

JESSACA SPYBROOK

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Department of Educational Leadership, Research, and Technology
College of Education
Western Michigan University
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EDUCATION

- 2003-2007 University of Michigan
Ph.D. in Education Studies with a focus in Quantitative Methods
Dissertation Title: *Are Group Randomized Trials Funded by the Institute of Education Sciences Designed with Adequate Power?*
Committee: Stephen Raudenbush (chair), Howard Bloom, Robert Boruch, Roger Goddard
Funder: The William T. Grant Foundation
- 2001-2003 University of Michigan
M.A. in Applied Statistics
- 1996-1999 University of Michigan
B.A. in Elementary Education

HONORS

- 2010 National Academy of Education Spencer Postdoctoral Fellow
2002 Department of Statistics Outstanding Graduate Student Instructor Award

PUBLICATIONS

- Spybrook, J., Lininger, M., & Cullen, A. (under review). An examination of the changes in precision from the planning phase to the implementation phase in group randomized trials launched by the institute of education sciences.
- Leslie, J., Shen, J., & Spybrook, J. (under review). Are principal background and school processes related to teacher job satisfaction? A multi-level study using schools and staffing survey 2003-04.
- Spybrook, J., & Raudenbush, S.W. (2009). An Examination of the Precision and Technical Accuracy of the First Wave of Group Randomized Trials Funded by the Institute of Education Sciences. *Educational Evaluation and Policy Analysis*, 31(3).
- Coryn, C.L.S, Spybrook, J., Evergreen, S.D.H., & Blinkiewicz, M.V. (2009). Development and evaluation of the social-emotional learning scale. *Journal of Psychoeducational Assessment*, 27(4), 283-295.

Spybrook, J. (2008). Are Power Analyses Reported with Adequate Detail: Findings from the First Wave of Group Randomized Trials Funded by the Institute of Education Sciences. *Journal of Research on Educational Effectiveness*, 1(3).

Spybrook, J. (2008). Power and Sample Size for Classroom and School-Level Interventions. In O'Connell, A., & McCoach, B. (Eds.), *Multilevel Analysis of Educational Data*. Greenwich, CT: Information Age Publishing.

Raudenbush, S.W., Martinez, A., & Spybrook, J. (2007). Strategies for Improving Precision in Group Randomized Experiments. *Educational Evaluation and Policy Analysis*, 29 (1).

OTHER PUBLICATIONS

Magura, S., Spybrook, J., Rosenblum, A., Fong, C., Villano, C., Vogel, H., & Betzler, T. (2010). Undiagnosed drug misuse among admissions to psychiatric day treatment and prediction of early exit. *The Open Addiction Journal*, 3, 102-108.

Henry, C.A., Shervin, D., Neumeyer, A., Steingard, R., Spybrook, J. Choueiri, R., & Bauman, M. (2009). Retrial of Selective Serotonin Reuptake Inhibitor in Children with Pervasive Developmental Disorders: A Retrospective Chart Review. *Journal of Child and Adolescent Psychopharmacology*, 19(2).

SOFTWARE AND DOCUMENTATION

Liu, X. , Spybrook, J., Congdon, R., Martinez, A., & Raudenbush, S.W., (2009). *Optimal Design for Longitudinal and Multilevel Research V.2.0*.

Spybrook, J., Raudenbush, S.W., Congdon, R., & Martinez, A. (2009). *Optimal Design for Longitudinal and Multilevel Research: Documentation for the Optimal Design Software V.2.0*. Available at www.wtgrantfoundation.org.

TEACHING EXPERIENCE

August 2008 – Present

Assistant Professor, Department of Educational Leadership, Research, and Technology, Western Michigan University.

January 2008 - Present

Adjunct Faculty, Interdisciplinary Program in Evaluation, Western Michigan University.

Summer 2005, 2006

Teaching Assistant, Interuniversity Consortium for Political and Social Research, University of Michigan.

Summer 2004

Adjunct Professor, Business School, Eastern Michigan University.

August 2001 – August 2003

Teaching Assistant, Department of Statistics, University of Michigan.

August 1999 – June 2001

7th grade Math Teacher, Romulus Middle School, Romulus, Michigan.

GRANTS FUNDED

March 2009

Principal Investigator, Examining the changes in methodology that occur between the design and implementation of field trials in education, US Department of Education, Institute of Education Sciences. Funding: \$300,000 for two years.

April 2008

Co-principal Investigator, Evaluation of Outlook Academy, Michigan Department of Education. Determine the components that contribute to the academic and social-emotional success of students in the Outlook Academy. Funding: \$30,000 for two years.

INVITED PRESENTATIONS/WORKSHOPS

Spybrook, J. (July 2010). *Statistical Power in Group Randomized Trials*. Instructor at the 4th Annual Workshop on Randomized Trials sponsored by the Institute of Education Sciences, Evanston, IL.

Spybrook, J. (March 2010). *Designing Adequately Powered Group Randomized Trials*. Workshop at the 2010 annual meeting of the Society for Research on Educational Effectiveness, Washington, D.C.

Spybrook, J. (December, 2009). *Designing Adequately Powered Cluster Randomized Trials using Optimal Design*. Workshop for the Institute of Education Sciences program officers, Washington, D.C.

Spybrook, J. (July 2009). *Statistical Power in Group Randomized Trials*. Instructor at the 3rd Annual Workshop on Randomized Trials sponsored by the Institute of Education Sciences, Nashville, TN.

Spybrook, J. & Martinez, A. (March 2009). *Designing Adequately Powered Group Randomized Trials*. Workshop at the 2009 annual meeting of the Society for Research on Educational Effectiveness, Washington, D.C.

Spybrook, J. (October 2008). *Introduction to Hierarchical Linear Modeling*. Workshop for the Wayne State Social Work Faculty.

Spybrook, J. (July 2008). *Statistical Power in Group Randomized Trials*. Instructor at the 2nd Annual Workshop on Randomized Trials sponsored by the Institute of Education Sciences, Evanston, IL.

Spybrook, J. (May 2008). *Introduction to Hierarchical Linear Modeling*. Workshop sponsored by the Michigan Association for Evaluation, Dearborn, MI.

Spybrook, J. (January 2008). *Experimental Designs and the Statistical Power of Group Randomized Trials Funded by the Institute of Education Sciences*. Invited presentation at the Texas Institute for Measurement, Evaluation, and Statistics, Houston, TX.

Spybrook, J., & Martinez, A. (March 2007). *Power Analysis and Optimal Design Software*. Workshop presented at ETS, Princeton, NJ.

CONFERENCE PAPERS AND PRESENTATIONS

Spybrook, J. (April 2010). *An Examination of the Viability of Federal Policies that Promote Experiments in Education*. Roundtable presented at the 2010 annual meeting of the American Educational Research Association, Denver, CO.

Martinez, A. & Spybrook, J. (April 2009). *The Power of the Test for Treatment Effects in a Cluster Randomized Trial with Repeated Measures*. Poster presented at the 2009 annual meeting of the American Educational Research Association, San Diego, CA.

Martinez, A. & Spybrook, J. (March 2009). *Common Issues in the Design and Analysis of Multisite Cluster Randomized Trials*. Paper presented at the 2009 annual meeting of the Society for Research on Educational Effectiveness, Washington, D.C.

Spybrook, J. (March 2008). *Experimental Designs and the Statistical Power of Group Randomized Trials Funded by the Institute of Education Sciences*. Paper presented at the 2008 annual meeting of the Society for Research on Educational Effectiveness, Washington, D.C.

Spybrook, J. (April 2007). *Are Group Randomized Trials Funded by the Institute of Education Sciences Designed with Adequate Power?* Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL.

Martinez, A., Raudenbush, S., & Spybrook, J. (April 2007). *Statistical Power of Fixed and Random Block Effects Models for Blocked Group-Randomized Trials*. Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL.

Spybrook, J. (November 2006). *Increasing the capacity for conducting group-level experiments*. Presentation at the annual meeting of the American Evaluation Association, Portland, OR.

Parkinson, J., McNeill, K.L., & Spybrook, J. (April 2006). *Investigating the context of small classes in kindergarten and its effects on teachers and students*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Raudenbush, S.W., Bloom, H., & Spybrook, J. (May 2004). *Increasing the capacity for conducting group-level experiments*. Presentation at the annual meeting of the Society for Prevention Research, Quebec, Canada.

Raudenbush, S.W., Bloom, H., & Spybrook, J. (March 2004) *Increasing the capacity for conducting group-level experiments*. Presentation at the biennial meeting of the Society for Research on Adolescence, Baltimore, MD.

WORKSHOPS

Spybrook, J. (April 2010). *Planning Adequately Powered Group Randomized Trials*. Half day workshop presented at the annual meeting of the American Educational Research Association, Denver, CO.

Spybrook, J. & Martinez, A. (April 2009). *Planning Adequately Powered Group Randomized Trials*. Full day workshop presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Spybrook, J. (November 2008). *Statistical Power in Group Randomized Trials*. Demonstration presented at the annual meeting of the American Evaluation Association, Denver, CO.

Spybrook, J. (January 2008). *Introduction to Hierarchical Linear Modeling*. Workshop presented at The Evaluation Center, Kalamazoo, MI.

Bloom, H., Raudenbush, S.W., Spybrook, J., & Martinez, A. (April 2006). *Randomizing Groups to Evaluate Place-Based Programs*. Workshop presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Bloom, H., Martinez, A., & Spybrook, J. (May 2005). *Randomizing Groups to Evaluate Place-Based Programs*. Workshop presented at the annual meeting of the Society for Prevention Research, Washington D.C.

Raudenbush, S.W., Bryk, A.S., & Spybrook, J. (September 2004). *Hierarchical Linear Modeling (HLM)*. Workshop sponsored by Scientific Software International, Chicago, IL.

Raudenbush, S.W., Bloom, H., Spybrook, J. & Martinez, A. (July 2004). *Design and Analysis of Group-Randomized Trials*. Workshop convened by the William T. Grant Foundation, Ann Arbor, MI.

TECHNICAL REPORTS

Henry, J., Spybrook, J., and Richardson, M. (2010). *Final Report on the Evaluation of The Outlook Academy*. Kalamazoo, MI.

Henry, J., Spybrook, J., and Richardson, M. (2009). *Year 1 Report on the Evaluation of The Outlook Academy*. Kalamazoo, MI.

Miron, G., Spybrook, J., & Evergreen, S. (2008). *Key findings from the 2007 survey of high school students*. Kalamazoo, MI. Western Michigan University, The Evaluation Center.

Spybrook, J., Miron, G. & Cullen, A. (2007). *Evaluation of The Rapides Foundation's Systemic Initiative in Education*. Kalamazoo, MI. Western Michigan University, The Evaluation Center.

Spybrook, J., & Coryn, C.L.S. (2007). *Modeling the academic performance of public schools in Hawai'i*. Kalamazoo, MI. Western Michigan University, The Evaluation Center.

PROFESSIONAL MEMBERSHIPS

Member, American Educational Research Association

Member, Society for Research on Educational Effectiveness

Member, American Evaluation Association

Affiliate, Campbell Collaboration Education Group

PROFESSIONAL SERVICES

Reviewer, National Science Foundation REESE competition, January 2010

Member of Editorial Board, Journal for Research on Educational Effectiveness, since June 2010

Reviewer, American Educational Research Association annual meeting

Reviewer, American Evaluation Association annual meeting

Ad-hoc Reviewer, Journal for MultiDisciplinary Evaluation, since January 2008

Member, University of Michigan Search Committee, Quantitative Research Methods, 2006