

CURRICULUM VITAE

LARRY V. HEDGES
Northwestern University
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EDUCATION

Ph.D., Stanford University, 1980
Mathematical Methods in Educational Research

M.A., Stanford University, 1980
Statistics

B.A., Magna Cum Laude, University of California, San Diego, 1978
Mathematics

HONORS

Fellow, American Academy of Arts and Sciences
Member, National Academy of Education
Fellow, American Statistical Association
Fellow, American Psychological Association
Fellow, American Educational Research Association
Hedges Award and Lecture, Society for Research on Educational Effectiveness, 2016
Presidential Citation for developing methods that improved education research, American Educational Research Association, 2014
Sells Award for Distinguished Contributions to Multivariate Research, 2014
Visiting Fellow, The Russell Sage Foundation, 2013/2014
Statistician of the Year, American Statistical Association Chicago Chapter, 2013/2014
Ingram Olkin Award for Lifetime Contributions to Research Synthesis Methods, 2007
Frederick Mosteller Award for Distinguished Contributions to Research Synthesis, 2005
The Palmer O. Johnson Award, American Educational Research Association, 2002
The Harold E. Mitzel Award for Meritorious Contribution to Education Through Research, 2002
The Review of Research Award, American Educational Research Association, 1997
Member, The Society for Research Synthesis Methods
Member, Society of Multivariate Experimental Psychology
American Statistical Association Research Fellow, 1987-1990, 1998
California State Fellow, Stanford University, 1977-1979
Provost's Fellow, University of California, San Diego, 1971-1972
Regent's Scholar, University of California, San Diego, 1970-1973

EMPLOYMENT

Board of Trustees Professor
Northwestern University
Department of Statistics (Chairman of the Department), Department of Psychology (by courtesy), Institute for Policy Research, Department of Medical Social Sciences, and the School of Education and Social Policy

Stella M. Rowley Distinguished Service Professor 1/05 - 9/05

Stella M. Rowley Professor 1/94 - 2/05

The University of Chicago, Departments of Education, Psychology,
Sociology, and The Harris Graduate School of Public Policy Studies

Professor 10/88 - 12/93

The University of Chicago, Department of Education

Chairman, Department of Education 7/88 - 6/91
The University of Chicago
Associate Professor 10/84 - 9/88
The University of Chicago, Department of Education
Associate Professor 9/85 - 6/86
Michigan State University, College of Education, Department of
Counseling, Educational Psychology, Special Education
Assistant Professor 10/80 - 9/84
The University of Chicago, Department of Education

EDITORIAL EXPERIENCE

Editorial Board, *The Russell Sage Journal*, 2013-present
Co-Editor, *Journal of Research on Educational Effectiveness*, 2007-2012
Associate Editor, *American Journal of Sociology* 2003-2005
Editorial Board, *Psychological Bulletin* 2002-2004
Editor, *Journal of Educational and Behavioral Statistics* 1998-2001
Editorial Board, *Psychological Method* 1995-2000
Editorial Board, *Review of Educational Research* 1996-2001
Editorial Board, *New Directions in Program Evaluation* 1991-1995
Associate Editor, *Quantitative Methods, Psychological Bulletin* 1986-1989
Associate Editor, *Journal of Educational Statistics* 1983-1994
Editorial Board, *Evaluation Studies Review Annual* 1986
Consulting Editor, *American Educational Research Journal* 1984-1986

MEMBERSHIPS

American Educational Research Association
American Psychological Association
American Statistical Association
Society for Research on Educational Effectiveness
Society for Research Synthesis Methods

BOOKS & MONOGRAPHS

Hedges, L. V. & Olkin, I. (1985). *Statistical Methods for Meta-Analysis*. New York: Academic Press.

Hedges, L. V., Shymansky, J. A., & Woodworth, G. (1989). *A Practical Guide to Modern Methods of Meta-Analysis*. Washington, D.C.: National Science Teachers Association.

Cook, T., Cooper, H. M., Cordray, D., Hedges, L. V., Light, R. J., Louis, T., & Mosteller, F. (1991). *Meta-Analysis for Explanation*. New York: The Russell Sage Foundation.

Draper, D., Gaver, D. P., Goel, P. K., Greenhouse, J. B., Hedges, L. V., Morris, C. N., Tucker, J. R., & Waterman, C. (1993). *Combining Information: Statistical Issues and Opportunities for Research*. Washington, D.C.: American Statistical Association.

Cooper, H. M. & Hedges, L. V. (Eds.) (1994). *The Handbook of Research Synthesis*. New York: The Russell Sage Foundation.

Hedges, L. V. & Schneider, B. (Eds.) (2005). *The Social Organization of Schooling*. New York: The Russell Sage Foundation.

Cooper, H. M., Hedges, L. V., & Valentine, J. (Eds.) (2009). *The Handbook of Research Synthesis and meta-analysis (2nd Edition)*. New York: The Russell Sage Foundation.

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. London: John Wiley.

Arthur, J., Waring, M., Coe, R., & Hedges, L. V. (2012). *Research methods and methodologies in education*. Los Angeles, CA: Sage Publications

PUBLICATIONS

Hedges, L. V. & Majer, K. (1976). An attempt to improve prediction of college success of minority students by adjusting for high school characteristics. *Educational and Psychological Measurement*, 36, 953-958.

Hedges, L. V. (1978). Personalized introductory courses: A longitudinal study. *American Journal of Physics*, 46, 207-210.

Hedges, L. V. (1980). Unbiased estimation of effect size. *Evaluation in Education: International Progress*, 4, 25-27.

Calfee, R. C. & Hedges, L. V. (1980). Independent process models of aptitude-treatment interactions. In R. Snow (Ed.), *Aptitudes, Learning, and Instruction: Cognitive Process Models*. Mahwah, NJ: Lawrence Erlbaum.

Hedges, L. V. & Olkin, I. (1980). Vote counting methods in research synthesis. *Psychological Bulletin*, 88, 359-369.

Hedges, L. V. (1981). Distribution theory for Glass's estimator of effect size and related estimators. *Journal of Educational Statistics*, 6, 107-128. (Reprinted in S. Gorard (Ed.) *Quantitative Research in Education*. London: Sage Publications, 2008.)

Hedges, L. V. (1981). Illustrating the results of two-aptitude aptitude-treatment interactions. *American Educational Research Journal*, 18, 57-62.

Hedges, L. V. & Olkin, I. (1981). The asymptotic distribution of commonality components. *Psychometrika*, 46, 331-336.

Hedges, L. V. (1982). Fitting continuous models to effect size data. *Journal of Educational Statistics*, 7, 245-270. (Reprinted in R. J. Light (Ed.), *Evaluation Studies Review Annual*, 8. Beverly Hills: Sage Publications, 1983.)

Hedges, L. V. (1982). Estimation of effect size from a series of independent experiments. *Psychological Bulletin*, 92, 490-499. (Reprinted in R. J. Light (Ed.), *Evaluation Studies Review Annual*, 8. Beverly Hills: Sage Publications, 1983.)

Hedges, L. V. (1982). Estimation and testing for differences in effect size: A comment on Hsu. *Psychological Bulletin*, 91, 691-693.

- Smith, R. M. & Hedges, L. V. (1982). A comparison likelihood ratio chi-square and Pearsonian chi-square tests of fit in the Rasch model. *Educational Research and Perspectives*, 9, 44-54.
- Hedges, L. V. (1982). Fitting categorical models to effect sizes from a series of experiments. *Journal of Educational Statistics*, 7, 119-137.
- Hedges, L. V. & Olkin, I. (1982). Analyses, reanalyses, and meta-analyses. *Contemporary Education Review*, 1, 157-165.
- Giaconia, R. M. & Hedges, L. V. (1982). Identifying features of effective open education. *Review of Educational Research*, 52, 579-602. (Reprinted in R. J. Light (Ed.), *Evaluation Studies Review Annual*, 8, Beverly Hills: Sage Publications, 1983.)
- Olkin, I. & Hedges, L. V. (1983). An annotated bibliography on statistical methods for incomplete data. Pages 417-478 in I. Olkin (Ed.), *Incomplete Data in Sample Surveys, II*. New York: Academic Press.
- Hedges, L. V. & Stock, W. (1983). The effects of class size: An examination of rival hypotheses. *American Educational Research Journal*, 20, 63-85.
- Hedges, L. V. & Olkin, I. (1983). Regression models in research synthesis. *American Statistician*, 37, 137-140.
- Hedges, L. V. & Olkin, I. (1983). Joint distributions of some indices based on correlation coefficients. Pages 437-454 in S. Karlin, L. A. Goodman, & F. Amemiya (Eds.), *Studies in Econometrics, Time Series, and Multivariate Analysis*. New York: Academic Press.
- Hedges, L. V. & Olkin, I. (1983). Clustering estimates of effect magnitude from independent studies. *Psychological Bulletin*, 93, 563-573.
- Hedges, L. V. (1983). Statistical summaries in research integration. *The Behavioral and Brain Sciences*, 6, 295-296.
- Hedges, L. V. (1983). Combining independent estimators in research synthesis. *British Journal of Mathematical and Statistical Psychology*, 36, 123-131.
- Hedges, L. V. (1983). A random effects model for effect sizes. *Psychological Bulletin*, 93, 388-395.
- Hedges, L. V. & Olkin, I. (1984). Nonparametric estimators of effect size in meta-analysis. *Psychological Bulletin*, 96, 573-580.
- Hedges, L. V. (1984). Research synthesis: The state of the art. *International Journal of Aging and Human Development*, 19, 85-93.
- Hedges, L. V. (1984). Estimation of effect size under nonrandom sampling: The effects of censoring studies yielding statistically insignificant mean differences. *Journal of Educational Statistics*, 9, 61-85.

- Hedges, L. V. (1984). Advances in statistical methods for meta-analysis. Pages 25-42 in P. Wortman & W. H. Yeaton (Eds.), *Issues in Data Synthesis: New Directions in Program Evaluation*, 24. San Francisco: Jossey-Bass. [Reprinted in D. S. Cordray & M. W. Lipsey (Eds.) *Evaluation Studies Review Annual, II*. Beverly Hills: Sage Publications, 1986.]
- Becker, B. J. & Hedges, L. V. (1984). Meta-analysis of cognitive gender differences: A comment on an analysis by Rosenthal and Rubin. *Journal of Educational Psychology*, 76, 583-587.
- Giaconia, R. M. & Hedges, L. V. (1985). Synthesis of teaching effectiveness research. Pages 5101-5120 in T. Husen & T. N. Postlewaite (Eds.) *International Encyclopedia of Education*. Oxford: Pergamon Press. (Reprinted in M. J. Dunkin (Ed.) *The International Encyclopedia of Teaching and Teacher Education*. Oxford: Pergamon Press.)
- Hedges, L. V. & Olkin, I. (1986). Meta-analysis: A review and a new view. *Educational Researcher*, 15 (8), 14-21.
- Hedges, L. V. (1986). Issues in meta-analysis. Pages 353-398 in E. Z. Rothkopf (Ed.), *Review of Research in Education*. Mahwah, NJ: Lawrence Earlbaum.
- Hedges, L. V. & Becker, B. J. (1986). Statistical methods in the meta-analysis of research on gender differences. Pages 14-50 in J. S. Hyde & M. C. Linn (Eds.) *The Psychology of Gender: Progress through Meta-analysis*. Baltimore: The Johns Hopkins University Press.
- Hedges, L. V. (1987). How hard is hard science, how soft is soft science?: The empirical cumulativeness of research. *American Psychologist*, 42, 443-455. [Reprinted in S. L. Schneider (Ed.) *Experimental design in the behavioral and social sciences*. Chichester, UK: Sage Publications.]
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- Hedges, L. V. (1987). Commentary on pooling the results of clinical trials. *Statistics in Medicine*, 6, 381-385.
- Games, P. A. & Hedges, L.V. (1987). Multifactor analyses on proportions, variances, correlations, and standardized mean differences for independent groups. *Journal of Experimental Education*, 56, 15-23.
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- Hedges, L. V. (1988). Meta-analysis. Pages 96-98 in S. Kotz & N. L. Johnson (Eds.), *International Encyclopedia of the Statistical Sciences*. New York: John Wiley.
- Becker, B. J. & Hedges, L. V. (1988). The effects of selection and variability in studies of gender differences. *The Behavioral and Brain Sciences*, 11, 183-184.

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- Huttenlocher, J., Hedges, L. V., & Prohaska, V. (1988). Hierarchical organization in ordered domains: Estimating the dates of events. *Psychological Review*, 95, 471-484.
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- Hedges, L. V. (1989). Meta-analysis of related research. Pages 647-663 in N. Schneiderman (Ed.), *Handbook on Methods in Cardiovascular Behavioral Medicine*. New York: Plenum.
- Becker, B. J. & Hedges, L. V. (1989). Synthesizing research on organizational participation. *Research in the Sociology of Organizations*, 7, 203-231.
- Hedges, L. V. (1989). Estimating the normal mean and variance under a selection model. Pages 447-458 in L. Gleser, M. D. Perlman, S. J. Press, and A. R. Sampson (Eds.) *Contributions to Probability and Statistics: Essays in Honor of Ingram Olkin*. New York: Springer-Verlag.
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- Stodolsky, S. & Hedges, L. V. (1990). The role of evaluation in the University of Chicago School Mathematics Project. Pages 411-422 in I. Wirszup & R. Streit (Eds.). *Developments in School Mathematics Education Around the World*. Reston, VA: National Council of Teachers of Mathematics.
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- Gurevitch, J., & Hedges, L. V. (1993). Meta-analysis: Combining the results of independent experiments. Pages 378-398 in S. Scheiner & J. Gurevitch (Eds.) *Design and Analysis of Ecological Experiments*. New York: Chapman and Hall.
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- Hedges, L. V. & Waddington, T. (1993). From evidence to knowledge to policy: Research synthesis for policy formation. *Review of Educational Research*, *63*, 345-352.
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- Huttenlocher, J. & Hedges, L. V. (1994). Combining graded categories: Membership and typicality. *Psychological Review*, *101*, 157-165.
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- Hedges, L. V. (1994). Combining estimates across studies: Meta-analysis of research. Pages 15-26 in K. A. McCormick, S. R. Moore, R. A. Siegel (Eds.) *Clinical Practice Guideline Development: Methodology Perspectives*. Washington, D. C.: Agency for Health Care Policy Research.
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- Hedges, L. V., Laine, R. D., & Greenwald, R. (1994). Money does matter somewhere: A reply to Hanushek. *Educational Researcher*, 23(4), 9-10.
- Brown, S. A., & Hedges, L. V. (1994). Predicting metabolic control in diabetes: A pilot study using meta-analysis to estimate a linear model. *Nursing Research*, 43, 362-368.
- Hasselblad, V. & Hedges, L. V. (1995). Meta-analysis of screening and diagnostic tests. *Psychological Bulletin*, 117, 167-178.
- Laine, R. D., Greenwald, R., & Hedges, L. V. (1995). Money does matter: A research synthesis of a new universe of production function studies. Pages 44-70 in L. O. Picus (Ed.), *Where Does the Money Go? Resource Allocation in Elementary and Secondary Education*. Newbury Park, CA: Sage Publications.
- Vevea, J. L. & Hedges, L. V. (1995). A general linear model for estimating effect size in the presence of publication bias. *Psychometrika*, 60, 419-435.
- Hedges, L. V. & Nowell, A. (1995). Sex differences in mental test scores, variability, and numbers of high-scoring individuals. *Science*, 269, 41-45.
- Hedges, L. V. & Greenwald, R. (1996). Have times changed?: The relation between school resources and student performance. Pages 74-92 in G. Burtless (Ed.) *Does Money Matter? The Link Between School Resources, Student Achievement, and Adult Success*. Washington, DC: The Brookings Institution.
- Hedges, L. V. & Vevea, J. L. (1996). Estimating effect size under publication bias: Small sample properties and robustness of a random effects selection model. *Journal of Educational and Behavioral Statistics*, 21, 299-332.
- Greenwald, R., Hedges, L. V., & Laine, R. D. (1996). The effect of school resources on student achievement. *Review of Educational Research*, 66, 361-396.
- Greenwald, R., Laine, R.D., & Hedges, L.V. (1996). The school funding controversy: Reality bites. *Educational Leadership*, 53, 78-79.

- Hedges, L. V. (1997). Construct validity and causal inference: The concept of total causal inference error. Pages 325-341 in V. McKim and S. Turner (Eds.) *Causality in Crisis?*. Notre Dame, IN: Notre Dame University Press.
- Hedges, L. V. (1997). Improving meta-analysis for policy purposes. Pages 202-217 in W. J. Bukoski and N. S. Tobler (Eds.) *Meta-Analysis of Drug Abuse Prevention Programs, NIDA Research Monograph No. 170*. Washington, DC: U. S. Government Printing Office.
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- Linde, K., Clausius, N., Ramirez, G., Melchart, D., Eitel, F., Hedges, L. V. & Jonas, W. B. (1998). Overviews and meta-analyses of controlled clinical trials of homeopathy. Pages 101-106 in E. Ernst and E. G. Hahn (Eds.) *Homeopathy: A Critical Appraisal*. Oxford: Butterworth-Heinemann.
- Hedges, L. V. (1998). Study quality control in meta-analysis. *Pain Forum*, 7, 98-99.
- Hedges, L. V. (1998). Bayesian approaches to meta-analysis. Pages 251-275 in B. Everitt & G. Dunn (Eds.) *Recent Advances in the Statistical Analysis of Medical Data*. London: Edward Arnold.
- Hedges, L. V. & Nowell, A. (1998). Black-White test score convergence since 1965. Pages 149-181 in C. Jencks and M. Phillips (Eds.) *The Black White Test Score Gap*. Washington, DC: The Brookings Institution.
- Nowell, A. & Hedges, L. V. (1998). Trends in gender differences in academic achievement from 1960 to 1994: An analysis of differences in mean, variance and extreme scores. *Sex Roles*, 39, 21-43.
- Hedges, L. V. & Vevea, J. L. (1998). Fixed and random effects models in meta-analysis. *Psychological Methods*, 3, 486-504. [Reprinted in J. Miles and B. Stucky (Eds.) (2014). *Quantitative Psychology*. Los Angeles: Sage Publications.]
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- D'Agostino, J. V., Borman, G., Hedges, L. V., & Wong, K. K. (1998). Longitudinal achievement and Chapter I coordination in high poverty schools: A multilevel analysis of the Prospects data. *Journal of Education for Students Placed at Risk*, 3, 401-420.
- Hedges, L. V., Gurevitch, J., & Curtis, P. (1999). The meta-analysis of response ratios in experimental ecology. *Ecology*, 80, 1150-1156.

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- Nye, B., Hedges, L. V., & Konstantopoulos, S. (1999). The long term effects of small classes: A five year follow-up of the Tennessee class size experiment. *Educational Evaluation and Policy Analysis*, 21, 127-142.
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- Huttenlocher, J., Hedges, L. V., & Vevea, J. L. (2000). Why do categories affect stimulus judgment? *Journal of Experimental Psychology: General*, 129, 220-241.
- Nye, B., Hedges, L. V., & Konstantopoulos, S. (2000). The effects of small classes on achievement: The results of the Tennessee class size experiment. *American Educational Research Journal*, 37, 123-151.
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- Nye, B., Hedges, L. V., and Konstantopoulos, S. (2000). Do minorities and the disadvantaged benefit more from small classes?: Evidence from the Tennessee class size experiment. *American Journal of Education*, 109, 1-26.
- Hedges, L.V. (2000). Using converging evidence in policy formation: The case of research on class size. *Evaluation and Research in Education*, 14, 193-205.
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Three vote-counting methods for estimating effect size and statistical significance of combined results (with I. Olkin). Annual Meeting of the AERA, San Francisco, 1979.

The asymptotic distribution of estimates used in commonality analysis. Annual Meeting of the Psychometric Society, Monterey, California, 1979.

Path analyses in an experiment on teaching effectiveness: Tests of the influence of teacher characteristics and classroom processes on student outcomes (with J. Crawford & N. Stayrook). Annual Meeting of the American Research Association, San Francisco, 1979.

The empirical evidence on the effectiveness of open education (with R. M. Giaconia and N. L. Gage). Final Report of the Stanford University Research Synthesis Project, vol. II, 1980.

Combining the results of experiments using different scales of measurement. Final Report of the Stanford University Research Synthesis Project, vol. I, 1980.

Estimation of effect size as a statistical problem. Annual Meeting of the AERA, Los Angeles, 1981.

Identifying features of effective open education programs (with R. Giaconia). Annual Meeting of the AERA, Los Angeles, 1981.

Statistical theory for effect size estimation. Annual Meeting of the AERA, Los Angeles, 1981.

Statistical methodology for meta-analysis. ERIC/TM Report No. 83, 1982.

- Research synthesis, the state of the art. Annual Meeting of the Gerontology Society, Boston, 1982.
- Conceptual aspects of effect size estimation. Annual Meeting of the AERA, New York, 1982.
- Analogue to the analysis of variance for effect size data. Annual Meeting of the AERA, New York, 1982.
- A comparison of likelihood ratio chi-square and Pearsonian chi-square of fit in the Rasch model (with R. Smith). Annual meeting of the AERA, New York, 1982.
- Synthesis of independent research studies: A review. Annual Meeting of the AERA, New York, 1982.
- Asymptotic distribution theory for indices based on correlations. Annual Meeting of the AERA, New Orleans, 1984.
- The state of the art in meta-analysis: Statistical issues. Annual Meeting of the AERA, New Orleans, 1984.
- Evaluation in mathematics education. AMOCO International Conference on Mathematics Education, Chicago, 1985.
- What we have learned about reviewing educational research. Invited Address. Annual Meeting of the American Evaluation Association, Kansas City, 1986.
- Meta-analysis: The first ten years and beyond. Annual Meeting of the American Psychological Association, Washington, D.C., 1986.
- Statistical issues in the meta-analysis of environmental studies. Invited Address. American Statistical Association/ Environmental Protection Agency Conference on Environmental Statistics, Washington, D.C., 1986.
- Meta-analysis: Combining the results of related experiments. Invited Address. Midwest Bio- Pharmaceutical Statistics Meeting, Muncie, Indiana, 1986.
- Improving statistical procedures for validity generalization studies. Invited address. ETS Invitational Conference on Test Validity for the 1990's and Beyond. Princeton, New Jersey, 1986.
- Estimating effect size from vote counts. Annual Meeting of the AERA, San Francisco, 1986.
- Directions for the future of methodology in meta-analysis. National Research Council, Committee on National Statistics Workshop on the Future of Meta-analysis. Hedgesville, West Virginia, 1986.
- Meta-analysis and theory formation. Annual Meeting of the American Psychological Association, Atlanta, 1988.
- Synthesizing correlation matrices (with B. J. Becker). Annual Meeting of the American Educational Research Association, Boston, 1989.
- Recent developments in educational statistics. Invited address. Annual Meeting of the American Statistical Association, Washington, D.C., 1989.
- Modeling publication selection effects in random effects models in meta-analysis. Invited address. International Meeting of the Institute of Mathematical Statistics, Uppsala, Sweden, 1990.
- Combining estimates of effect size over different trials. Invited address. Drug Information Association, Lausanne, Switzerland, 1991.

Combining information across studies to estimate linear models: applications in policy analysis (with B. J. Becker). Invited address. Annual Meeting of the American Statistical Association, Atlanta, 1991.

Detecting and measuring improvements in validity (with B. J. Becker and J. H. Wolfe). Naval Personnel Research and Development Center Technical Report, No. 92-93, 1992.

The synthesis of evaluation research. Invited address. International Conference on Evaluation in Educational Evaluation, Valparaiso, Chile, 1992.

Moving meta-analysis beyond the simple aggregation of experimental studies. Invited address. Annual Meeting of the American Psychological Association, Toronto, 1993.

The role of construct validity in causal generalization. Invited address. Conference called Causality in Crisis? Statistical Methods and the Search for Causal Knowledge in the Social Sciences, Notre Dame, IN, 1993.

The synthesis of evidence about education production functions. Invitational meeting on education production functions, The Brookings Institution, Washington, DC, 1994.

Statistical methods for meta-analysis: Combining information from independent research studies. Invited lecturer, series of lectures. 19th Annual Workshop on Applied Statistics, Brigham Young University, Provo UT, 1994.

Statistical issues and unpublished data. Annual meeting of the American Statistical Association, Orlando, FL, 1995.

Student achievement and background characteristics in the Prospects Study. Annual meeting of the AERA, New York, 1996.

Comments on combining information from different sources. Meeting of the International Biometric Society, Richmond, VA, 1996.

The development and use of meta-analytic methods in the empirical sciences. Annual meeting of the Ecological Society of America, Providence, RI, 1996.

A study of equating in NAEP (with J. L. Vevea). Report of a study commissioned by the NAEP Validity Studies (NVS) Panel, American Institutes for Research, Palo Alto, CA, 1997.

The relation between school resources and student achievement. Annual meeting of the American Association for the Advancement of Science, Philadelphia, 1998.

New directions for psychometric methods. 77th meeting of the Committee on National Statistics, Washington, DC, 1998.

Statistical dependence in meta-analysis. Invited paper. North American meeting of the International Biometric Society, Atlanta, Georgia, 1999.

Using converging evidence in policy formation. Keynote address. Second International Conference on Evidence-based Policies and Indicator Systems. Durham, England, 1999.

Is the Black-White achievement gap really closing? Invited address. Third Annual Conference of the Institute of Educational Initiatives, Notre Dame University, 1999.

Statistical dependence in meta-analysis: Conceptual issues and analytic solutions. Invited Address. Annual Meeting of the American Psychological Association, Washington, DC, 2000.

Meta-analysis of diagnostic and screening tests. Invited address. MRC Conference on systematic reviews of observational studies in medicine. Bristol, England, 2000.

Computer use and its relation to academic achievement in mathematics, reading, and writing (with S. Konstantopoulos & A. Thoreson). Report of a study commissioned by the NAEP Validity Studies (NVS) Panel, American Institutes for Research, Palo Alto, CA, 2000.

Synthesizing findings across studies. Invited address. Workshop on Science, Evidence, and Inference in Education, National Research Council, Washington, DC, 2001.

How can survey research contribute to evidence-based policy? Keynote address. Third International Conference on Evidence-Based Policies and Indicator Systems, Durham, England, July, 2001.

The social distribution of academic achievement in America. First annual Frank Bixby Lecture, The Spencer Foundation, Chicago, IL, 2001.

Examining the Effects of School Organization on Student Achievement. Presented at the Second NCES Research Seminar, Instructional Performance Consequences of High Poverty Schooling. Washington, DC, March, 2002.

How Large an Effect Should We Expect From School Reform Programs? Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, April, 2002.

Contrasting Categories: Boundary Effects on Stimulus Estimation (with Janellen Huttenlocher). Paper presented at the Annual Meeting of the Psychonomic Society. Kansas City, MO, November 2002.

The Culture of Evidence. Keynote address to the National Science Foundation Math-Science Partnership awardee meeting, Washington, DC, January, 2003.

"Scientific research on scaling up educational interventions." Invited address at the annual meeting of the American Educational Research Association, Chicago, April 2003.

"Meta-analysis for Evidence-Based Policy." Keynote address. Fourth International Conference on Evidence-Based Policies and Indicator Systems, London, England, July 2003.

"Designing multilevel studies for assessing the effects of interventions and their variation across contexts." Invited address at the annual meeting of the American Educational Research Association, San Diego, April 13, 2004.

"Designing studies for evidence based scale up in education." Invited address at the annual meeting of the American Educational Research Association, San Diego, April 15, 2004.

"Do post doctoral fellowships affect academic careers: The case of the NAE Spencer fellowships." Invited address at the annual meeting of the American Educational Research Association, San Diego, April 15, 2004.

"Effect sizes in cluster randomized designs." Paper presented at the annual meeting of the Campbell Collaboration, Lisbon, Portugal, February 26, 2005.

"Advanced statistical methods for meta-analysis." Workshop presented at the annual meeting of the Campbell Collaboration, Lisbon, Portugal, February 26, 2005.

"Designs for multilevel studies for assessing intervention effects and the variation of effects across contexts." Paper presented at the annual meeting of the American Educational Research Association, Montreal, April, 2005.

"Overview of effect sizes and why we need them." Paper presented at the National Center for Education Statistics invitational workshop on effect sizes." Washington, DC, June 2005.

"Meta-analysis applied to health psychology." Paper presented at the annual meeting of the American Psychological Association, Washington, DC, August, 2005.

"Recommendations for development studies." Paper presented at the first annual IES Research Conference, Washington, DC, June, 2006.

"Meta-analysis at age 30 (or 102 or 201)." Keynote address given at the Society for Research Synthesis Methods, Cambridge, UK, August 2006.

"The structure of variation of academic achievement." Keynote address to the Interagency Educational Research Initiative, Principal Investigators meeting, Pentagon City, VA, August 2006.

"Power analysis in special education research." Paper presented at the annual IES research Conference. Washington, DC, June 2007.

"Dealing with dependence in meta-analysis." Paper presented at the annual meeting of the Society for Research Synthesis Methods, Evanston, IL, July 2007.

"Effect sizes in cluster randomized designs." Paper presented at the annual meeting of the Association for Policy Analysis and Management, Washington, DC, November 2007.

"Robust standard errors and experimental design." First annual Rand Statistics Lecture at Carnegie Mellon University, Pittsburgh, PA, December, 2007

"Using the instrumental variables technique in educational research." Invited address at the annual IES Research Conference, Washington, DC, June 2008.

"Improving the generalization from meta-analysis." Invited address at the annual meeting of the Society for Research Synthesis Methods, Corfu Greece, July 2008.

"Recent developments in meta-analysis." Invited address at the annual meeting of Conference on Innovations in Trauma Research Methods, Evanston, IL, November 2008.

"New challenges for social surveys." Invited address to the Committee on National Statistics, Irvine, CA, February 2009.

"Problems with the design and implementation of randomized experiments." Invited address at the annual IES Research Conference, Washington, DC, June 2009.

"Robust procedures for dependence in meta-analysis." Presidential address to the Society for Research Synthesis Methods, Seattle, WA, July 2009.

"Infrastructure needed for urban education research." Invited address presented at the conference on America's urban infrastructure, St Louis, MO, November 2009.

Hedges, Larry and Rhoads, Christopher (2009). *Statistical Power Analysis in Education Research* (NCSE 2010-3006). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education.

“The AERA standards for reporting empirical social science research.” Invited address at the annual meeting of the American Educational Research Association, Denver, May, 2010.

“A somewhat eccentric history of hierarchical linear models.” Invited address at the annual meeting of the American Educational Research Association, Denver, May, 2010.

“Methods for meta-analysis for dependent effect sizes.” Workshop presented at the Institute of Education, University of London, London, June 2010.

“Context effects, experiments, and generalization in education and social research.” Public lecture presented under the auspices of the UK Economic and Social Research Council, London, June 2010.

“A d -estimator for single subject designs.” Invited address at the annual IES Research Conference, Washington, DC, June 2010.

“Generating plausible causal hypotheses.” Invited address at the annual IES Research Conference, Washington, DC, June 2010.

“Comments on bias adjustment in research synthesis.” Invited address to the Society for Research Synthesis Methods, Cartagena, Spain, July 2010.

“Towards a future education research policy.” Invited address to the National Academy of Education, Washington, DC, November 6, 2010.

“An effect size for single subject $(AB)^k$ designs. Paper presented at the annual meeting of the Society for Research Synthesis Methods, Ottawa, Canada, July, 2011.

“Improving generalizability of social research.” 2012 MITER lecture at the University of Minnesota, March 23, 2012

“Does winning a prestigious prize enhance research careers?” 2012 MITER lecture at the University of Minnesota, March 23, 2012.

“Statistical identification versus causal identification in single subject designs.” Paper presented at the annual meeting of the Society for Research Synthesis Methods, Aix on Provence, France, June 29, 2012.

“The crisis in US education research capacity.” Keynote address to the annual meeting of the Midwest Education Research Association, Evanston, IL, November 9, 2012.

“The structure of variation in academic achievement: Implications for evidence about education.” National Science Foundation Distinguished Lecture, Arlington, VA, November 29, 2012.

“Innovations in Data and Technology in Education Research: State Longitudinal Data Systems.” Presidential invited address at the Annual Meeting of the American Educational Research Association, San Francisco, April 30, 2013.

“Methodological challenges in meta-analysis for policy purposes.” Keynote address given at the Annual Meeting of the Campbell Collaboration, Chicago, IL, May 21, 2013.

“Replication and heterogeneity in psychological science.” Invited address at the 25th anniversary meeting of the Association for Psychological Sciences, Washington, DC, May 24, 2013.

“Economic inequality and academic achievement.” Keynote address given at the 2013 IEA International Research Conference, Singapore, June 27, 2013.

Hedges, L. V. & de Mello, V. C. (2013). *A validity study of the NAEP full population estimates*. A report of research conducted under the auspices of the NAEP Validity Studies Panel. San Mateo, CA: American Institutes for Research.

“Some challenges in conducting cluster randomized field trials in education and the social sciences.” Keynote address given at the Conference on Randomised Controlled Trials in the Social Sciences, Durham, UK, September 11, 2013.

“Big data with big consequences, but who will benefit?” Statistician of the Year Address, American Statistical Association Meeting, Chicago, October 24, 2013.

“The evaluation of National Academy of Education fellowship programs.” Invited address at the annual meeting of the National Academy of Education, Washington, DC, October 26, 2013.

“Comments on best practice in quasi-experimental designs for evaluation research.” Invited address at the National Science Foundation, Arlington, VA, October 28, 2013.

“Improving generalization from large scale experiments: New methods.” Invited briefing at the US Institute of Education Sciences, January 30, 2014.

“Barriers to valid and replicable science in education.” Invited address at the National Science Foundation Invited Conference on Robust Science in Social, Behavioral, and Economics Sciences, Arlington, VA, March 20-21, 2014.

“Improving generalization from evaluation studies in education.” Presidential invited address at the annual meeting of the American Educational Research Association, Philadelphia, April 5, 2014.

“The history, present and future prospects for research synthesis.” Invited address at the annual meeting of the American Educational Research Association, Philadelphia, April 5, 2014.

“Improving the generalizability of social research.” Robert Vecchio Distinguished Lecture on Business Analytics, Notre Dame University, South Bend, IN, May 2, 2014.

“Current perspectives on generalizability.” Presented at the US Department of Health and Human Services Office of Program Research and Evaluation Working Group on External Validity, Washington, DC, May 21, 2014.

“Meta-analysis: Its growth, history, and impact.” Presidential Invited address to the annual meeting of the Southwest Education Research Association, San Antonio, TX, February 5, 2015.

“Recent developments in multivariate meta-analysis.” Starr Lecture given at the Brown University School of Public Health, Providence, RI, February 23, 2015.

“Understanding heterogeneity of treatment effects.” Keynote address given at the annual conference on randomized controlled trials in the social sciences. York, UK, September 9, 2015.

“Multivariate meta-analysis.” Sells Award Lecture given at the annual meeting of the Society of Multivariate Experimental Psychology, Redondo Beach, CA, October 17, 2015.

“Olkin’s contributions to meta-analysis.” Invited address at the meeting in honor of Ingram Olkin’s 90th birthday, Stanford, CA, November 10, 2015.

Shadish, W.R., Hedges, L.V., Horner, R.H., and Odom, S.L. (2015). *The Role of Between-Case Effect Size in Conducting, Interpreting, and Summarizing Single-Case Research* (NCER 2015-002) Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education.

“Recent developments in multivariate meta-analysis.” Keynote Presentation at the Annual Meeting of DAGStat, Göttingen, Germany, March 15, 2016.

“Challenges in building usable knowledge in in education.” Inaugural Larry V. Hedges Lecture at the Annual Meeting of the Society for Research on Educational Effectiveness, Washington, DC, March 3, 2016.

“Data sharing is not enough.” Invited comments at the Annual Meeting of the American Educational Research Association, Washington, DC, April 19, 2016.

“Comments on the NSF Directorate for Education and Human Resources Update” Invited comments at the Annual Meeting of the American Educational Research Association, Washington, DC, April 19, 2016.

“Developing empirical evidence on design parameters to improve field experiments.” Invited address at the 75th Anniversary Symposium for NORC, Chicago, April 14, 2016.

“Statistical methods for studying replication.” Paper presented at the Annual Meeting of the Association for Psychological Science, Chicago, IL, May 27, 2016.

“Ingram Olkin’s contributions to research synthesis.” Invited address at the Annual Meeting of the Society for Research Synthesis Methods, Florence, Italy, July 11, 2016.

“My career in applied statistics.” Invited address at the 2016 Joint Statistical Meetings, Chicago, July 31, 2016

“Building useful social knowledge from randomized field trials.” Keynote address at the Winter School on Randomized Controlled Field Trials, Eberhart Karls Universität, Tübingen, Germany, December 8, 2016.

“Developments in multivariate meta-analysis for policy research.” Invited address at the Annual Meeting of the Biometric Society (ENAR), Washington, DC, March 14, 2017.

“Using big data in education: Ethics, dilemmas, and possibilities.” Invited address at the Annual Meeting of the American Educational Research Association, San Antonio, TX, April 28, 2017.

REFERENCES

Available upon request