

J. Michael Brick, Ph.D.

Dr. Michael Brick is a senior statistician and a Westat Vice President where he is co-Director of the Survey Methods Unit, and Associate Director of the Statistical Staff. He has more than 30 years of experience in survey research, with special expertise in sample design and estimation for large surveys, the theory and practice of telephone surveys, address-based sampling, the techniques of quality management and survey quality control, nonresponse and bias evaluation, and survey methodology. Dr. Brick has contributed to the statistical and substantive aspects of numerous studies and to statistical methodology research in several areas, including health, establishment, education, transportation, and product injury studies. Dr. Brick is a Fellow of the American Statistical Association, an elected member of the International Statistical Institute, and a research professor in the Joint Program in Survey Methodology at the University of Maryland..

Education

Ph.D., Statistics, American University, 1984
M.A., Statistics, American University, 1976
B.S., Mathematics, University of Dayton, 1973

Professional Achievements

President, Washington Statistical Society (2010, elect 2009 and past 2011)
Task Force on Non-probability Sampling, (Co-chair, 2011-) American Association of Public Opinion Research
Committee on National Statistics, Panel on a Research Agenda for the Future of Social Science Data Collection, 2010-2012
American Association of Public Opinion Research, Communications Committee 2007-2008
National Academy of Science Panel on Food Insecurity, 2004-2005
Public Opinion Quarterly, 2003- (Editorial Board)
Waksberg Paper Award Committee, 2000-2003 (Chair, 2003)
Fellow, American Statistical Association
Elected Member, International Statistical Institute
American Statistical Association Advisory Committee for the Census Bureau, 2002-2007
Advisory Committee on Statistical Methods for Statistics Canada, 2007-
Publication Editor, International Association of Survey Statisticians (IASS) Jubilee Commemorative Volume, *Landmark Papers in Survey Statistics*, 2001
Survey Methodology, (Associate Editor 2001-)
Editor, *The Survey Statistician* (newsletter of the International Association of Survey Statisticians, 1995-2000)

Employment and Select Project Experience

Westat (1984 to Present)

National Center for Education Statistics (1980 to 1984)

National Highway Traffic Safety Administration (1976 to 1980)

U.S. Postal Service (1974 to 1976)

A selection of projects that Dr. Brick has been the principal investigator, project director, or chief statistician include:

National Household Education Survey (NHES) 1989-2012.

California Health Interview Survey, 2001- 2011

Angler Surveys 2009-2013

Early Childhood Longitudinal Study, Kindergarten Class 1998-2007 and 2010-2011

The National Crime Victimization Survey Companion Survey

National Children's Study

National Survey of Recent College Graduates

National Survey of America's Families: Assessing the New Federalism

National Immunization Provider Record Check Study 1994-1996

State Observational Safety Belt Usage Surveys

Selected Publications

Brick, J.M., and Williams, D. (2013). Explaining rising nonresponse rates in cross-sectional surveys. *ANNALS of the American Academy of Political and Social Science*, 645, 36-59.

Lohr, S., and Brick, J.M. (2012). Blending domain estimates from two victimization surveys with possible bias. *Canadian Journal of Statistics*, 40, 679-696.

Brick, J.M., Andrews, W., Brick, P., King, H., Mathiowetz, N., and Stokes, L.(2012). Methods for improving response rates in two-phase mail surveys. *Survey Practice*, 5. Available at: <http://surveypractice.org/index.php/SurveyPractice/article/view/17>.

Brick, J.M., Montaquila, J., Han, D., and Williams, D. (2012). Improving response rates for Spanish speakers in two-phase mail surveys. *Public Opinion Quarterly*, 76, 721-732.

Le, K., Brick, J.M., Diop, A., and Alemadi, D. (2012). Within-household sampling conditioning on household size. *International Journal of Public Opinion Research*. doi:10.1093/ijpor/eds008.

Brick, J. Michael. (2011). The Future of Survey Sampling, *Public Opinion Quarterly*, 75, 872-888.

Brick, J. Michael, Williams, Douglas, and Montaquila, Jill. (2011). Address-Based Sampling for Subpopulation Surveys, *Public Opinion Quarterly*, 75, 409-428.

Brick J. M., Cervantes, I. F., Lee, S., and Norman, G. (2011). Nonsampling Errors in Dual Frame Telephone Surveys, *Survey Methodology*, 37, 1-12.

- Montaquila, Jill, Hsu, Valerie, and Brick, J. Michael. (2011). Using a match rate model to predict areas where USPS-Based address lists may be used in place of traditional listing. *Public Opinion Quarterly*, 75, 317-335.
- Lee, S., Brick, J.M., Brown, E.R., and Grant, D. (2010). Growing cell-phone population and noncoverage bias in traditional random digit dial telephone health surveys. *Health Services Research*, 45, 1121-1139.
- Montaquila, J.M., Brick, J.M., and Curtin, L.R. (2010). Statistical and practical issues in the design of a national probability sample of births for the National Children's Study. *Statistics in Medicine*, 29, 368-376.
- Brick, J.M., and Montaquila, J.M. (2009). Nonresponse and weighting. In D. Pfeffermann and C.R. Rao (Eds.), *Sample surveys: Design, methods and applications* (vol. 29A, pp. 163-186). Amsterdam, The Netherlands: North-Holland.
- Lee, S., Brown, E.R., Grant, D., Belin, T.R., and Brick, J.M. (2009). Exploring nonresponse bias in a health survey using neighborhood characteristics. *American Journal of Public Health*, 99, 1811-1817.
- Valliant, R., Brick, J.M., and Dever, J. (2008). Weight adjustments for the grouped jackknife variance estimator. *Journal of Official Statistics*, 24(3), 469-488
- Fahimi, M., Dale, K., and Brick, J.M. (2008). Bias in list-assisted 100-series RDD sampling. *Survey Practice*.
- Keeter, S., Smith, G., Kennedy, C., Turakhia, C., Schulman, M., and Brick, J.M. (2008). Questionnaire and fieldwork challenges in a probability sample survey of Muslim Americans. *Survey Practice*.
- Groves, R.M.J., Brick, J.M., Couper, M., Kalsbeek, W., Harris-Kojetin, B., Kreuter, F., Pennell, B., Raghunathan, T., Smith, T., Tourangeau, R., Bowers, A., Jans, M., Kennedy, C., Levenstein, R., Olson, K., Peytcheva, E., Ziniel, S., and Wagner, J. (2008). Issues facing the field: Alternative practical measures of representativeness of survey respondent pools. *Survey Practice*.
- Brick, J.M., and Jones, M.E. (2008). Propensity to respond and nonresponse bias. *Metron-International Journal of Statistics*, 66, 51-73.
- Brick, J.M., and Lepkowski, J.M. (2008). Multiple mode and frame telephone surveys. In J.M. Lepkowski, C. Tucker, J.M. Brick, E.D. de Leeuw, L. Japac, P.J. Lavrakas, M.W. Link, and R.L. Sangster (Eds.), *Advances in telephone survey methodology* (pp. 149-169). New York, NY: Wiley.
- Montaquila, J.M., Brick, J.M., Hagedorn, M.C., Kennedy, C., and Keeter, S. (2008). Aspects of nonresponse bias in RDD telephone surveys. In J.M. Lepkowski, C. Tucker, J.M. Brick, E. De Leeuw, L. Japac, P. Lavrakas, M. Link, and R. Sangster (Eds.), *Advances in telephone survey methodology* (pp. 561-586). New York, NY: Wiley.
- Brick, J.M., Edwards, W.S., and Lee, S. (2007). Sampling telephone numbers and adults, interview length, and weighting in the California Health Interview Survey cell phone pilot study. *Public Opinion Quarterly*, 71, 793-813.
- Brick, J.M., and Tucker, C. (2007). Mitofsky-Waksberg: Learning from the past. *Public Opinion Quarterly*, 71, 703-716.

- Brick, J.M., Brick, P.D., Dipko, S., Presser, S., Tucker, C., and Yuan, Y. (2007). Cell phone survey feasibility in the U.S.: Sampling and calling cell numbers versus landline numbers. *Public Opinion Quarterly*, 71, 23-39.
- Tucker, C., Brick, J.M., and Meekins, B. (2007). Household telephone service and usage patterns in the U.S. in 2004: Implications for telephone samples. *Public Opinion Quarterly*, 71, 3-22.
- Brick, J.M., Dipko, S., Presser, S., Tucker, C., and Yuan, Y. (2006). Nonresponse bias in a dual frame sample of cell and landline numbers. *Public Opinion Quarterly*, 70, 780-793.
- Lu, W., Brick, J.M., and Sitter, R. (2006). Algorithms for constructing combined strata grouped jackknife and balanced repeated replications with domains. *Journal of the American Statistical Association*, 101, 1680-1692.
- Kim, J.K., Brick, J.M., Fuller, W.A., and Kalton, G. (2006). On the bias of the multiple-imputation variance estimator in survey sampling. *Journal of the Royal Statistical Society, B*, 68, 509-521.
- Brick, J.M., Montaquila, J., Hagedorn, M.C., Brock Roth, S., and Chapman, C. (2005). Implications for RDD design from an incentive experiment. *Journal of Official Statistics*, 21(4), 571-589.
- Brick, J.M., Jones, M.E., Kalton, G., and Valliant, R. (2005). Variance estimation with hot deck imputation: A simulation study of three methods. *Survey Methodology*, 31(2), 151-159.
- Kalton, G., Brick, J.M., and Lê, T. (2005). Estimating components of design effects for use in sample design. In *Household sample surveys in developing and transition countries* (Sales No. E.05.XVII.6). New York, NY: Department of Economic and Social Affairs, Statistics Division, United Nations.
- Brick, J.M., and Kalton, G. (2004). Weighting and estimation for time-use surveys. In *Guide to producing statistics on time use: Measuring paid and unpaid work* (Sales No. E.04.XVII.7). New York, NY: Department of Economic and Social Affairs, Statistics Division, United Nations.
- Kalton, G., and Brick, J.M. (2004). Sample designs for time-use surveys. In *Guide to producing statistics on time use: Measuring paid and unpaid work* (Sales No. E.04.XVII.7). New York, NY: Department of Economic and Social Affairs, Statistics Division, United Nations.
- Brick, J.M. (2004). Weighting. In M. Lewis-Beck, A. Bryman, and T.F. Liao (Eds.), *The Sage encyclopedia of social science research methods* (pp. 1191-1192). Thousand Oaks, CA: Sage Publications.
- Brick, J.M., Kalton, G., and Kim, J.K. (2004). Variance estimation with hot deck imputation using a model. *Survey Methodology*, 30, 57-66.
- Rizzo, L., Brick, J.M., and Park, I. (2004). A minimally intrusive method for sampling persons in random digit dial surveys. *Public Opinion Quarterly*, 68, 267-274.
- Brick, J.M., Judkins, D., Montaquila, J., and Morganstein, D. (2002). Two-phase list-assisted RDD sampling. *Journal of Official Statistics*, 18, 203-216.
- Brick, J.M., Montaquila, J., and Scheuren, F. (2002). Estimating residency rates for undetermined telephone numbers. *Public Opinion Quarterly*, 66, 18-39.

- Kalton, G., and Brick, J.M. (2000). Weighting in household panel surveys (Chapter 5). In D. Rose (Ed.), *Researching social and economic change: The uses of household panel studies*. New York: Routledge.
- Winglee, M., Valliant, R., Brick, J.M., and Maclin, S. (2000). Probability matching of medical events. *Journal of Economics and Social Measurement*, 26(2), 129-140.
- Brick, J.M., Morganstein, D., and Waksberg, J. (1999). Use of short-cut methods in reduction of total error in population surveys. *Bulletin of the International Statistical Institute* (52nd session, Brick, J.M., and Morganstein, D. (1997). Computing sampling errors from clustered unequally weighted data using replication: WesVarPC. *Bulletin of the International Statistical Institute* (51st session, Istanbul, Turkey), Book 1, pp. 479-482.
- Brick, J.M., and Kalton, G. (1996). Handling missing data in survey research. *Statistical Methods in Medical Research*, 5, 215-238.
- Brick, J.M., Waksberg, J., and Keeter, S. (1996). Using data on interruptions in telephone service as coverage adjustments. *Survey Methodology*, 22(2), 185-197.
- Rizzo, L., Kalton, G., and Brick, J.M. (1996). A comparison of some weighting adjustment methods for panel nonresponse. *Survey Methodology*, 22(1), 43-53.
- Brick, J.M., Waksberg, J., Kulp, D., and Starer, A. (1995). Bias in list-assisted telephone surveys. *Public Opinion Quarterly*, 59(2), 218-235.
- Morganstein, D., Brick, J.M., Burke, J., Cantor, D., and Judkins, D. (1993). Statistical research in a large-scale private survey research organization. *Journal of Official Statistics*, 9(1), 233-243.
- Brick, J.M., and Waksberg, J. (1991). Avoiding sequential sampling with RDD. *Survey Methodology*, 17(1), 27-41.
- Brick, J.M. (1990). Multiplicity sampling in a RDD telephone survey. *Proceedings of the Survey Research Methods Section of the American Statistical Association*, pp. 296-301. Alexandria, VA: American Statistical Association.
- Brick, J.M., Michael, J., and Morganstein, D.R. (1989). Using statistical thinking to solve maintenance problems. *Quality Progress*, 22(5), 55-60.
- Brick, J.M., and Lago, J. (1988). The design and implementation of an observational safety belt use survey. *Journal of Safety Research*, 19, 87-98.