G. R. (2006, April). Robust Means Modeling: an alternative to hypothesis testing in independent and repeated groups design for variance heterogeneity and non-normality. Paper presented at the 2006 meeting of the American Educational Research Association, San Francisco, CA.
- Choi, J., Levy, R., & Hancock, G. R. (2006, April). A new Markov Chain Monte Carlo estimation method with covariance data for structural equation modeling. Paper presented at the 2006 meeting of the American Educational Research Association, San Francisco, CA.
- <u>Levy, R.</u>, & **Hancock, G. R.** (2006, April). *Conceptualizing validity from a latent variable-centered framework*. Paper presented at the 2006 meeting of the American Educational Research Association, San Francisco, CA.
- Greene, J. A., Azevedo, R., & Hancock, G. R. (2006, April). Embedding personal epistemology research with academic self-efficacy and academic achievement. Paper presented at the 2006 meeting of the American Educational Research Association, San Francisco, CA.
- Hancock, G. R., & Koran, J. M. (2005, April). A latent growth modeling strategy for interrupted longitudinal processes. Paper presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- **Hancock, G. R.**, & <u>Kroopnick, M. H.</u> (2005, April). A simplified sample size determination for tests of latent covariance structure parameters. Paper presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- Levy, R., & Hancock, G. R. (2005, April). A framework of statistical tests for latent mean and covariance structure models. Paper presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- Pan, X., & Cao, Y., & Hancock, G. R. (2005, April). A latent growth mixture modeling approach for censored longitudinal data. Paper presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- Choi, J., Fan, W., & Hancock, G. R. (2005, April). Confidence intervals for between-subjects latent mean effect size measures in structured means models. Paper presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- <u>Huang, X., Lin, P.,</u> & **Hancock, G. R.** (2005, April). *Testing hypotheses about relative loading magnitude using confirmatory factor models.* Paper

- presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- Stapleton, L. M., & **Hancock, G. R.** (2005, April). *Strategies for assessing latent mean differences with two-level data*. Paper presented at the 2005 meeting of the American Educational Research Association, Montréal, Canada.
- Choi, J., & Hancock, G. R. (2004, April). Latent growth modeling for logistic response functions. Paper presented at the 2004 meeting of the American Educational Research Association, San Diego, CA.
- <u>Fan, W.</u>, & **Hancock, G. R.** (2004, April). *Impact of measurement model modifications on structural parameter integrity*. Paper presented at the 2004 meeting of the American Educational Research Association, San Diego, CA.
- Gagné, P. E., & Hancock, G. R. (2004, April). Generalized confirmatory factor mixture models: A tool for assessing factorial invariance across unspecified populations. Paper presented at the 2004 meeting of the American Educational Research Association, San Diego, CA.
- <u>Levy, R.</u>, & **Hancock, G. R.** (2004, April). A framework of statistical tests for competing nonnested covariance structure models. Paper presented at the 2004 meeting of the American Educational Research Association, San Diego, CA.
- Mueller, R. O., & **Hancock, G. R.** (2004, April). Evaluating structural equation modeling studies: Some practical suggestions to manuscript reviewers. Paper presented at the 2004 meeting of the American Educational Research Association, San Diego, CA.
- **Hancock, G. R.** (2003, April). *Effect size, power, and sample size determination* for repeated measure structured means modeling. Paper presented at the 2003 meeting of the American Educational Research Association, Chicago, IL.
- **Hancock, G. R.**, & Choi, J. (2003, April). *The effect of shifting and stretching temporal metrics in linear latent growth models*. Paper presented at the 2003 meeting of the American Educational Research Association, Chicago, IL.
- <u>Levy, R.</u>, & **Hancock, G. R.** (2003, April). A statistical test for comparing nonnested structural equation models. Paper presented at the 2003 meeting of the American Educational Research Association, Chicago, IL.
- Mueller, R. O., & **Hancock, G. R.** (2003, April). *Type VI error: Its relevance to structural equation modeling*. Paper presented at the 2003 meeting of the American Educational Research Association, Chicago, IL.
- Hamilton, J., Hancock, G. R., & Gagné, P. E. (2003, April). *The effect of sample size on latent growth models*. Paper presented at the 2003 meeting of the National Council on Measurement in Education, Chicago, IL.
- **Hancock, G. R.**, <u>Buehl, M.</u>, & Ployhart, R. E. (2002, April). *Second-order latent growth models with shifting indicators*. Paper presented at the annual

- meeting of the American Educational Research Association, New Orleans, LA.
- **Hancock, G. R.**, & Gagné, P. E. (2002, April). *Effect size, power, and sample size determination for trend factors in latent growth models*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Gagné, P. E., & Hancock, G. R. (2002, April). Relation of sample size and solution propriety in latent variable structural equation models as a function of construct reliability. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Hancock, G. R., & Mueller, R. O. (2001, April). Bootstrapping empirical variability estimates for coefficient H using popular structural equation modeling software. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Stapleton, L. M., & Hancock, G. R. (2001, April). The incorporation of design information in multilevel structural equation models for complex sample data. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- **Hancock, G. R.**, Conley, M. W., & Stapleton, L. M. (2001, April). *Latent growth models with multilevel data*. Symposium paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Freeman, M. J., & Hancock, G. R. (2001, April). A Monte Carlo study of Type I error robustness of tests of spread for the two-sample case. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Alban, T. M., & Hancock, G. R. (2001, April). A survey of measurement, statistics, and evaluation doctoral programs in North America. Paper presented at the annual meeting of the National Council on Measurement in Education, Seattle, WA.
- **Hancock, G. R.**, & Mueller, R. O. (2000, December). *Rethinking construct reliability within latent variable systems*. Paper presented at the International Symposium on Structural Equation Modeling, St. Charles, IL.
- Mueller, R. O., & **Hancock, G. R.** (2000, November). *The DOs and DON'Ts of structural equation modeling, Part II: Research Design and Measurement.*Paper presented at the annual meeting of the Association for the Advancement of Educational Research, Porte Verde, FL.
- Hancock, G. R. (2000, April). Latent effect size measures for structured means modeling and MIMIC approaches to hypothesis testing of latent construct means. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Hancock, G. R., Freeman, M. J., & Nevitt, J. (2000, April). Assessing maximum power of the RMSEA test of not close fit. Paper presented at the annual

- meeting of the American Educational Research Association, New Orleans, LA.
- Berkovits, I., & Hancock, G. R. (2000, April). A comparison of methods for structural modeling with polytomous and continuous variables. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Stapleton, L. M., & Hancock, G. R. (2000, April). *Using multilevel structural equation modeling with faculty data*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Stapleton, L. M., & Hancock, G. R. (1999, November). *Multilevel modeling using data from the National Study of Postsecondary Faculty*. Workshare presented at the annual meeting of the North East Association for Institutional Research. Newport, RI.
- Hancock, G. R., Stapleton, L. M., & Berkovits, I. (1999, April). Minimum constraints for loading and intercept invariance in covariance and mean structure models. Paper presented at the 1999 annual meeting of the American Educational Research Association, Montréal, Canada.
- Nevitt, J., & Hancock, G. R. (1999, April). Adjusting the RMSEA for conditions of nonnormality. Paper presented at the 1999 annual meeting of the American Educational Research Association, Montréal, Canada.
- Cox, K. E., Guthrie, J. T., & **Hancock, G. R.** (1999, April). *Mediational processes of motivation and instruction in reading achievement*. Paper presented at the 1999 annual meeting of the American Educational Research Association, Montréal, Canada.
- Lawrence, F. R., & Hancock, G. R. (1998, April). Finite sample behavior of the likelihood ratio, Wald, and Lagrange Multiplier tests: Bias and variability in univariate noncentrality parameter estimation. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Nevitt, J., & Hancock, G. R. (1998, April). Relative performance of rescaling and resampling approaches to model χ^2 and parameter standard error estimation in structural equation modeling. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Berkovits, I., Nevitt, J., & Hancock, G. R. (1998, April). A bootstrap resampling approach for repeated measure designs: Robustness to sphericity and normality violations. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- **Hancock, G. R.**, <u>Kuo, W.</u>, & <u>Lawrence, F. R.</u> (1997, April). *Second-order latent growth models*. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.
- <u>Lawrence, F. R.</u>, & **Hancock, G. R.** (1997, April). Power of structured means modeling, MIMIC modeling, and MANOVA approaches for detecting

- construct mean differences. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.
- **Hancock, G. R.** (1997, April). A sequential Scheffé-based respecification procedure for controlling Type I error in exploratory structural equation model modification. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.
- Hancock, G. R., & Klockars, A. J. (1996, April). *Using Finite Intersection Tests to improve Shaffer's Modified Sequentially Rejective Bonferroni for all possible pairwise comparisons*. Paper presented at the meeting of the American Educational Research Association, New York, NY.
- Klockars, A. J., & **Hancock, G. R.** (1996, April). *Using Finite Intersection Test methodology to create an improved Scheffé procedure*. Paper presented at the meeting of the American Educational Research Association, New York, NY.
- Lawrence, F. R., & Hancock, G. R. (1996, April). Conditions affecting integrity of a factor solution under varying degrees of overextraction. Paper presented at the meeting of the American Educational Research Association, New York, NY.
- Whang, P. A., & **Hancock, G. R.** (1995, August). *Cognitive factors underlying the mathematics achievement of Asian-American elementary students.* Paper presented at the meeting of the American Psychological Association, New York City, NY.
- **Hancock, G. R.** (1995, April). *Using EQS to conduct inferential procedures on disattenuated correlation coefficients*. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.
- **Hancock, G. R.**, <u>Butler, M. S.</u>, & Fischman, M. G. (1994, April). *The ABC's of two-dimensional error scores: Measures and analyses of accuracy, bias, and consistency*. Symposium paper presented at the meeting of the American Alliance for Health, Physical Education, Recreation, and Dance, Denver, CO.
- Whang, P. A., & **Hancock, G. R.** (1994, April). What's motivating Julie Lynn and Ju-Li Lin in American math classes? A comparison of expectancies and beliefs. Paper presented at the meeting of the American Educational Research Association, New Orleans, LA.
- Shannon, D. M., Twale, D. J., **Hancock, G. R.**, & Trentham, L. L. (1994, February). *Feedback and modification of college instruction*. Paper presented at the meeting of the Eastern Educational Research Association, Sarasota, FL.
- Whang, P. A., & **Hancock, G. R.** (1993, August). *Mathematical motivation:* Asian-American and non-Asian students' expectancies and values. Paper presented at the meeting of the American Psychological Association, Toronto, Canada.
- Klockars, A. J., & Hancock, G. R. (1993, April). An F-enhanced stagewise protected procedure for testing a complete set of planned orthogonal

- *contrasts*. Paper presented at the meeting of the American Educational Research Association, Atlanta, GA.
- Blackorby, J., **Hancock, G. R.**, & Siegel, S. (1993, April). *Human capital and structural explanations of postschool success for youth with disabilities: A latent variable exploration of the National Longitudinal Transition Study.* Paper presented at the meeting of the American Educational Research Association, Atlanta, GA.
- Shannon, D. M., **Hancock, G. R.**, Twale, D. J., & <u>Perry, C. N.</u> (1993, February). Assessment of college teaching strategies: Using evaluation techniques to modify instruction. Paper presented at the meeting of the Eastern Educational Research Association, Clearwater, FL.
- Hancock, G. R., Thiede, K. W., & Sax, G. (1992, April). *Reliability of comparably written two-option multiple-choice and true-false test items*. Paper presented at the meeting of the National Council on Measurement in Education, San Francisco, CA.
- **Hancock, G. R.** (1992, April). *Impact of item complexity on the comparability of multiple-choice and constructed-response test formats*. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.
- Halpin, G., <u>Crouse, D.</u>, Halpin, G., & **Hancock, G. R.** (1992, April). *Discipline and learning: Understanding the nature of the problem*. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.
- **Hancock, G. R.**, Shannon, D. M., & Trentham, L. L. (1992, March). *Student and teacher gender in ratings of university faculty: Results from five colleges of study*. Paper presented at the meeting of the Eastern Educational Research Association, Hilton Head, SC.
- McAweeney, M. J., Klockars, A. J., & **Hancock, G. R.** (1991, April). Flat versus weighted and simultaneous versus sequential multiple comparison procedures: A power analysis for the 2x2 factorial design. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.
- Thiede, K. W., Klockars, A. J., & **Hancock, G. R.** (1991, April). *Recall and recognition formats: A correlational analysis*. Paper presented at the meeting of the National Council on Measurement in Education, Chicago, IL.
- Klockars, A. J., & **Hancock, G. R.** (1991, April). Power of recent multiple comparison procedures as applied to a complete set of planned orthogonal contrasts. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.
- **Hancock, G. R.**, & Klockars, A. J. (1990, April). *Scales for rating a narrow bandwidth of behavioral performance: Impact of scale type and rating domain on validity*. Paper presented at the meeting of the National Council on Measurement in Education, Boston, MA.

- Klockars, A. J., & **Hancock**, **G. R.** (1990, April). *Competing strategies for planned orthogonal comparisons*. Paper presented at the meeting of the American Educational Research Association, Boston, MA.
- Clinton, B. L., & **Hancock, G. R.** (1990, February). *The development of an understanding of empathetic messages*. Paper presented at the meeting of the Western States Communication Association (Instructional Division, Competitive Papers), Sacramento, CA.

BOARDS AND OFFICES

Editorial Boards

Multivariatew Behavioral Research

Editorial Board Member (2018 -)

Psychological Methods

Consulting Editor (2010 -)

AERA Educational Statisticians Quantitative Methods Book Series Editorial Board Member (2002 -)

<u>Structural Equation Modeling: A Multidisciplinary Journal</u> Editorial Board Member (August, 1998 -)

<u>Structural Equation Modeling: A Multidisciplinary Journal</u> Associate Editor (January, 2010 – May, 2014)

Educational and Psychological Measurement

Editorial Board Member (January, 2004 - June, 2008)

Child Development

Editorial Board Member (August, 2001 - December, 2006)

Contemporary Educational Psychology

Editorial Board Member (August, 2000 - December, 2006)

Journal of Educational Psychology

Editorial Board Member (May, 1999 - January, 2002)

<u>Developmental Psychology</u>

Consulting Editor (August, 1996 - December, 1998)

Grant Review Panels

Institute of Education Sciences

Statistical Methodology (2018, chair)

Statistical Methodology (2009, 2012)

Social and Behavioral (2009 – 2015)

National Institutes of Health / National Institute of Child Health and Human Development

Biobehavioral and Behavioral Sciences (2011 - 2013)

National Science Foundation (ad hoc reviewer)

Methodology, Measurement and Statistics (2009 - present)

Spencer Foundation (ad hoc reviewer)

(2015)

Professional Offices

AERA Division D, Significant Contribution to Research Methodology Award

Committee

member (2016-2018)

AERA Division D, Professional Mentoring Committee

chair (2004-2006)

AERA Division D, Nominating Committee

chair (2002-2004)

AERA Division D, Professional Mentoring Committee

member (2001-2004)

AERA Division D, Nominating Committee

member (2001-2002)

AERA Structural Equation Modeling Special Interest Group

President (1999-2000)

AERA Structural Equation Modeling Special Interest Group

President/Program Chair (1997-1999)

AERA Structural Equation Modeling Special Interest Group Newsletter

Acting editor (1997-1998)

AERA Educational Statisticians Special Interest Group Newsletter

Co-editor with C. Mitchell Dayton (1996-1998)

AWARDS AND HONORS

Scholarship Awards and Recognition

Rubin Scholar Award 2016

University of Copenhagen Copenhagen, Denmark

Distinguished Service Award 2015

Structural Equation Modeling Special Interest Group

	American Educational Research Association			
	Fellow American Psychological Association	2014		
	Fellow Association for Psychological Science	2014		
	Member Society of Multivariate Experimental Psychology	2014		
	Distinguished Scholar Teacher Award University of Maryland, College Park	2013-14		
	Award for Outstanding Contributions Educational Statisticians Special Interest Group American Educational Research Association	2012		
	Award for Outstanding Scholarship College of Education University of Maryland, College Park	2012		
	Distinguished Graduate Alumnus College of Education University of Washington, Seattle Distinguished Lecturer (by invitation) American Educational Research Association Structural Equation Modeling Special Interest Group			
	Fellow American Educational Research Association	2010		
	<u>Distinguished Visiting Scientist</u> (by invitation) Educational Testing Service, Princeton, NJ	June/July 2001		
Teaching/Mentoring Awards and Recognition				
	Most Valuable Professor Wrestling Team University of Maryland, College Park	2015-16		
	<u>Distinguished Scholar Teacher Award</u> University of Maryland, College Park			
	Jacob Cohen Award for Distinguished Contributions to Teaching and Mentoring American Psychological Association, Division 5	2011		
	Graduate Faculty Mentor of the Year Award Graduate School University of Maryland, College Park	2011		

Outstanding Teacher Award Recipient
College of Education
University of Maryland, College Park

Outstanding Graduate Mentor Award Recipient
Graduate Student Government
University of Maryland, College Park

Student Awards and Honors

Tessa Johnson 2019 Society of Multivariate Experimental Psychology Dissertation Research Grant 2019 AERA Division D In-Progress Research Award winner Tessa Johnson 2019 AERA Division D In-Progress Research Award winner Daniel McNeish 2017-18 Anastasi Dissertation Award, APA Division 5 2017 Shauna Sweet Society of Multivariate Experimental Psychology Dissertation Research Grant Summer 2014 Daniel McNeish **ACT Summer Internship recipient** Huili Liu Summer 2014 Educational Testing Service Summer Internship recipient Summer 2013 Daniel McNeish American Institutes of Research Summer Internship recipient Summer 2013 Tongyun Li Educational Testing Service Summer Internship recipient Yoonjeong Kang April 2012 2012 American Educational Research Association Educational Statisticians Special Interest Group Graduate Student Best Paper Award recipient Nidhi Kohli April 2011 2011 American Educational Research Association Educational Statisticians Special Interest Group Graduate Student Best Paper Award recipient Min Liu April 2010 2010 American Educational Research Association Educational Statisticians Special Interest Group Graduate Student Best Paper Award recipient

University of Maryland Graduate School Ann G. Wylie Dissertation Fellowship

Hancock-29

recipient

Brandi Weiss 2009-10

University of Maryland Graduate School Ann G. Wylie Dissertation Fellowship recipient

Xiaodong Hou Summer 2009

ACT Summer Internship recipient (award declined due to health)

Jennifer Koran 2008-09

Educational Testing Service Harold Gulliksen Psychometric Fellowship recipient

Jennifer Koran 2008-09

Spencer Foundation Dissertation Fellowship Award recipient (award declined to accept other award)

Jennifer Koran 2008-09

American Educational Research Association Dissertation Fellowship Award recipient (award declined to accept other award)

Heather Mann 2008-09

University of Maryland Graduate School Ann G. Wylie Dissertation Fellowship recipient

Heather Mann Summer 2008

Educational Testing Service Summer Internship recipient

<u>Jaehwa Choi</u> 2005-06

University of Maryland Graduate School Dissertation Fellowship recipient

Roy Levy (not my formal advisee, but I mentored him) 2005-06

Educational Testing Service Harold Gulliksen Psychometric Fellowship recipient

Phillip E. Gagné 2003-04

Educational Testing Service Harold Gulliksen Psychometric Fellowship recipient

Jonathan Nevitt 2001

American Educational Research Association Division D Mary Catherine Ellwein Outstanding Quantitative Dissertation Award

Laura M. Stapleton 2000-01

Educational Testing Service Harold Gulliksen Psychometric Fellowship recipient

Mara J. Freeman Summer 2001

Educational Testing Service Summer Internship recipient

Ilona Arnold-Berkovits 1999-2000

Educational Testing Service Harold Gulliksen Psychometric Fellowship recipient

Select Advisee Academic/Professional Placements

Yong Luo (Ph.D. advisee)

Psychometrician

Prometric

Nidhi Kohli (Ph.D. advisee)

Associate Professor University of Minnesota

Xiaodong Hou (Ph.D. advisee)

Statistician/Econometrician American Institutes of Research

Min Liu (Ph.D. advisee)

Assistant Professor University of Hawaii at Manoa Department of Educational Psychology

Hsiu-Fei Wang (Ph.D. advisee)

Assistant Professor
National Sun Yat-sen University
Institute of Education and the Center for Teacher Education

Brandi Weiss (Ph.D. advisee)

Assistant Professor The George Washington University Department of Educational Leadership

Rochelle Tractenberg (Ph.D. advisee)

Associate Professor Georgetown University Medical Center Biostatistics, Bioinformatics & Biomathematics

Heather Mann (Ph.D. advisee)

Associate Research Scientist Educational Testing Service ETS Research & Development Division ETS Center for Validity Research

Jennifer Koran (Ph.D. advisee)

Assistant Professor
Southern Illinois University
Department of Educational Psychology and Special Education

Laura Stapleton (Ph.D. advisee)

Professor
University of Maryland
Department of Human Development and Quantitative Methodology

Jennifer Hamilton (Ph.D. advisee)

Senior Study Director WESTAT

Phill Gagné (Ph.D. advisee)

Program Officer

Institute of Education Sciences

Jaehwa Choi (Ph.D. advisee)

Associate Professor The George Washington University Department of Educational Leadership

Weihua Fan (Ph.D. advisee)

Associate Professor University of Houston Department of Educational Psychology

Ilona Arnold-Berkovits (Ph.D. advisee)

Senior Psychometrician CTB McGraw-Hill

Jeffrey A. Greene (M.A. advisee)

Associate Professor University of North Carolina, Chapel Hill Department of Educational Psychology

Michelle Buehl (M.A. advisee)

Associate Professor George Mason University Department of Educational Psychology

A PARTIAL LIST OF LOCATIONS OF INVITED LECTURES AND WORKSHOPS

Agencies and Organizations

American Educational Research Association (multiple)

Association for Psychological Science (multiple)

Center for Advanced Study of Language (multiple)

Child Trends (multiple)

Educational Testing Service (multiple)

Florida Educational Research Association

Graduate Management Admission Council

International Society for Traumatic Stress Studies

JBS International

National Center for Education Statistics (multiple)

Scientific Software International (multiple)

United Biosource International

Institutions

Boise State University

DePaul University

Erasmus University, Holland

George Washington University (multiple)

James Madison University

Johns Hopkins University

Kent State University

Loyola University of Maryland

Loyola University of New Orleans (multiple)

Purdue University

Savannah State University

University of Alberta

University of Bologna, Italy

University of Copenhagen, Denmark

University of Delaware

University of Georgia

University of Houston

University of Illinois at Chicago

University of Kansas

University of Manitoba, Canada

University of Maryland (multiple)

University of Maryland Baltimore County

University of North Carolina Chapel Hill

University of Pennsylvania

University of Rhode Island

University of Southern California

University of Virginia

University of Washington

Villanova University

Virginia Commonwealth University (multiple)

Washington State University

Wayne State University