
BIOGRAPHICAL SKETCH

NAME: Paul von Hippel

eRA COMMONS USER NAME: vonhippel1

POSITION TITLE: Associate Professor, LBJ School of Public Affairs

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
Yale University, New Haven, CT	BA	06/1990	Music
Stanford University, Stanford, CA	PhD	05/1998	Computer music
The Ohio State University, Columbus, OH	Postdoc	06/2000	Music psychology
The Ohio State University, Columbus, OH	MAS	12/2001	Statistics
The Ohio State University, Columbus, OH	PhD	05/2010	Sociology

A. Personal Statement

I work on three different research topics: the causes and remedies for academic achievement gaps between children from advantaged and disadvantaged families. This fits under the primary research area of Demography: Education, Work and Inequality. A second research topic explores the causes and remedies of the obesity epidemic, especially among children. As children from disadvantaged backgrounds are more susceptible to obesity, this falls under the primary research area of Population Health. My third research topic focuses on research design and statistical methods, especially for incomplete data. This is necessary to support and advance every research area.

Over the next 5 years I expect to make the following major contributions: write several papers on incomplete data, capped by a 2nd edition of the book *Missing Data* (with Paul Allison); write several papers on school and family sources of inequality in academic achievement, capped by a book with Doug Downey; and develop a new, more efficient method for multiple imputation of missing data, and its implementation in widely used software.

I benefit from the PRC through computer support, grant support, graduate student training, and the opportunity to network with graduate students and potential collaborators. The computer and grant support are exceptionally valuable as similar services are not available in my home department, the LBJ School of Public Affairs. The networking opportunities are also valuable as, in my home department, I am the only faculty member working on my research topics.

B. Positions and Honors**Positions and Employment**

1998-2001 Post-Doctoral Fellow, School of Music, Ohio State University
2002-2005 Research Statistician, Department of Sociology and Initiative in Population Research, Ohio State University
2006-2009 Data Scientist, Fraud & Risk, Check Free Services Corporation and JPMorgan Chase
2010-2016 Assistant Professor, LBJ School of Public Affairs, The University of Texas at Austin
2016-present Associate Professor, LBJ School of Public Affairs, The University of Texas at Austin

Other Experience and Professional Memberships

2011-present Editorial board, *Sociological Methodology*
2012-present Research advisory board, National Summer Learning Association
2012 Chair, Clifford Clogg award committee, Methodology section, American Sociological Association
2013-present Member, Equal Employment Opportunity Commission DATANET
2014 Chair, David L. Stevenson award committee, Education section, American Sociological Association
2015-present Journal editorial board, *Socius*

Honors

2005	Willard Waller Award for best article in the past three years. Education section, American Sociological Association
2007	Clifford Clogg Award for year's best article by a graduate student. Methodology Section, American Association. (For "Regression with Missing Ys.")
2008	Honorable mention, David L. Stevenson Award for year's best article by a graduate student
2009	James Coleman Award for best article in the past two years. Education Section, American Sociological Association. (For "Are 'Failing' Schools Really Failing?")
2010	Kingsbury Data Center Award, Northwest Evaluation Association, Portland, OR.
2016	Winner (one of 5), <i>Obesity</i> Journal Symposium. The Obesity Society. New Orleans, LA.

C. Contributions to Science

In the area of missing data, I am currently best known for my work on missing dependent variables and on misspecified imputation models (von Hippel, 2007, 2009, 2013). But I have just developed a much more fundamental contribution that I call maximum likelihood multiple imputation (MLMI), which is more computationally efficient than the imputation methods that are widely used today (von Hippel, 2016). I expect that MLMI will become popular, and I am in conversations about getting it implemented in software. I am also about to start on a second edition of the popular book *Missing Data* (Sage), which will publicize MLMI further.

von Hippel, P. T. (2007). Regression With Missing Ys: An Improved Strategy For Analyzing Multiply Imputed Data. *Sociological Methodology*, 37, 83–117.

von Hippel, P. T. (2009). How To Impute Interactions, Squares, and Other Transformed Variables. *Sociological Methodology*, 39(1), 265–291. <http://doi.org/10.1111/j.1467-9531.2009.01215.x>

von Hippel, P. T. (2013). Should a Normal Imputation Model be Modified to Impute Skewed Variables? *Sociological Methods & Research*, 42(1), 105–138.

von Hippel, P. T. (2016). Maximum likelihood multiple imputation: A more efficient approach to repairing and analyzing incomplete data. *arXiv:1210.0870 [Stat]*. Retrieved from <http://arxiv.org/abs/1210.0870>

In the area of obesity, I am best known for studies showing that children do not become obese in school; they become obese when school is out (von Hippel, Powell, Downey, & Rowland, 2007; von Hippel & Workman, 2016). I have also evaluated a \$37 million state program that failed to reduce obesity through middle school physical education (von Hippel & Bradbury, 2015). I am now working on a broader review article about the limitations of trying to combat the obesity epidemic through schools, and about the necessity of addressing out-of-school food marketing and behaviors.

von Hippel, P. T., & Bradbury, W. K. (2015). The effects of school physical education grants on obesity, fitness, and academic achievement. *Preventive Medicine*, 78, 44–51. <http://doi.org/10.1016/j.ypmed.2015.06.011>

von Hippel, P. T., Powell, B., Downey, D. B., & Rowland, N. J. (2007). The effect of school on overweight in childhood: Gain in body mass index during the school year and during summer vacation. *American Journal of Public Health*, 97(4), 696–702.

von Hippel, P. T., & Workman, J. (2016). From Kindergarten Through 2nd Grade, US Children's Obesity Prevalence Grows Only During Summer Vacations. *Obesity*, *accepted*.

In the area of education, I am best known for work showing that test score gaps between advantaged and disadvantaged children grow faster during summer vacations than during the school year (Downey, von Hippel, & Broh, 2004). But I have just completed a more fundamental contribution that challenges that claim and shows how claims about the growth of test score gaps are sensitive to test score scaling and other measurement artifacts (von Hippel & Hamrock, 2016). I am working on other articles comparing school and non-school sources of inequality. This work will be capped by a book coauthored with Doug Downey.

Downey, D. B., von Hippel, P. T., & Broh, B. A. (2004). Are Schools the Great Equalizer? Cognitive Inequality during the Summer Months and the School Year. *American Sociological Review*, 69(5), 613.

von Hippel, P. T., & Hamrock, C. (2016). *Do Test Score Gaps Grow Before, During, or between the School Years? Measurement Artifacts and What We Can Know in Spite of Them* (SSRN

D. Research Support

Ongoing Research Support

83-16-05 (P. von Hippel, PI)

01/01/16-12/31/17

Russell Sage Foundation

Do gaps in cognitive skills, health, and behavioral skills grow faster in school or out? New analyses using the ECLS-K:2011

This project uses new data and improved methods to estimate school and summer rates of growth in obesity, test-score gaps, and social and behavioral skills.

Role: Principal Investigator

Responsibilities: Co-author 3 research articles and coordinate activities among co-authors (co-I Doug Downey, Ohio State, and consultant Joe Workman, Oxford)

1867333 (P. von Hippel, PI)

09/01/16-12/31/17

William T. Grant Foundation

Does a successful experiment lead to successful policy? Class size reduction in Tennessee after Project STAR
This project examines a fundamental premise of evidence-based policy: that policies based on rigorous evidence from randomized experiments will be as effective as the experiments suggest. Toward that end, we evaluate the effects of Project Challenge, which reduced class sizes in Tennessee's poorest school districts after Tennessee's Project STAR experiment suggested that class size reductions could substantially raise test scores.

Role: Principal Investigator

Responsibilities: Author one research article, data collection, data analysis, historical research.

Completed Research Support

181404 (P. von Hippel, PI)

06/01/13-08/31/15

William T. Grant Foundation

How big are summer learning gaps? Using seasonal comparisons to understand whether schools or other settings are the primary source of test-score inequality

This project was to (1) re-analyze two classic studies of seasonal learning patterns with special attention to issues of test-score scaling and (2) analyze a large new dataset that provides a broader picture of seasonal learning than has been available previously.

Role: Principal Investigator (with co-I Doug Downey)

Responsibilities: Authored one research article with a graduate student. Coordinated activities among investigators.

UTA-001139 (P. von Hippel, PI)

09/01/13-08/31/14

St. David's Foundation

The Effect of School Physical Education Grants on Obesity, Fitness, and Academic Achievement

Over a 4-year period the state of Texas gave high poverty middle schools \$37 million in grants to improve their physical education programs. This project used fixed effects models to estimate the effects of those grants on children's obesity, fitness, and academic achievement.

Role: Principal Investigator

Responsibilities: Authored one research article with a graduate student. Responsibilities included writing, framing, data collection, and data analysis.

1H79AE000101-02S1 (P. von Hippel, PI)

11/15/12-09/29/13

Stanford University, Center on Poverty and Inequality

Family and Household Income Inequality, Within and Between School Districts, 1970-2009

This project aimed to answer questions about trends in components of inequality, and to solve the associated methodological roadblocks.

Role: Principal Investigator

Responsibilities: Authored one research article, developed statistical methods, released software.