Sharon L. Lohr List of Publications

Books

- 2023 National Academies of Sciences, Engineering, and Medicine. Toward a 21st Century National Data Infrastructure: Enhancing Survey Programs by Using Multiple Data Sources. Lohr, S.L., Weinberg, D.H., and Marton, K., editors. Washington, DC: National Academies Press, 240 pages.
- 2022 Lohr, S. L. Sampling: Design and Analysis, 3rd ed. Boca Raton, FL: CRC Press, 650 pages.
- 2022 Lohr, S. L. SAS[®] Software Companion for Sampling: Design and Analysis, 3rd ed. Boca Raton, FL: CRC Press, 235 pages.
- 2022 Lu, Y. and Lohr, S. L. *R Companion for* Sampling: Design and Analysis, 3rd ed. Boca Raton, FL: CRC Press, 209 pages.
- 2021 Lohr, S. L. *Solutions Manual for* Sampling: Design and Analysis, 3rd ed. Boca Raton, FL: CRC Press. 320 pages. Available to instructors from CRC Press.
- 2019 Lohr, S. L. *Measuring Crime: Behind the Statistics*. Boca Raton, FL: CRC Press, 157 pages. Endnotes available online at www.sharonlohr.com.
- 2010 Lohr, S. *Sampling: Design and Analysis, 2nd ed.* Boston: Brooks/Cole, 596 pages. Reprinted in 2019 by CRC Press, Boca Raton, FL.
- 2010 Lohr, S. Solutions Manual for Sampling: Design and Analysis, 2nd ed. Boston: Brooks/Cole, 258 pages. Available to instructors from CRC Press.
- 2010 Lohr, S. Computer Programs for Sampling: Design and Analysis, 2nd ed. Available at www.sharonlohr.com.
- 1999 Lohr, S. Sampling: Design and Analysis. Pacific Grove, CA: Duxbury Press, 494 pages. Also translated into Spanish as Muestreo: Diseño y Análisis, 2000.
- 1999 Lohr, S. Instructor's Manual for Sampling: Design and Analysis. Pacific Grove, CA: Duxbury Press, 135 pages.

Articles and Software

2023 Lohr, S.L. Measuring crime. In *The Wiley Blackwell Encyclopedia of Sociology*, *Second Edition*, ed. Ritzer, G. Hoboken, NJ: Wiley, in press.

- 2023 Lohr, S.L. Assuming a nonresponse model does not make it true. *Harvard Data* Science Review, 5(3), 1–10.
- 2023 Lohr, S.L. Sampling designs for educational research. In *International Encyclope*dia of Education, 4th ed., ed. Tierney, R., Rizvi, F., and Ercikan, K. Amsterdam: Elsevier, pp. 703–709.
- 2022 Lohr, S.L. Comments on "Statistical inference with non-probability survey samples" by Changbao Wu. *Survey Methodology*, 48, 331–338.
- 2021 Lu, Y. and Lohr, S.L. *SDAResources: Datasets and Functions for "Sampling: Design and Analysis.*" R package version 0.1.1, CRAN.R-project.org/package= SDAResources.
- 2021 Lohr, S.L. Multiple-frame surveys for a multiple-data-source world. Survey Methodology, 47(2), 229–263.
- 2020 Lohr, S. Measuring uncertainty with multiple sources of data. Proceedings of Statistics Canada Symposium 2018, Combine to Conquer: Innovations in the Use of Multiple Sources of Data. Plenary address.
- 2019 Lohr, S.L., Riddles, M.K., and Brick, J.M. Goodness of fit tests for distributions estimated from complex survey data. The Canadian Journal of Statistics, 47(3), 409–425.
- 2019 Lohr, S.L. Edith Abbott and the origins of Chicago's crime statistics. *Significance*, 16(2), 10–11.
- 2019 Lohr, S.L. Gertrude M. Cox and statistical design. Notices of the American Mathematical Society, 66(3), 317–323.
- 2019 Brick, J.M. and Lohr, S.L. Experimental evaluation of mail questionnaires in a probability sample on victimization. Journal of the Royal Statistical Society, Series A, 82(2), 669–687.
- 2018 Lohr, S.L. Combining data and crime. Proceedings of the 2018 Federal Committee on Statistical Methodology (FCSM) Research and Policy Conference. Plenary address.
- 2017 Lohr, S.L. Comments on "Sample Survey Theory and Methods: Past, Present, and Future Directions" by J.N.K. Rao and W. Fuller. *Survey Methodology*, 43(2), 173–178.
- 2017 Lohr, S.L. and Brick, J.M. Roosevelt predicted to win: Revisiting the Literary Digest Poll of 1936. *Statistics, Politics, and Policy*, 8(1), 65-84.

- 2017 Lohr, S.L. and Raghunathan, T.E. Combining survey data with other data sources. Statistical Science, 32, 293–312.
- 2017 Tourangeau, R., Brick, J.M., Lohr, S., and Li, J. Adaptive and responsive survey designs: A review and assessment. *Journal of the Royal Statistical Society, Series* A, 180, 203–233.
- 2017 Lohr, S. and Zhu, X. Randomized sequential individual assignment in social experiments: Evaluating the design options prospectively. *Sociological Methods and Research*, 46, 1049–1075.
- 2017 Hyland, A., Ambrose, B., ..., Lohr, S., Design and methods of the Population Assessment of Tobacco and Health (PATH) Study. *Tobacco Control*, 26, 371–378.
- 2017 Lohr, S., Broene, P. and Jodts, E. Sample design and weighting for estimating a dose-response curve. In JSM Proceedings, Survey Research Methods Section, Alexandria, VA: American Statistical Association, 1358–1372. Winner of the Survey Research Methods Section poster competition in the traditional poster category.
- 2017 Siegfried, Y., Morganstein, D., Piesse, A., and Lohr, S. Why independent surveys with the same objective yield different estimates. In JSM Proceedings, Survey Research Methods Section, Alexandria, VA: American Statistical Association, 935– 952.
- 2017 Riddles, M.K., Lohr, S.L., Brick, J.M., Langetieg, P.T., Payne, J.M., and Plumley, A.H. Handling respondent rounding of wages using the IRS and CPS matched dataset. 2016 IRS Research Bulletin Washington, DC: Internal Revenue Service, 60-68.
- 2016 Lohr, S.L., Riddles, M.K., and Morganstein, D. Tests for evaluating nonresponse bias in surveys. *Survey Methodology*, 42, 195–218.
- 2016 Zhu, X. and Lohr, S. SeqAlloc: Sequential allocation for prospective experiments. R package version 1.0, https://CRAN.R-project.org/package=SeqAlloc.
- 2016 Piesse, A. and Lohr, S. Sample design for longitudinal multiphase samples with misclassification. In JSM Proceedings, Survey Research Methods Section. Alexandria, VA: American Statistical Association, 3377–3391.
- 2015 Lohr, S., Hsu, V., and Montaquila, J. Using classification and regression trees to model survey nonresponse. In JSM Proceedings, Survey Research Methods Section. Alexandria, VA: American Statistical Association, 2071–2085.
- 2015 Lohr, S. Red beads and profound knowledge: Deming and quality of education. Education Policy Analysis Archives, 23(80), 1-24.

- 2015 Lohr, S., Nair, V., Clark, C.Z.F., Lynch, J., and Young, L.J. Special section on published articles that have influenced policy. *Statistics and Public Policy*, 2(1), e1008900.
- 2014 Lohr, S. and Brick, J.M. Allocation for dual frame telephone surveys with nonresponse. Journal of Survey Statistics and Methodology, 2, 388-409.
- 2014 Lohr, S. Design effects for a regression slope in a cluster sample. *Journal of Survey Statistics and Methodology*, 2, 97–125.
- 2014 Karl, A., Yang, Y., and Lohr, S. Computation of maximum likelihood estimates for multiresponse generalized linear mixed models with non-nested, correlated random effects. *Computational Statistics and Data Analysis*, 73, 146–162.
- 2014 Lohr, S. Red beads and profound knowledge: Deming and quality of education. Proceedings of the American Statistical Association, 4270-4284.
- 2014 Cecere, W., Jiao, R., Rozsi, M., Severynse, J., Lohr, S., and Green, J. Composite measure of size evaluation and primary sampling unit formation for NHTSA's redesign of the National Automotive Sampling System. *Proceedings of the Survey Research Methods Section, American Statistical Association*, 1279–1290.
- 2014 Jiao, R., Sugawara, Y., Rozsi, M., Lohr, S., Green, J., and Cecere, W. Estimating population and design parameters for NHTSA's new National Automotive Sampling System. *Proceedings of the Survey Research Methods Section, American Statistical Association*, 1028–1037.
- 2014 Rozsi, M., Cecere, W., Lohr, S., and Green, J. Creating a flexible and scalable PSU sample for NHTSA's redesign of the National Automotive Sampling System. Proceedings of the Survey Research Methods Section, American Statistical Association, 1019–1027.
- 2014 Miller, N., Sizov, N., Lohr, S., and Cantor, D. New research on community reaction to aircraft noise in the United States. Proceedings of the 11th International Congress on Noise as a Public Health Problem (ICBEN).
- 2014 Lohr, S. and Schochet, P.Z. Analyzing data from experiments in which the treatment groups have different hierarchical structures. SAS Global Forum 2014 Proceedings, http://support.sas.com/resources/papers/proceedings14/1260-2014. pdf.
- 2014 Lohr, S. When should a multiple frame survey be used? The Survey Statistician, no. 69 (January), 17–21.
- 2014 Brick, J.M. and Lohr, S. Allocation for dual frame telephone surveys with nonresponse. Proceedings of the 2013 Statistics Canada International Methodology Symposium (on CD-ROM). Ottawa, ON: Statistics Canada.

- 2013 Lohr, S., Schochet, P.Z., and Sanders, E. Partially nested randomized controlled trials in education research: A guide to theory and practice. (NCER 2014-2000). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education, 166 pages.
- 2013 Karl, A., Yang, Y., and Lohr, S. A correlated random effects model for nonignorable missing data in value-added assessment of teacher effects. *Journal of Educational and Behavioral Statistics*, 38, 577-603.
- 2013 Hamada, M., Lohr, S., Hamada, C.A., and Burr, T. Estimating a proportion from repeated sampling of a growing population: An application of survey sampling methodology. *Quality Engineering*, 25, 108–117.
- 2013 Karl, A., Yang, Y., and Lohr, S. Efficient maximum likelihood estimation of multiple membership linear mixed models, with an application to educational valueadded assessments. *Computational Statistics and Data Analysis*, 59, 13–27.
- 2012 Lohr, S. and Brick, J.M. Blending domain estimates from two victimization surveys with possible bias. *Canadian Journal of Statistics*, 40, 679–696.
- 2012 Lohr, S. The value Deming's ideas can add to educational evaluation. *Statistics, Politics, and Policy,* 3, issue 2, article 1.
- 2012 Broatch, J. and Lohr, S. Multidimensional assessment of value added by teachers to real-world responses. Journal of Educational and Behavioral Statistics, 37, 256– 277.
- 2012 Lohr, S. Using SAS[®] for the design, analysis, and visualization of complex surveys. SAS Global Forum 2012 Proceedings. Keynote address.
- 2012 Edwards, W.S., Brick, J.M., and Lohr, S. Designing a low(er)-cost companion to the National Crime Victimization Survey. Proceedings of the 2012 Federal Committee on Statistical Methodology Research Conference.
- 2012 Karl, A., Yang, Y., and Lohr, S. GPvam: Maximum likelihood estimation of the generalized persistence value-added model. R package version 3.0-9, CRAN. r-project.org/package=GPvam.
- 2011 Lohr, S. Alternative survey sample designs: Sampling with multiple overlapping frames. *Survey Methodology*, 37, 197–213.
- 2011 Mendez, G. and Lohr, S. Estimating residual variance in random forest regression. Computational Statistics and Data Analysis, 55, 2937–2950.
- 2011 Karl, A., Yang, Y., and Lohr, S. Exploring missing data in value-added models in education. *Proceedings of the Social Statistics Section, American Statistical* Association, 2449–2460.

- 2010 Lohr, S. The 2009 Morris Hansen Lecture: The care, feeding, and training of survey statisticians. *Journal of Official Statistics*, 26, 395–409. Invited paper with discussion.
- 2010 Lu, Y. and Lohr, S. Gross flow estimation in dual frame surveys. Survey Methodology, 36, 13–22.
- 2010 Lohr, S. Dual frame surveys: Recent developments and challenges. *Proceedings of the 45th meeting of the Italian Statistical Society*, 12 pages.
- 2009 Jenney, B. and Lohr, S. Experimental designs for multiple-level responses, with application to a large-scale educational intervention. *Annals of Applied Statistics*, 3, 691–709.
- 2009 Lohr, S. and Rao, J.N.K. Jackknife estimation of mean squared error of small area predictors in nonlinear mixed models. *Biometrika*, 96, 457–468.
- 2009 Lohr, S. Multiple frame surveys. In Handbook of Statistics, Vol. 29A, Sample Surveys: Design, Methods and Applications, ed. D. Pfeffermann and C. R. Rao. Amsterdam: North Holland, 71–88.
- 2009 Lohr, S. Sampling and survey design. Handbook of Statistics, Vol. 29A, Sample Surveys: Design, Methods and Applications, ed. D. Pfeffermann and C. R. Rao. Amsterdam: North Holland, 3–8.
- 2008 Ybarra, L.M.R. and Lohr, S. Small area estimation when auxiliary information is measured with error. *Biometrika*, 95, 919–931.
- 2008 Lohr, S. Coverage and sampling. Chapter 6 of International Handbook of Survey Methodology, ed. E. deLeeuw, J. Hox, D. Dillman. New York: Erlbaum, 97–112.
- 2008 Mendez, G., Buskirk, T., Lohr, S., and Haag, S. Factors associated with persistence in science and engineering majors: An exploratory study using random forests. *Journal of Engineering Education*, 97, 57–70.
- 2007 Alf, C. and Lohr, S. Sampling assumptions in introductory statistics classes. *The American Statistician*, 61, 71–77.
- 2007 Lohr, S. Comment: Struggles with survey weighting and regression modeling. *Statistical Science*, 22, 175–178.
- 2007 Lohr, S. Recent developments in multiple frame surveys. Proceedings of the Survey Research Methods Section, American Statistical Association, 3257–3264.
- 2007 Lohr, S. Discussion of papers on resampling methods in small area estimation. Proceedings of the Survey Research Methods Section, American Statistical Association, 3265–3267.

- 2007 Jenney, B. and Lohr, S. Choice of randomized design in large-scale education experiments. *Proceedings of the Social Statistics Section, American Statistical Association*, 3638–3645.
- 2006 Prewitt, K. and Lohr, S. Bandwidth selection in local polynomial regression using eigenvalues. *Journal of the Royal Statistical Society, Series B*, 68, 135–154.
- 2006 Lohr, S. and Rao, J.N.K. Estimation in multiple-frame surveys. *Journal of the American Statistical Association*, 101, 1019–1030.
- 2005 Buskirk, T. and Lohr, S. Asymptotic properties of kernel density estimation with complex survey data. *Journal of Statistical Planning and Inference*, 128, 165–190.
- 2005 Dueck, A. and Lohr, S. Robust estimation of multivariate covariance components. *Biometrics*, 61, 162-169.
- 2005 Sylvester, D. and Lohr, S. The security of our secrets: A history of privacy and confidentiality in law and statistical practice. *Denver University Law Review*, 83, 147–209.
- 2005 Sylvester, D. and Lohr, S. Counting on confidentiality: Legal and statistical approaches to federal privacy law after the USA PATRIOT act. *Wisconsin Law Review*, 1036–1138.
- 2004 Lohr, S. Statistical frontiers in survey sampling. *The American Statistician*, 58, 145–149.
- 2004 Lohr, S. and Rao, J.N.K. Resampling methods for MSE estimation with nonlinear small area models. *Proceedings of Statistics Canada Symposium 2003: Challenges* in Survey Taking for the Next Decade, on CD, 9 pages.
- 2004 Lohr, S. Small area and longitudinal estimation using information from multiple surveys. Proceedings of the Seminar on Funding Opportunity in Survey and Statistical Research, Statistical Policy Working Paper 36, Federal Committee on Statistical Methodology, Statistical Policy Office, Office of Management and Budget, 77–94.
- 2003 Lohr, S. Sample surveys. in *Modern Biometry*, ed. by Susan R. Wilson and Lynne Billard, in *Encyclopedia of Life Support Systems*, developed under the auspices of the UNESCO, Eolss Publishers, Oxford UK [www.eolss.net].
- 2003 Lohr, S. and Prasad, N.G.N. Small area estimation using auxiliary survey data. Canadian Journal of Statistics, 31, 383–396.
- 2003 Lohr, S. and Rao, J.N.K. Estimation in multiple frame surveys. *Proceedings of the International Conference on Recent Advances in Survey Sampling*, 137–146.

- 2003 Lohr, S. and Ybarra, L.M.R. Area-level models using data from multiple surveys. Proceedings of Statistics Canada Symposium 2002: Modelling Survey Data for Social and Economic Research. (On CD, 7 pages).
- 2003 Lohr, S. Privacy and survey research: Ethical and legal questions from a researcher's perspective. Bulletin of the International Statistical Institute, Proceedings of the 54th Session. (On CD, 4 pages).
- 2002 Ybarra, L.M.R. and Lohr, S. Estimates of repeat victimization using the National Crime Victimization Survey. *Journal of Quantitative Criminology*, 18, 1–21.
- 2002 Lohr, S. Estimation using multiple surveys. Proceedings of the 53rd Session of the International Statistical Institute, International Association of Survey Statisticians, ed. D. Binder and E. Rancourt, 336–349.
- 2002 Dueck, A. and Lohr, S. Robust estimation of multivariate covariance components. *Proceedings of the Statistical Computing Section, American Statistical Association*, 845-850.
- 2001 Lohr, S. Sample surveys: Model-based approaches. International Encyclopedia of the Social and Behavioral Sciences, ed. N.J. Smelser and P.B. Baltes. Amsterdam: Elsevier Science Publishers, 20, 13462–7.
- 2001 Lohr, S. Estimation using multiple surveys. Bulletin of the International Statistical Institute, Proceedings of the 53rd Session, Vol. 2, 367-370.
- 2000 Lohr, S. and Rao, J.N.K. Inference in dual frame surveys. *Journal of the American Statistical Association*, 95, 271–280.
- 2000 Bush, J.E., Humphreys, J.T., Allen, D. and Lohr, S. Relationships between school music ensemble participation and academic achievement in the USA. translated to the Greek by Lelouda Stamos, with an English abstract, *Music Education (Special Edition: Proceedings of the Greek Society for Music Education)*, 2, 147–154.
- 2000 Lohr, S. and Buskirk, T. Density estimation with complex survey data. 1999 Proceedings of the Survey Methods Section, Statistical Society of Canada, 27-32.
- 2000 Ybarra, L.M.R. and Lohr, S. Effects of attrition in the National Crime Victimization Survey. *Proceedings of the Survey Research Methods Section, American Statistical Association*, 870-874.
- 1999 Lohr, S. Hasse diagrams. in *Encyclopedia of Statistical Sciences, Update Volume* 3, ed. S. Kotz. New York: Wiley, 297–301.
- 1998 Ellman, I.M. and Lohr, S. The dissolution of divorce laws and divorce rates. *International Review of Law and Economics*, 18, 341–359.

- 1998 Peart, D., Lohr, S., and Patten, D. The effect of feral pig activity on woody seedling survival on Santa Cruz Island, California. Technical Report, ASU Center for Environmental Studies.
- 1998 Prewitt, K. and Lohr, S. Condition indices and bandwidth selection in nonparametric curve estimation. *Proceedings of the Statistical Computing Section, American Statistical Association*, 159-161.
- 1998 Lohr, S. and Sun, S. Probability of victimization over time: Results from the U.S. National Crime Victimization Survey. Proceedings of Statistics Canada Symposium 98, Longitudinal Analysis for Complex Surveys, 163-168.
- 1997 Lohr, S. and Divan, M. Comparison of confidence intervals for variance components with unbalanced data. *Journal of Statistical Computation and Simulation*, 58, 83– 97.
- 1997 Ellman, I.M. and Lohr, S. Marriage as contract, opportunistic violence, and other bad arguments for fault divorce. *University of Illinois Law Review*, 719–772.
- 1997 Lohr, S. and Rao, J.N.K. Jackknife variance estimation in multiple frame surveys. *Proceedings of the Survey Research Section, American Statistical Association*, 552-557.
- 1996 Fecso, R., Kalsbeek, W., Lohr, S., Scheaffer, R., Scheuren, F., and Stasny, E. Teaching survey sampling. *The American Statistician*, 50, 328–340.
- 1995 Lohr, S. Optimal Bayesian design of experiments for the one-way random effects model. *Biometrika*, 82, 175–186.
- 1995 Lohr, S. Hasse diagrams in statistical consulting and teaching. *The American Statistician*, 49, 376–381.
- 1994 Conaway, M. and Lohr, S. A longitudinal analysis of factors associated with reporting violent crimes to the police. *Journal of Quantitative Criminology*, 10, 23–39.
- 1994 Lohr, S. and Liu, J. A comparison of weighted and unweighted analyses in the NCVS. *Journal of Quantitative Criminology*, 10, 343–360.
- 1994 Peart, D., Patten, D. and Lohr, S. Feral pig disturbance and woody species seedling regeneration and abundance beneath coast live oaks (Quercus agrifolia) on Santa Cruz Island, California. In The Fourth California Islands Symposium: Update on the Status of Resources, ed. W.L. Halvorson and G.J. Maender, 313–322.
- 1994 Lohr, S. Invited discussion of 'Statistical values, quality and certification' by P. Imrey. *The American Statistician*, 48, 76–77.

- 1993 Lohr, S. Three-stage accurate estimation in the general linear model. *Journal of Statistical Planning and Inference*, 34, 317–331.
- 1993 Lohr, S. Two-stage accurate estimation in the general linear model. *Sequential* Analysis, 12, 1–23.
- 1993 Lohr, S. Multivariate normal probabilities of star-shaped regions. *Applied Statistics*, 42, 576–582.
- 1993 Lohr, S. and Liu, J. The role of weights in multivariate analyses of the NCVS. Proceedings of the Survey Research Section, American Statistical Association, 781-785.
- 1993 Lohr, S. and Conaway, M. National Crime Surveys Longitudinal File, 1988-1989: [Selected Variables] [computer file]. Tempe, AZ: Sharon L. Lohr [producer]. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]. Also on Longitudinal Data on Crime (1999, ICPSR 2599);
- 1992 Chang, T., Lohr, S., and McLaren, G. Teaching survey sampling using simulation. *The American Statistician*, 46, 232–237.
- 1992 Gazzuolo, E., DeLong, M., Lohr, S., LaBat, K., and Bye, E. Predicting garment pattern dimensions from photographic and anthropometric data. *Applied Ergonomics*, 23, 161–171.
- 1992 Beehler, J., Lohr, S., and Defoliart, G. Factors influencing oviposition in Aedes triseriatus. The Great Lakes Entomologist, 25, 259–264.
- 1990 Lohr, S. Accurate multivariate estimation using triple sampling. *The Annals of Statistics*, 18, 1615–1633.