UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF MISSISSIPPI NORTHERN DIVISION

CAMPAIGN FOR SOUTHERN	§	
EQUALITY et al.,	§	
- /	§	
Plaintiffs,	§	
	§	
vs.	§	CIVIL ACTION
	§	NO. 3:15-cv-00578-DPJ-FKB
The MISSISSIPPI DEPARTMENT OF	§	
HUMAN SERVICES et al.,	§	
	§	
Defendants.	§	
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REPLY DECLARATION OF BRIAN POWELL, PH.D., IN SUPPORT OF <u>PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION</u>

BRIAN POWELL, Ph.D., declares under penalty of perjury, pursuant to 28 U.S.C.

§ 1746, as follows:

1. I am the James H. Rudy Professor in the Department of Sociology at Indiana

University and the Chair of Indiana University's Department of Sociology. I hold a Bachelor's

degree in sociology from Hobart College in Geneva, New York (1976), and a Master's degree

and Ph.D. in sociology from Emory University in Atlanta, Georgia (1980 and 1984,

respectively). I have taught at Indiana University since 1985.

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2. As a sociologist, my research focuses on family sociology, the sociology of education, gender, and social psychology. With grants from the National Science Foundation, American Educational Research Association, and the Spencer Foundation, I have examined how families confer advantages (or disadvantages) to their children and how structural and compositional features of families (*e.g.*, parental age, family size, birth order, one vs. two-parent households, inter-racial composition, same-sex vs. different-sex parents, and adoptive vs. biological parents) influence parental social, intellectual, and economic investments in children. My research has an emphasis on several increasingly visible groups of "atypical" family forms: families with older parents, bi/multiracial families, adoptive families, and gay/lesbian families. I also examine public opinion regarding family forms, family policy, and gender.

3. I am the lead author of *Counted Out: Same-Sex Relations and Americans' Definitions of Family*, which won the American Sociological Association Section on Family's William J. Goode Book Award, the Midwest Sociological Society's Distinguished Book Award, and the North Central Sociological Association's Scholarly Achievement Award. I have coauthored several scholarly articles relating to same-sex parenting, including *Adoptive Parents, Adaptive Parents: Evaluating the Importance of Biological Ties for Parental Investment,* 72 Am. Sociological Rev. 95 (2007) and *Measurement, Methods, and Divergent Patterns: Reassessing the Effects of Same-Sex Parents,* 52 Soc. Sci. Research 615 (2015).

4. I am the author of numerous articles that have appeared in the major peerreviewed sociological journals, including *American Sociological Review*, *American Journal of Sociology*, *Social Forces*, *Journal of Marriage and Family*, *Social Psychology Quarterly*, and the *Journal of Health and Social Behavior*. For these and other work, I have received scholarly and teaching awards from the American Sociological Association Emotions Section, the American

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Sociological Association Sex and Gender Section, the American Educational Research Association, the Center for Work and Families, and Indiana University.

5. In addition to my work as a professor and researcher, I recently completed a term as the Vice President of the American Sociological Association and currently serve as a member of the General Social Survey Board of Overseers. I also have served as the chair of the Sociology of Education and the Social Psychology Sections of the American Sociological Association; the deputy editor for *American Sociological Review*, *Sociology of Education*, and the *Journal of Health and Social Behavior*; an editorial board member of *Social Psychology Quarterly*; and a reviewer for the National Science Foundation, the Spencer Foundation, the Harvard University Press, the Oxford University Press, and the University of California Press, among others.

6. The statements set forth in this declaration are based on my own research, twentynine years as a professor teaching classes on research methods, sociology, gender, and family, and the work of other scholars and authors, including those cited in the bibliography attached hereto as Exhibit A.

7. I have been retained as an expert in the above-referenced litigation to respond to the argument made by Defendants Governor Phil Bryant, Attorney General Jim Hood, the Mississippi Department of Human Services, and Executive Director Richard Berry in their Memorandum of Authorities Supporting Defendants' Response to Motion for Preliminary Injunction that the Mississippi Legislature was justified in banning same-sex couples from adopting because dual-gender parenting is preferable to same-sex couple parenting. I have actual knowledge of the matters stated in this declaration and could and would so testify if called as a witness.

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8. My background, experience, and publications are provided in detail in my curriculum vitae attached hereto as Exhibit B.

* * *

9. In their Memorandum of Authorities Supporting Defendants' Response to Motion for Preliminary Injunction, the Defendants attempt to justify Mississippi's ban on adoption by same-sex couples by asserting that "the Mississippi Legislature has concluded that dual-gender parenting is preferable and should be encouraged where possible by prohibiting adoption by same-gender couples." (D.E. 21, at 18.) This conclusion conflicts with the overwhelming body of mainstream social scientific research. Indeed, the scholarly consensus in the social scientific community is that children of gay and lesbian couples fare just as well as children raised by different-sex parents across a wide variety of developmental metrics.

10. This position is held by two major professional associations: the American Psychological Association and the American Sociological Association.¹ Both of these associations have systematically examined the empirical evidence on this issue. The American Psychological Association has concluded that "[t]he factors that affect the adjustment of children are not dependent on parental gender or sexual orientation" and that "[t]here is no scientific basis for concluding that same-sex couples are any less fit or capable parents than heterosexual couples, or that their children are any less psychologically healthy and well adjusted." Br. for Am. Psychological Ass'n, *Obergefell* v. *Hodges*, at 18 & 22. The American Sociological

¹ See Br. for Am. Psychological Ass'n, et al. as Amici Curiae Supporting Petitioners, Obergefell v. Hodges, 135 S. Ct. 2584 (2015) (No. 14-556); Br. for Am. Sociological Ass'n as Amicus Curiae Supporting Petitioners, Obergefell v. Hodges, 135 S. Ct. 2584 (2015) (No. 14-556); Br. for Am. Sociological Ass'n as Amicus Curiae Supporting Respondents Perry and Windsor, Hollingsworth v. Perry, 133 S. Ct. 2652 (2013) (No. 12-144) and United States v. Windsor, 133 S. Ct. 2675 (2013) (No. 12-307); Am. Psychological Ass'n, Resolution on Sexual Orientation, Parents, and Children, 60 Am. Psychologist 496 (2005).

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Association has reached a similar conclusion: it notes that "[t]he scholarly consensus is clear and consistent: children of same-sex parents fare just as well as children of different-sex parents" and any "[c]laims that children fare better with different-sex parents than with same-sex parents are unsupported by existing social science research." Br. for Am. Sociological Ass'n, *Obergefell* v.

Hodges, at 5 & 13.

11. I agree completely with these conclusions. They are based on a notable, significant body of literature that finds minimal differences in academic performance and achievement, social development, psychological well-being, and behavioral challenges, among others, between children raised by same-sex parents and those raised by different-sex parents.²

² Many studies on same-sex parenting have been published in academic, peer-reviewed journals, including dozens since 2000. These studies have employed a variety of research methods and have utilized data from thousands of research participants. The following articles comprise a subset of the body of research on same-sex parenting: Simon Cheng & Brian Powell, Measurement, Methods, and Divergent Patterns: Reassessing the Effects of Same-Sex Parents, 52 Soc. Sci. Research 615 (2015); Jimi Adams & Ryan Light, Scientific Consensus, the Law, and Same Sex Parenting Outcomes, 53 Soc. Sci. Rev. 300 (2015); Abbie E. Goldberg & JuliAnna Z. Smith, *Predictors of Psychological Adjustment in Early* Placed Adopted Children with Lesbian, Gay, and Heterosexual Parents, 27 J. of Fam. Psychology 431 (2013); Michael J. Rosenfeld, Reply to Allen et al., 50 Demography 963 (2013); Justin A. Lavner, Jill Waterman, & Letitia Anne Peplau, Can Gay and Lesbian Parents Promote Healthy Development in High-Risk Children Adopted from Foster Care?. 82 Am. J. of Orthopsychiatry 465 (2012); Michael J. Rosenfeld, Nontraditional Families and Childhood Progress through School, 47 Demography 755 (2010); Timothy J. Biblarz & Judith Stacey, How Does the Gender of Parents Matter?, 72 J. of Marriage & Fam. 3 (2010); Alicia L. Fedewa & Teresa P. Clark, Parent Practices and Home-School Partnerships: A Differential Effect for Children with Same-Sex Coupled Parents?, 5 J. of GLBT Fam. Studies 312 (2009); Jennifer L. Wainright & Charlotte J. Patterson, Peer Relations among Adolescents with Female Same-Sex Parents, 44 Dev. Psychology 117 (2008); Fiona Tasker, Lesbian Mothers, Gay Fathers, and Their Children: A Review, 26 Dev. and Behavioral Pediatrics 224 (2005); Jennifer L. Wainright, Stephen T. Russell, & Charlotte J. Patterson, Psychosocial Adjustment, School Outcomes, and Romantic Relationships of Adolescents with Same-Sex Parents, 75 Child Dev. 1886 (2004); Susan Golombok et al., Children with Lesbian Parents: A Community Study, 39 Dev. Psychology 20 (2003); Raymond W. Chan, Barbara Raboy, & Charlotte J. Patterson, *Psychosocial Adjustment among Children* Conceived via Donor Insemination by Lesbian and Heterosexual Mothers, 69 Child Dev. 443

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This research confirms that children of same-sex parents show no additional behavioral, emotional, or mental health issues compared to children raised in other family structures. Indeed, to the contrary, same-sex parents show high levels of parental skills and involvement with their children. *See* Kate C. Prickett, Alexa Martin-Storey, & Robert Crosnoe, *A Research Note on Time with Children in Different- and Same-Sex Two-Parent Families*, 52 Demography 905 (2015)

12. The social science research supporting these conclusions is based on both smallscale and large-scale, national studies of families. Both provide important complementary approaches to understanding the consequences of living in different family structures in the United States. Representative of the latter approach is the scholarship of Michael J. Rosenfeld, whose systematic statistical peer-reviewed analysis of the 2000 U.S. Census concludes that among families with roughly equivalent income and education levels, children raised in samesex households fare just as well in terms of educational progress as children raised in married, heterosexual households. *See* Rosenfeld at 963; Rosenfeld at 755. Other studies similarly demonstrate that children raised by same-sex parents show no differences in terms of academic achievement, social development, or mental health as compared to children raised by differentsex parents. *See, e.g.*, Fedewa & Clark at 312; Wainright & Patterson at 117; Wainright *et al.* at 1886.

13. The absence of differences also discredits the notion that the presence of both male and female role models in the home enhances children's and adolescents' adjustment. Social science research establishes that both men and women have the capacity to be good parents. Studies have shown that, when parents receive their children, men and women have the

(1998); David K. Flaks et al., Lesbians Choosing Motherhood: A Comparative Study of Lesbian and Heterosexual Parents and Their Children, 31 Dev. Psychology 105 (1995).

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capacity to be equally competent at parenting. Moreover, as they spend time with their children, men and women can and do adopt both sensitive (stereotypically female) and authoritative (stereotypically male) parenting styles. In other words, parenting skills and attributes are not gender exclusive.

14. The conclusion that Rosenfeld and others have reached regarding same-sex parenting is typical. In fact, the level of consistency in the patterns found in studies of same-sex vs. different-sex couple parenting is remarkably high in terms of social science research. In their recent analysis of citations and citation networks from thousands of publications from the past few decades, Jimi Adams and Ryan Light document that scholarly agreement regarding this conclusion is "overwhelming." Adams & Light at 307.

15. The level of consensus from methodologically sound research is in fact so great that it is not undercut by the very few outliers that purport to conclude that there are differences between children raised by same-sex parents and those raised by different-sex parents. Of these outliers, the most cited is the analysis of Mark Regnerus. *See* Mark Regnerus, *How Different Are the Adult Children of Parents Who Have Same-Sex Relationships? Findings from the New Family Structures Study*, 41 Soc. Sci. Research 752 (2012); Mark Regnerus, *Parental Same-Sex Relationships, Family Instability, and Subsequent Life Outcomes for Adult Children: Answering Critics of the New Family Structures Study with Additional Analyses*, 41 Soc. Sci. Research 1367 (2012). Using originally collected national data—the New Family Structures Study—Regnerus purported to compare the outcome profiles of 236 adult children whose parents, according to Regnerus, had a same-sex romantic relationship (which he refers to as "gay father" and "lesbian mother" households) with the outcomes of those who grew up in "intact biological families."

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intact biological families fare better than children from lesbian mother and gay father households on a number of outcomes.

16. Regnerus's research has received highly critical assessments that have been published in academic journals,³ outlined by a group of more than one hundred social scientists,⁴ and described in detail by the American Sociological Association.⁵ These critics have called into question the study's design, the data quality, and the integrity of the review process that resulted in the publication of the article. Among critics' concerns are the Regnerus studies' failure to: (1) actually study individuals who were raised by two same-sex parents;⁶ (2) assess whether a child's "same-sex parent" is indeed gay or lesbian; and (3) distinguish between the effect of having a same-sex parent and the effect of family transitions, such as instability and divorce. In my assessment, these concerns persuasively challenge the conclusions made by Regnerus.⁷

⁴ Gary G. Gates *et al*, *Letter to the Editors and Advisory Editors of Social Science Research*, 41 Soc. Sci. Research 1350 (2012).

⁵ Br. of Am. Sociological Ass'n, *Obergefell* v. *Hodges*; Br. for Am. Sociological Ass'n, *Hollingsworth* v. *Perry and United States* v. *Windsor*.

⁶ In fact, only two individuals in the study reported living with two same-sex parents throughout childhood.

⁷ A subsequent article that claimed to reach the same conclusions as those of Regnerus, using a Canadian sample, also has been legitimately criticized for its inability to determine the residential history of the youths studied, its reliance on an atypical sample of young adults, and its overstating of claims—as indicated in part by an erratum published by its author. *See* Douglas W. Allen, *High School Graduation Rates among Children of Same-Sex Households*, 11 Rev. of Econ. of the Household 635 (2013); Douglas W. Allen, *Erratum to: High School Graduation Rates among Children of Same-Sex Households*, 12 Rev. of Econ. of the

³ Michael J. Rosenfeld, *Revisiting the Data from the New Family Structure Study: Taking Family Instability into Account*, 2 Sociological Sci. 478 (2015); Andrew J. Perrin, Philip N. Cohen, & Neal Caren, *Responding to the Regnerus Study: Are Children of Parents Who Had Same-Sex Relationships Disadvantaged? A Scientific Evaluation of the No-Differences Hypothesis*, 17 J. of Gay & Lesbian Mental Health 327 (2013); Darren E. Sherkat, *The Editorial Process and Politicized Scholarship: Monday Morning Editorial Quarterbacking and a Call for Scientific Vigilance*, 41 Soc. Sci. Research 1346 (2012).

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17. Despite the powerful criticisms of his study, Regnerus and colleagues in a subsequent *amicus* brief defended the study by claiming that "despite the attention and scrutiny, the study remains in print and sequence analyses of the (now-publicly-accessible) data have revealed no analytic errors." Br. of Social Science Professors as *Amici Curiae* Supporting Defendants, *Robicheaux* v. *Caldwell*, 2 F. Supp. 3d 910 (E.D. La. 2014) (13-05090), at 19. This is no longer true. In fact, in a 2015 article, my colleague Professor Simon Cheng from the University of Connecticut and I reanalyzed the New Family Structure Survey, *i.e.*, the dataset that Regnerus used in his studies. *See* Cheng & Powell at 615.⁸ In doing so, we identified several serious problems in the decisions that Regnerus made regarding measurement and models and, in turn, demonstrated that the patterns reported in his paper are mostly the result of these problematic decisions.⁹ More specifically, we found that:

a. A large number of respondents in the analyses were misclassified as having been raised in a lesbian mother or gay father household. We estimated the misclassification to exceed one-third of this subsample. The primary sources of these misclassification errors were:

> i. The inclusion of respondents whose highly implausible responses to other questions lend doubt to all of their responses (*e.g.*, a 25-year old man

Household 207 (2013). Two other recent articles also did not systematically take into account family stability and family transitions and were not subject to the rigorous review process that most peer-referred journals provide. *See* D. Paul Sullins, *Child Attention-Deficit Hyperactivity Disorder (ADHD) in Same-Sex Parent Families in the United States: Prevalence and Comorbidities*, 6 British J. of Med. & Med. Research 987 (2015); D. Paul Sullins, *Emotional Problems among Children with Same-Sex Parents: Difference by Definition*, 7 British J. of Educ., Soc. & Behavioural Sci. 99 (2015).

⁸ A copy of this article is attached hereto as Exhibit C.

⁹ A second article reanalyzing the Regnerus data but focusing on other modeling concerns also calls into question Regnerus's conclusion. *See* Rosenfeld at 478.

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who reported that his father had a romantic relationship with another man, but also reported that he was 7-feet 8-inches tall, weighed 88 pounds, was married 8 times, and had 8 children);

ii. The classification of respondents as being raised by a lesbian mother or a gay father even when the respondents reported never living or living very briefly (*e.g.*, a year or less) with that parent; and

iii. The classification of respondents as being raised by a lesbianmother or gay father even when their responses to calendar data (*i.e.*,questions that asked respondents to specify with whom they lived during eachyear of their childhood) were inconsistent with the categorization.

b. Multiple methodological and modeling decisions made by Regnerus decisions that have plausible alternatives and that at minimum should have been considered to assess the extent to which the patterns were not idiosyncratic—appear to artificially inflate the patterns reported in the article.

c. Once adjustments taking into account the coding errors and alternative methodological choices are made, the putative disadvantages to children in same-sex households disappear: that is, the profile of children from same-sex households is similar to that of adult children from intact biological families.

Conclusion

18. The position that children from same-sex households fare as well as children from different-sex households is overwhelmingly compelling: it has been confirmed by multiple studies and endorsed by the major professional associations that focus on and have extensively studied the question of children's well-being. The few studies that conclude otherwise have been

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appropriately criticized for serious methodological flaws. The social scientific evidence is persuasive in challenging a rational basis for denying adoption rights to same-sex couples.

19. I declare under the penalty of perjury that the foregoing is true and correct.Executed on October 12, 2015.

Baisi Powell

Brian Powell

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Exhibit A

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Brief for American Sociological Association as *Amicus Curiae* Supporting Respondents Perry and Windsor, *Hollingsworth* v. *Perry*, 133 S. Ct. 2652 (2013) (No. 12-144) and United States v. *Windsor*, 133 S. Ct. 2675 (2013) (No. 12-307).

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Exhibit B

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September 2015

BRIAN POWELL

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OFFICE ADDRESS & TELEPHONE

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PROFESSIONAL POSITIONS

PROFESSIONAL I	<u>COSITIONS</u>
2014-present	Chair, Department of Sociology, Indiana University
2008-present	James H. Rudy Professor of Sociology, Indiana University
2013-present	Affiliated Faculty, Kinsey Institute, Indiana University
1986-present	Affiliated Faculty, Women's Studies/Gender Studies Program, Indiana
	University
2002-2007	Allen D. and Polly S. Grimshaw Professor of Sociology, Indiana
	University
1998-2002	Professor of Sociology, Indiana University
1990-1998	Associate Professor of Sociology, Indiana University
1986-1990	Assistant Professor of Sociology, Indiana University
1985-1986	Visiting Assistant Professor of Sociology, Indiana University
EDUCATION	
1984 - 1986	Indiana University, Bloomington, IN.
	NIMH Post-Doctoral Training Program in Measurement
1984	Emory University, Atlanta, GA.
	Ph.D. in sociology. Dissertation: "State and Regional Variation in
	Scholastic Aptitude Test Performance."
1980	Emory University, Atlanta, GA.
	M.A. in sociology. Thesis: "Correlates of Childlessness and One-
	Child Parity Rates."
1976	Hobart College, Geneva, NY.
	B.A. in sociology with highest honors

RESEARCH/TEACHING INTERESTS

Sociology of Education	Sociology of Family
Sociology of Sex/Gender	Social Psychology
Medical Sociology (Mental Health)	

RESEARCH HONORS, FELLOWSHIPS, and GRANTS

2016	Distinguished Faculty Award, College of Arts and Sciences, Indiana
	University
2013	Distinguished Article Award, American Sociological Association Sex and
	Gender Section
2013	Recent Contribution Award (Outstanding Article), American Sociological

	Association Section on Emotions
2012-2015	Vice-President Elect, Vice President, Past Vice President, American
	Sociological Association
2012	Rosabeth Moss Kanter Award for Excellence in Work-Family Research
	Finalist, Center for Families and Center for Work and Families
2011	William J. Goode Book Award, American Sociological Association
	Section on Family
2011	Distinguished Book Award, Midwest Sociological Society
2011	Scholarly Achievement Award (book), North Central Sociological
	Association
2010-2012	National Science Foundation Grant, SES-0961128/SES-0961189,
	"Transformation or Continuity in Americans' Definitions of Family,"
	\$95,251 (Co-PI, Lala Carr Steelman)
2010-2011	National Center for Family and Marriage Research/Department of Health
	and Human Services Grant, "New Approaches to the Measurement of
	Children's Family Structure: Change or Continuity in Americans'
	Definitions of Family," \$20,000
2009-2011	National Science Foundation Grant, SRS-0935815, "A Qualitative
	Analysis of Selected Question in the Science and Engineering Indicators
	Module of the General Social Survey," \$136,557, Co-PI
2008-present	James H. Rudy Professor of Sociology, Indiana University
2007	Outstanding Publication Award, Section on Aging and the Life Course,
	American Sociological Association
2002-2007	Allen D. and Polly S. Grimshaw Professorship of Sociology, Indiana
	University
2002-2004	Spencer Foundation Small Grant, "Educational Investments in
	Bi/Multiracial Families," \$35,000 (Co-PI, Simon Cheng)
2002-2004	American Educational Research Association/National Center for
	Educational Statistics Grant, "The Educational Experiences of Youths
	from Bi/Multiracial Families," \$25,000 (Co-PI, Simon Cheng)
2002-2003	National Science Foundation Grant, SES-0202469, "Non-Resident
	Parenting Practices, Gender, and Adolescent Outcomes," \$7,500 (Co-PI,
	Chadwick Menning)
2002-present	Alliance of Distinguished Rank Professors, Indiana University
2000-2002	National Science Foundation Grant, SES-9912267/SES-9912299,
	"Parental Age and Investments to Young Children: Collaborative
	Research." \$104,800 (Co-PI, Lala Carr Steelman)
1999-2000	National Science Foundation, SES-9818801, "Representations of
	Parenthood: An Analysis of Child Custody Laws, The Courts, and
	Families." \$7,188 (Co-PI, Julie Artis)
1999	Sociological Research Association, inducted
1998-2001	National Science Foundation Grant, SES-9810246/SES-9810435,
	"Parental Age and Allocation of Resources to Offspring." \$177,038
	(Co-PI, Lala Carr Steelman)
1997	Summer Faculty Fellowship, Indiana University
1996	Summer Faculty Fellowship, Indiana University
1992-1993	Ameritech Fellow, Indiana University, "Exploring State and Regional
	Differences in Educational Indicators"

1992	Summer Faculty Fellowship, Indiana University
1991, 1992	Reuben Hill Research and Theory Award Finalist, National Council of Family Relations
1991	Outstanding Young Faculty Award, Indiana University
1990	Scholarship Development Grant, Midwest Sociological Society
1989	Biomedical Grant, Indiana University
1986 - 1988	Spencer Foundation Postdoctoral Fellowship, National Academy of
	Education
1988	Summer Faculty Fellowship, Indiana University
1988	Supplementary Research Grant, Indiana University
1985	Outstanding Dissertation Award, American Educational Research
	Association
1984 - 1986	NIMH Post-Doctoral Fellowship
1983	Howard W. Odum Award (for Outstanding Graduate Student Paper),
	Southern Sociological Society
1983	Dean's Award for Excellence in Research, Emory University
1976	Phi Beta Kappa, Hobart College

TEACHING HONORS, FELLOWSHIPS, and GRANTS

2015	Outstanding Mentor Award, Department of Sociology, Indiana University
2012	Trustees Teaching Award, Indiana University
2010	John F. Schnabel Distinguished Contributions to Teaching Award, North Central Sociological Association (with Bernice Pescosolido)
2009	Carla B. Howery Award for Developing Teacher-Scholars, Teaching and Learning Section, American Sociological Association (with Bernice Pescosolido)
2008	Scholarship of Teaching and Learning Leadership Award, Indiana University (with Bernice Pescosolido)
2005	Course Development Grant, Honors College, Indiana University
2004	Trustees Teaching Award, Indiana University
2002	Scholarship of Teaching and Learning Research Grant, Indiana University (Co-PI, Janice McCabe)
2001	Distinguished Contributions to Teaching Award, American Sociological Association (Co-director, Program in College Pedagogy)
2001	Wilbert Hite Mentoring Award, Indiana University
2000	Outstanding Mentor Award, Department of Sociology, Indiana University
1999-2000	Scholarship of Teaching and Learning Grant, Indiana University
1997, 1998, 1999	Teaching Excellence Recognition Award, Indiana University
1995-present	Preparing Future Faculty Grant, Indiana University and American Sociological Association, Co-director with Bernice Pescosolido.
1994-present	FACET (Faculty Colloquium for Excellence in Teaching) Award, Indiana University
1994	Teaching Resources Center Travel Grant, Indiana University
1992	Summer Teaching Fellowship, Department of Sociology, Indiana University
1991	Alpha Phi Omicron Teaching Recognition, Indiana University
1991	President's Award for Distinguished Teaching, Indiana University
1991	Student Choice Award for Outstanding Faculty, Student Alumni

	Council, Indiana University
1989	Certificates of Distinction, awarded by Blue, Golden Key, and Mortar
	Board, Indiana University
1988	Edwin Sutherland Teaching Award, Department of Sociology, Indiana
	University
1983	Dean's Award for Excellence in Teaching, Emory University

PUBLICATIONS

Book

Powell, Brian, Catherine Bolzendahl, Claudia Geist, and Lala Carr Steelman. 2010. Counted Out: Same-Sex Relations and Americans' Definitions of Family. American Sociological Association Rose Series. New York: Russell Sage Foundation (Paperback edition, 2012).

William J. Goode Book Award, American Sociological Association Section on Family.
Distinguished Book Award, Midwest Sociological Society.
Scholarly Achievement Award, North Central Sociological Association.
Author-Meets-Critics Sessions, American Sociological Association and Southern
Sociological Society.

Articles and Chapters

Powell, Brian, Laura Hamilton, Simon Cheng, and Bianca Manago. Forthcoming. "Implications of Changing Family Forms for Children." **Annual Review of Sociology**.

Cheng, Simon and Brian Powell. 2015. "Measurement, Methods, and Divergent Patterns: Reassessing the Effects of Same-Sex Parenting." **Social Science Research** 52:615-626.

Powell, Brian, Natasha Yurk Quadlin, and Oren Pizmony-Levy. 2015. "Public Opinion, The Courts, and Same-Sex Marriage: Four Lessons Learned." **Social Currents** 2:1-10.

Lively, Kathryn J., Jamie Oslawski-Lopez, and Brian Powell. 2014. "Unequal but Together: Inequality within and between Families." Pp. 381-408 in Jane D. McLeod, Edward J. Lawler, and Michael L. Schwalbe (eds.), **The Handbook of the Social Psychology of Inequality**. New York: Springer.

Powell, Brian. Forthcoming, 2014. "Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." **The Journal of the Indiana Academy of the Social Sciences.**

Hunt, Matthew O., Pamela Braboy Jackson, Samuel H. Kye, Brian Powell, and Lala Carr Steelman. 2013. "Still Color-Blind? The Treatment of Race, Ethnicity, Intersectionality, and Sexuality in Sociological Social Psychology." **Advances in Groups Processes** 30:21-46.

Hamilton, Laura, Claudia Geist, and Brian Powell. 2011. "Marital Name Change as a Window into Gender Attitudes." **Gender and Society** 25(2):145-175.

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Distinguished Article Award, American Sociological Association Sex and Gender Section.

Hamilton, Laura, Regina Werum, Lala Carr Steelman, and Brian Powell. 2011. "Changing Families, Changing Education." Pp. 205-223 in Maureen Hallinan (ed.), **Frontiers in Sociology of Education**. New York: Springer.

Cheng, Simon and Brian Powell. 2011. "Misclassification by Whom? A Comment on Campbell and Troyer." **American Sociological Review** 76(2):347-355.

Powell, Brian and Bernice Pescosolido. 2011."Roller Coasters and Revolutions: Themes in the Reflections of First-Time Teachers." **Sociological Focus** 44(4):285-294.

Lively, Kathryn J., Lala Carr Steelman, and Brian Powell. 2010. "Emotions, Equity, and the Household Division of Labor." **Social Psychology Quarterly** 73(4):358-379.

Abridged version selected for SPQ SNAPS online.

Recent Contribution Award (Outstanding Article), American Sociological Association Section on Emotions.

Selected top six finalist article for the 2012 Rosabeth Moss Kanter Award for Excellence in Work-Family Research.Center for Families and Center for Work and Families.

Lively, Kathryn J., Brian Powell, Claudia Geist, and Lala Carr Steelman. 2008. "Inequity among Intimates: Applying Equity Theory to the Family." **Advances in Group Processes: Justice** 25:87-116.

Cheng, Simon and Brian Powell. 2007. "Under and Beyond Constraints: Resource Allocation to Young Children from Biracial Families." **American Journal of Sociology** 112(4):1044-1094.

Abridged version reprinted in Noah Berlatsky (ed.), 2011, **Opposing Viewpoints:** Interracial America, Volume 2. Farmington Hills, MI: Greenhaven Press.

Hamilton, Laura, Simon Cheng, and Brian Powell. 2007. "Adoptive Parents, Adaptive Parents: Evaluating the Importance of Biological Ties for Parental Investment." **American Sociological Review** 72(1):95-116.

Paul von Hippel, Brian Powell, Douglas B. Downey, and Nicholas Rowland. 2007. "The Effect of School on Overweight in Childhood: Gains in Children's Body Mass Index during the School Year and during Summer Vacation." **American Journal of Public Health** 97(4):796-802.

Powell, Brian, Lala Carr Steelman, and Robert M. Carini. 2006. "Advancing Age, Advantaged Youth: Parental Age and the Transmission of Resources to Children." **Social Forces** 84(3):1359-1390.

Outstanding Publication Award, Section on Aging and the Life Course, American Sociological Association.

Lively, Kathryn J. and Brian Powell. 2006. "Emotional Expression at Work and at Home: Domain, Status, or Individual Characteristics?" **Social Psychology Quarterly** 69(1):17-38.

Powell, Brian and Simon Cheng. 2005. "Small Samples, Big Challenges: Studying Atypical Family Forms." **Journal of Marriage and Family** 67(4):926-935.

Powell, Brian, Lala Carr Steelman and Regina Werum. 2004. "Micro Causes, Macro Effects: Linking Family Structure, Public Policy, and Educational Outcomes." Pp. 111-144 in Dalton Conley (ed.), After the Bell: Education Solutions outside the School. New York: Routledge Press.

Powell, Brian and Janice McCabe. 2004, "'In My Class? No': Professors' Accounts of Grade Inflation." Pp. 193-220 in Moya L. Andrews and William E. Becker (eds.), **Contributions in the Scholarship of Teaching and Learning**. Bloomington, IN: Indiana University Press.

Schnittker, Jason S., Jeremy Freese, and Brian Powell. 2003. "Who Are Feminists and What Do They Believe? The Role of Generations." **American Sociological Review** 68(4):607-622.

Freese, Jeremy and Brian Powell. 2003. "Tilting at Twindmills: A Reassessment of the Relative Impact of Social and Biological Influences." **Journal of Health and Social Behavior** 44(2):130-135.

Steelman, Lala Carr, Brian Powell, Regina Werum, and Scott Carter. 2002. "Reconsidering Sibling Configuration and Academic Success: Recent Advances and Paradoxes." **Annual Review of Sociology** 28:243-269.

Freese, Jeremy and Brian Powell. 2001. "Making Love Out of Nothing At All?: Null Findings and the Trivers-Willard Hypothesis." **American Journal of Sociology** 106(4):1776-1789.

Steelman, Lala Carr, Brian Powell, and Robert M. Carini. 2000. "Do Teacher Unions Harm Educational Performance: Lessons Learned from State SAT and ACT Scores." **Harvard Educational Review** 70(4):437-466.

Hunt, Matthew, Pam Braboy Jackson, Brian Powell, and Lala Carr Steelman. 2000. "Colorblind: The Treatment of Race and Ethnicity in Social Psychology." **Social Psychology Quarterly** 63(4):352-364.

Schnittker, Jason, Jeremy Freese, and Brian Powell. 2000. "Nature, Nurture, Neither, Nor: Black-White Differences in Beliefs about the Causes and Appropriate Treatment of Mental Illness." **Social Forces** 78(3):1101-1132.

Freese, Jeremy, Brian Powell, and Lala Carr Steelman. 1999. "Rebel without a Cause or Effect: Birth Order and Social Attitudes." **American Sociological Review** 64(2):207-231.

Freese, Jeremy and Brian Powell. 1999. "Sociobiology, Status, and Parental Investment in Sons and Daughters: Testing the Trivers-Willard Hypothesis." **American Journal of Sociology** 106(6):1702-1741.

Downey, Douglas B., Brian Powell, Lala Carr Steelman, and Shana Pribesh. 1999. "Much Ado about Siblings: The Relationship between Sibship Size and Intellectual Development Revisited." American Sociological Review 64(2):192-197.

Freese, Jeremy, Julie Artis and Brian Powell. 1999. "Now I Know My ABC's: Demythologizing Grade Inflation." Pp. 185-194 in Bernice A. Pescosolido and Ron Aminzade (eds.), **The Social Worlds of Higher Education**. Thousand Oaks: Pine Forge Press.

Powell, Brian and Douglas B. Downey. 1997. "Living in Single-parent Households: An Investigation of the Same-sex Hypothesis." **American Sociological Review** 62(4):521-540.

Milkie, Melissa, Robin W. Simon, and Brian Powell. 1997. "Through the Eyes of Children: Youths' Perceptions and Evaluations of Maternal and Paternal Roles." **Social Psychology Quarterly** 60(3):218-237.

Powell, Brian and Lala Carr Steelman. 1996. "Bewitched, Bothered, and Bewildering: The Use and Misuse of State SAT and ACT Rankings." **Harvard Educational Review** 66(1):27-59.

Steelman, Lala Carr and Brian Powell. 1996. "The Family Devalued: The Treatment of the Family in Small Groups Literature." **Advances in Group Processes** 13:213-238.

Powell, Brian and Lala Carr Steelman. 1995. "Feeling the Pinch: Age Spacing and Economic Investments in Children." **Social Forces** 73(4):1465-1486.

Downey, Douglas B., Pamela B. Jackson, and Brian Powell. 1994. "Sons versus Daughters: Sex Composition of Children and Maternal Socialization Values." **Sociological Quarterly** 35(1):33-50.

Steelman, Lala Carr and Brian Powell. 1993. "Doing the Right Thing: Race and Parental Locus of Responsibility for Funding College." **Sociology of Education** 66(3):223-244.

Powell, Brian and Lala Carr Steelman. 1993. "The Educational Benefits of Being Spaced Out: Sibship Density and Educational Progress." **American Sociological Review** 58(3):367-382.

Downey, Douglas B. and Brian Powell. 1993. "Do Children from Single-Parent Families Fare Better Living with Same-Sex Parents?" **Journal of Marriage and the Family** 55(1):55-71.

Steelman, Lala Carr and Brian Powell. 1991. "Sponsoring the Next Generation: Parental Placement of Financial Responsibility for Higher Education." **American Journal of Sociology** 96(6):1505-1529.

Selected top five finalist article for the 1992 Reuben Hill Research and Theory Award, National Council on Family Relations.

Powell, Brian and Lala Carr Steelman. 1990. "Beyond Sibship Size: Sibling Density, Sex Composition, and Educational Outcomes." **Social Forces** 69(1):181-206.

Selected top five finalist article for the 1991 Reuben Hill Research and Theory Award,

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National Council on Family Relations.

Smith, Herb and Brian Powell. 1990. "Great Expectations: Variation in Income Expectations among College Seniors." **Sociology of Education** 63(3):194-207.

Steelman, Lala Carr and Brian Powell. 1989. "Acquiring Capital for College: The Constraints of Family Configuration." **American Sociological Review** 54(5):844-855.

Powell, Brian and Lala Carr Steelman. 1989. "The Liability of Having Brothers: College Funding Strategies and the Sex Composition of the Family." **Sociology of Education** 62(1):134-147.

Loring, Marti and Brian Powell. 1988. "Sex, Race, and DSM-III: A Study of the Objectivity of Psychiatric Behavior." Journal of Health and Social Behavior 29(1):1-22.

Powell, Brian and Lala Carr Steelman. 1987. "On State SAT Research: A Response to Wainer." **Journal of Educational Measurement** 24(1):84-89.

Levinson, Richard, Brian Powell, and Lala Carr Steelman. 1986. "Social Location, Significant Others and Body Image among Adolescents." **Social Psychology Quarterly** 49(4):330-337.

Young, Laura and Brian Powell. 1985. "The Effects of Obesity on the Clinical Judgments of Mental Health Professionals." **Journal of Health and Social Behavior** 26(3):233-246.

Jacobs, Jerry and Brian Powell. 1985. "Occupational Prestige: A Sex Neutral Concept?" Sex Roles 11(3):283-308.

Steelman, Lala Carr and Brian Powell. 1985. "Appraising the Implications of the SAT for Educational Policy." **Phi Delta Kappan** 66(9):117-124.

Steelman, Lala Carr and Brian Powell. 1985. "The Social and Academic Consequences of Birth Order: Real, Artificial, or Both?" **Journal of Marriage and the Family** 47(1):117-124.

Powell, Brian and Lala Carr Steelman. 1984. "Variation in State SAT Performance: Meaningful or Misleading?" **Harvard Educational Review** 54(4):389-413.

Powell, Brian and Jerry A. Jacobs. 1984. "Gender Differences in the Evaluation of Prestige." **Sociological Quarterly** 25(2):173-190.

Powell, Brian and Jerry A. Jacobs. 1984. "The Prestige Gap: Differential Evaluations of Male and Female Workers." **Sociology of Work and Occupations** 11(3):283-308.

Powell, Brian and Lala Carr Steelman. 1983. "Testing for Sex Inequality in Standardized Admission Exams: The Case for Open Access." **Integrated Education** 20(3):86-89.

Powell, Brian and Jerry A. Jacobs. 1983. "Sex and Consensus in Occupational Prestige Ratings." **Sociology and Social Research** 67(4):392-404.

Powell, Brian and Lala Carr Steelman. 1983. "Equity and the LSAT." Harvard Educational Review 53(1):32-44.

Powell, Brian and Lala Carr Steelman. 1982. "Fundamentalism and Sexism: A Reanalysis of Peek and Brown." **Social Forces** 60(4):1154-1159.

Powell, Brian and Lala Carr Steelman. 1982. "Testing an Undertested Comparison: Maternal Effects on Sons' and Daughters' Attitudes toward Women in the Labor Force" **Journal of Marriage and the Family** 44(2):349-355.

Miscellaneous Publications

Powell, Brian, Catherine Bolzendahl, Claudia Geist, and Lala Carr Steelman. Forthcoming. "Changing Counts, Counting Change: Americans' Movement toward a More Inclusive Definition of Family." In Barbara J. Risman and Virginia Rutter (eds.), **Families as They Really Are**. New York. W.W. Norton.

Powell, Brian. 2013. "Sibling Size Effects on Education." In James Ainsworth (ed.), Sociology of Education: An A-to-Z Guide. Thousand Oaks: Sage.

Warner, Lisa and Brian Powell. 2011. "Family." **Oxford Bibliographies Online: Sociology**. New York: Oxford University Press.

Powell, Brian. 2010. "Marriage and the Court of Public Opinion." Op-ed column in the Los Angeles Times.

Powell, Brian. 2010. "Accepting Same-Sex Families." Column in "Political Bookworm" in the **Washington Post**.

Powell, Brian and Laura Hamilton. 2007. "The Hidden Curriculum." In George Ritzer (ed.), **The Encyclopedia of Sociology**. New York: Blackwell.

McCabe, Janice and Brian Powell. 2005. "Woebegone about Grade Inflation: When All the Professors Are Above Average (and Tough Graders)." **Inside Higher Ed**.

Powell, Brian, Catherine Bolzendahl, Danielle Fettes, and Claudia Geist. 2004. "Amateur (and Other) Sociologists' Predictions Regarding Same-Sex Marriage." **Political Sociology Section of the American Sociological Association Newsletter**. August.

Freese, Jeremy and Powell, Brian. 1998. Book Review of **Born to Rebel: Birth Order, Family Dynamics, and Creative Lives** (Frank Sulloway) in **Contemporary Sociology**. 27(1):57-58.

Powell, Brian. 1998. "Is There A Lake Wobegon Syndrome?" In S. Holly Stocking, Eileen T. Bender, Claude H. Cookman, J. Vincent Peterson, and Robert B. Votaw (eds.), **More Quick Hits: Successful Strategies by Award-Winning Teachers**. Bloomington: Indiana University Press.

Powell, Brian. "Course Syllabi for Preparing Graduate Teaching Instructors." 1999. In

Preparing Graduate Students, edited by the American Sociological Association.

Powell, Brian. "Sloppy Reasoning, Misused Data." 1999. Guest Editorial in **Phi Delta Kappan**, **Indianapolis Star**, and **Bloomington Herald-Times**.

MANUSCRIPTS UNDER REVIEW OR IN PROGRESS

Cheng, Simon and Brian Powell. "Is Public Opinion on Same-Sex Parents Really About Parenting? A Comparison of Attitudes regarding Same-Sex Parents and Single Parents." In progress.

Cheng, Simon, Catherine Bolzendahl, and Brian Powell. "Similarities and Differences in Reactions to Single Parents and Same-Sex Parents: An International Comparison."

Geist, Claudia, Catherine Bolzendahl, and Brian Powell. "Marriage or Kinder? U.S. and German Approaches to Same-Sex Families." In progress.

Jordan, Kristin M., Oren Pizmony-Levy, and Brian Powell. "The Blind Side: Americans' Perceptions of Inequalities in College Access." In progress.

Powell, Brian, Oren Pizmony-Levy, and Kristin M. Jordan. "The Costs of Responsibility: Americans' Views on the Funding of College." In progress.

PRESENTATIONS AT PROFESSIONAL MEETINGS

"Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." Alpha Kappa Delta (AKD) Distinguished Lecture. American Sociological Association, Chicago, IL. 2015.

"Public Opinion after Obergefell v. Hodges." Plenary Session: The Politics of Same-Sex Marriage: Public Opinion and the Courts. American Sociological Association, Chicago, IL. 2015.

"Same-Sex, Same Families? Cross-National Differences in Support for Same-Sex and Single Parent Families." American Sociological Association, Chicago, IL. (with Catherine Bolzendahl and Simon Cheng). 2015.

"Counts, Miscounts and Recounts: Reassessing the Definitions of Typologies of Families." Work and Family Researchers Network, New York, NY. 2014.

"When the Atypical Becomes Typical: Implications of Changing Family Forms for Children." Work and Family Researchers Network, New York, NY. 2014.

Author-Meets-Critic Session on *Counted Out: Same-Sex Relations and Americans' Definitions of Family*. American Sociological Association, New York, NY. 2013.

"The Curious Case of the 7 Foot 8 Inch, 88 Pound Son of a Gay Man: Reassessing the Effects of Same-Sex Parenting." American Sociological Association, New York, NY. 2013 (with Simon

Cheng).

"Evolution, Revolution: Americans' Changing Views Regarding Same-Sex Marriage." Thematic Session. American Sociological Association, New York, NY. 2013.

"When the Atypical Becomes Typical: Implications of Changing Family Forms for Children." Thematic Session. American Sociologial Association, San Francisco, CA. 2013

"Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." Thematic Session. American Sociological Association, Denver, CO. 2012.

"The Costs of Responsibility: Americans' Views on the Funding of College." American Sociological Association, Denver, CO. 2012 (with Kristin Jordan and Oren Pizmony-Levy)

"Does Sexuality Matter? A Comparison of Heterosexuals' and Sexual Minorities' Sociopolitical Attitudes." American Sociological Association, Denver, CO. 2012 (with Eric Grollman).

"How Americans Think and Feel about Families." Work and Family Researchers Network, New York, NY. 2012.

"Family' Divided: Conflicting Visions of 'the American Family." Thematic Session. American Sociological Association, Las Vegas, NV. 2011.

"Graduate School Briefing: Challenges, Opportunities, and Processes." American Sociological Association, Las Vegas, NV. 2011.

Author-Meets-Critics Session on Kathleen Gerson's *The Unfinished Revolution*. American Sociological Association, Las Vegas, NV. 2011.

"Change or Continuity in Americans' Definition of Family." National Center for Family and Marriage Research Conference, New Approaches to the Measurement of Children's Family Structure, Bowling Green University, OH. 2011.

"When Minorities Become Majorities and Majorities Become Minorities." Council on Contemporary Families, Chicago, IL. 2011.

"Roller Coasters and Revolutions: Themes in the Reflections of First-Time Teachers." North Central Sociological Association, Cleveland, OH. 2011 (with Bernice Pescosolido)

"Counted Out: Same-Sex Relations and Americans' Definitions of Family." North Central Sociological Association, Cleveland, OH. 2011.

"The Blind Side: Americans' Perceptions of Inequalities in College Access." American Educational Research Association, New Orleans, LA. 2011 (with Kristin Jordan and Oren Pizmony-Levy).

"Good Mothers, Bad Mothers: Americans' Preferences for Custodial Arrangements in Single-Parents Households." Pacific Sociological Association, Seattle, WA. 2011 (with Claudia Geist and Catherine Bolzendahl).

"Challenges and Opportunities in Graduate School." American Sociological Association, Atlanta, GA. 2010.

"The Formation of Scholarly Teachers: Lessons for Teaching and Learning for the Next Generation." International Society for the Scholarship of Teaching and Learning, Bloomington, IN., 2009 (with Carol Hostetter and Bernice A. Pescosolido).

"Mapping Gender Ideology with Views toward Marital Name Change." American Sociological Association, San Francisco, CA. 2009 (with Laura Hamilton and Claudia Geist).

"Challenges and Opportunities in Graduate School." American Sociological Association, Boston, MA. 2008.

"Making Theory Relevant: The Gender Attitude and Belief Inventory." Society for the Study of Social Problems, Boston, MA. 2008.

"Preparing for Graduate School." American Sociological Association, New York, NY. 2007.

"Going on the Job Market as an LGBTQ Sociologist." American Sociological Association, Montreal, Canada. 2006.

"We are Family, Are You? Public Constructions of *the Family*." Society for the Study of Social Problems, San Francisco, CA, 2004 (with Catherine Bolzendahl, Danielle Fettes, and Claudia Geist).

"When Summer Gain is a Setback: Schools, Parents, and Child Obesity." American Sociological Association, San Francisco, CA, 2004 (with Douglas B. Downey, Paul Von Hippel, and Nicholas Rowland).

"Emotional Responses of Men and Women to Perceived Fairness of the Household Division of Labor." American Sociological Association, San Francisco, CA, 2004 (with Kathryn Lively and Lala Carr Steelman).

"Effective Mentoring and Advising of Graduate Students." American Sociological Association, San Francisco, CA, 2004.

"Sociology of Education: Research and Policy Considerations." Professional Workshop for Young Scholars in Sociology of Education." American Sociological Association, Atlanta, GA, 2003.

"Preparing for Graduate School." American Sociological Association, Atlanta, GA, 2003.

"Sociology of Education: Recent Research and Policy Challenges." Eastern Sociological Society, Philadelphia, PA, 2003.

"Teaching Feminisms: An Exercise." Southern Sociological Society, New Orleans, LA, 2003

(with Janice McCabe).

"Sociological Reflections on a Lost Culture: the Catskills in the 1960s and 1970s." Eastern Sociological Society, Philadelphia, PA, 2003.

"Who Are Feminists and What Do They Believe?: Feminist Self-Identification, Its Antecedents, and Its Relationship to Feminist Ideologies." American Sociological Association, Chicago, IL, 2002 (with Jason Schnittker and Jeremy Freese).

"Parental Involvement, Educational Resources, and School Outcomes of Children from Biracial Households: An Exploratory Study." American Sociological Association, Chicago, IL, 2002 (with Simon Cheng).

"Reevaluating the Role that Graduate Programs Can Play in the Development of Future Faculty." American Sociological Association, Chicago, IL, 2002.

"Who's a Feminist What Does S/he Believe? Age, Ideology and Feminist Self-Identification." Southern Sociological Society, Baltimore, MD, 2002 (with Jason Schnittker and Jeremy Freese).

"Preparing Future Faculty: Inclusive and Diverse Graduate Training for the 21st Century." Association of Black Sociologists, Anaheim, CA, 2001.

"Advancing Age, Advantaged Youth? The Implications of Parental Age for Investments in Children." After the Bell: Educational Solutions Outside the School Conference, New York University Center for Advanced Social Science Research and the Jerome Levy Economics Institute of Bard College, Annandale-on-the-Hudson, NY, 2001 (with Lala C. Steelman and Robert M. Carini).

"Preparing Future Faculty for the Range of Academic Jobs." American Sociological Association, Anaheim, CA, 2001.

"Emotional Expressivity at Work and at Home: To What Degree is the Expression of Anger Hierarchically and Situationally Determined?" American Sociological Association, Anaheim, CA, 2001 (with Kathryn J. Lively).

"Teacher Unions and Educational Productivity: Lessons Learned from State SAT, ACT, and NAEP Scores." Western Political Science Association, Las Vegas, NV, 2001 (with Lala Carr Steelman and Robert M. Carini).

"The Role of Parental Factors on the Intellectual Development of Young Children: An Assessment of NHES:93." Southern Sociological Society, New Orleans, LA, 2000 (with Kerry M. McLoughlin, Lala C. Steelman, and Robert M. Carini).

"Advancing Age Advancing Youth: Parental Age and Investments in Children." Southern Sociological Society, Nashville, TN, 1999 (with Lala Carr Steelman and Robert Carini).

"Rebel without a Cause or Effect: Birth Order, Sociobiology, and Social Attitudes." American Sociological Association, San Francisco, CA, 1998 (with Jeremy Freese and Lala Carr

Steelman).

"Nature, Nurture, Neither, Nor: Black-White Differences in Beliefs about the Causes and Appropriate Treatment of Mental Illness." American Sociological Association, San Francisco, CA, 1998 (with Jason Schnittker and Jeremy Freese).

"Preparing Future Faculty and Practitioners." American Sociological Association, San Francisco, CA, 1998.

"Do Teachers' Unions Help or Hurt Student Performance?: An Examination of State SAT, ACT, and NAEP Scores." Southern Sociological Society, New Orleans, LA, 1997 (with Lala Carr Steelman).

"The 'Best' Parent: Children's Perceptions and Evaluations of Maternal and Paternal Roles." American Sociological Association, New York, 1996 (with Melissa Milkie and Robin Simon).

"Preparing a Graduate Program in Teaching." American Sociological Association, New York, 1996.

"Adolescents' Well-being in Single-parent Households: The Case of the Same-sex Hypothesis." American Sociological Association, Washington, D.C., 1995 (with Douglas B. Downey).

"Bewitched, Bothered, and Bewildering: The Use and Misuse of State SAT, ACT, and NAEP Rankings." American Sociological Association, Washington, D.C., 1995 (with Lala Carr Steelman).

"Feeling the Pinch: Age Spacing and Economic Investments in Children." American Sociological Association. Los Angeles, CA, 1994 (with Lala Carr Steelman).

"Do Children in Single-Parent Families Fare Better Living with a Same-Sex Parent: A Followup." Midwestern Sociological Association. Chicago, IL, 1993 (with Douglas B. Downey).

"Family Structure and Educational Attainment in the United States." American Sociological Association. Pittsburgh, PA, 1992 (with Lala Carr Steelman).

"The Educational Benefits of Being Spaced Out: Sibship Density and Educational Progress." American Sociological Association. Cincinnati, OH, 1991 (with Lala Carr Steelman).

"Socialization Strategies and Sex Composition of the Family." American Sociological Association. Cincinnati, OH, 1991 (with Douglas B. Downey and Pamela Braboy).

"Sexual Assault among High School Students." Southern Sociological Society. Atlanta, GA, 1991 (with Chris Maxwell).

"Racial Differences in Parental Investment in Higher Education." Southern Sociological Society, Atlanta, GA, 1991 (with Lala Carr Steelman).

"Sex Composition of Sibship and Funding a College Education." Southern Sociological Society.

Nashville, TN, 1988 (with Lala Carr Steelman).

"Gender, Race, and DSM-III: A Diagnosis of Objective Evaluations in the Mental Health Profession." American Sociological Association. Chicago, IL, 1987 (with Marti Loring).

"Racial Variations in State SAT Performance." Southern Sociological Society. Atlanta, GA, 1987 (with Lala Carr Steelman).

"Theoretical and Methodological Issues in the Study of Sibling Influence." Southern Sociological Society. Charlotte, NC, 1985 (with Lala Carr Steelman).

"Obesity and Clinical Assessment." Eastern Sociological Society. Philadelphia, PA, 1985 (with Laura Young).

"Evaluating Educational Wall Charts." National Conference on Testing Reform. Stony Point, NY, 1985.

"State and Regional Variation in Educational Outcomes: An Assessment of the Scholastic Aptitude Test." Southern Sociological Society. Knoxville, TN, 1984 (with Lala Carr Steelman).

"Occupational Prestige and Sex Segregation: Further Evidence." Southern Sociological Society. Knoxville, TN, 1984.

"Social Sources of Body Image: Gender, Race, and Parental Perception." Southern Sociological Society. Atlanta, GA, 1983 (with Richard Levinson and Lala Carr Steelman).

"Sex Differences in Prestige Ratings: The Relative Impact of Incumbent and Position." Eastern Sociological Society. Baltimore, MD, 1983 (with Jerry A. Jacobs).

"Inequity in Standardized Admission Exams: The Case for Open Access." Society for the Study of Social Problems. San Francisco, CA, 1982 (with Lala Carr Steelman).

"Birth Order Outcomes: Predestined Outcomes or Artifactual Relationships?" Southern Sociological Society. Memphis, TN, 1982 (with Lala Carr Steelman).

"Testing an Untested Assumption: The Impact of Mothers' Educational and Occupational Status on Males' and Females' Sex Role Attitudes." Southern Sociological Society. Louisville, KY, 1981 (with Lala Carr Steelman).

"Occupational Prestige and the Sex of the Incumbent." Southern Sociological Society. Louisville, KY, 1981 (with Jerry A. Jacobs).

"Sex Based Differentiation in Occupational Prestige Rankings: A Cross-Cultural Comparison." American Sociological Association. New York, NY, 1980 (with Jerry A. Jacobs).

"Sex Role Variation in Occupational Prestige." New York State Sociological Association. Buffalo, NY, 1974.

INVITED PRESENTATIONS

"Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." University of Memphis. 2015.

"Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." University of Nebraska. 2014.

"Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." Keynote Speaker, National Association of Social Workers/Region 1. 2014.

"Amicus Animus: Same-Sex Marriage, Sociology and the Courts." University of California-Merced. 2014

"Changing Counts, Counting Change: Toward a More Inclusive Definition of Family." Keynote Speaker, Indiana Academy of the Social Sciences. Ball State University. 2013.

"Evolution, Revolution: Americans' Changing Reviews Regarding Same-Sex Marriage." Distinguished Speakers Series, University of Central Florida. 2013.

"Amicus Animus: Sociological Insights into the Supreme Court Cases on Same-Sex Marriage." University of Central Florida. 2013.

"Counted Out: Same-Sex Relations and Americans' Definitions of Family." Williams Institute, University of California, Los Angeles School of Law. 2012.

"Counted Out: Same-Sex Relations and Americans' Definitions of Family." University of Connecticut. 2012.

"The Costs of Responsibility: Americans' Views on the Funding of College." University of Connecticut. 2012.

"Counted Out: Same-Sex Relations and Americans' Definitions of Family." Broom Center for Demography, University of California, Santa Barbara. 2012.

"Race, Gender, and Marital Opportunities: Remarks Regarding 'Is Marriage for White People."" (panelist). Indiana University Maurer Law School. 2012.

"(Higher) Education for All? Americans' Views on College Access." Center for Research on Educational Opportunity. University of Notre Dame. 2011.

"Counted Out: Same-Sex Relations and Americans' Definitions of Family." Northwestern University. 2011.

"Same-Sex Marriage and the Future of DOMA: Law, Politics, Federalism, and Families." (panelist). Indiana University Maurer Law School. 2011.

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"Counted Out: Same-Sex Relations and Americans' Definitions of Family." University of Pennsylvania. 2010.

"Counted Out: Same-Sex Relations and Americans' Definitions of Family." Wake Forest University. 2010.

"The Formation of Scholarly Teachers: Lessons for Teaching and Learning for the Next Generation from the Survey of Doctoral Education." Scholarship of Teaching and Learning Series, Indiana University, 2009.(with Carol Hostetter and Bernice A. Pescosolido).

"Family Counts: Contemporary Struggles over the Meaning of Family." University of Texas. 2009.

"Family Counts: Contemporary Struggles over the Meaning of *Family*." University of Georgia. 2009.

"Family Counts: Contemporary Struggles over the Meaning of Family." Purdue University. 2009.

"Family Counts: How Americans Define Family." Kent State University. 2008.

"Names Matter: The Changing Matter of Names." Phi Beta Kappa Speaker, Indiana University. 2008.

"The Significance of Biology to Parenting." Harvard University Law School. 2007.

"Family Counts: Americans' Definitions of Family." Florida State University. 2006.

"God, Genes, and Gays: Views Regarding Children's Development and Definitions of *The Family*." Ohio State University. 2006.

"Who Counts as Kin? Reconstructing the American Family." University of Massachusetts-Amherst. 2006 (with Catherine Bolzendahl).

"Who Counts as Kin? How Americans Define The Family." Emory University. 2005.

"Who Counts as Kin? (Re)defining The Family." Dartmouth College. 2005.

"Kin or Sin: Contested Constructions of the American Family." University of South Carolina. 2005.

"Kin or Kinder? American and German Views of The Family." Ball State University. 2005.

"Reconstructing The American Family." Washington State University. 2004.

"Constructing The Family." University of Chicago. 2004.

"Grade Inflation Revisited." Scholarship of Teaching and Learning Series. Indiana University,

2003.

"From Accountability to Frenzy: Voices from the Professorate." Princeton University. 2003.

"Diversity in Sociology: Reconciling Methods, Reconciling Topics." Emory University, 2001.

"Now We Know Our ABC's: Demythologizing Grade Inflation." Scholarship of Teaching and Learning Series. Indiana University, 1999.

"Who and What Matter: Understanding Academic Success." Phi Beta Kappa Speaker, Indiana University, 1998.

"Parental Custody and the Same-Sex Hypothesis: Further Evidence." University of Pennsylvania, 1997.

"Implications of the Assumption of Gender Symmetry in Custodial Decisions." University of South Carolina, 1996.

TEACHING EXPERIENCE

1985-present	Visiting Assistant Professor to Professor. Indiana University,
-	Bloomington, IN. Courses: Introduction to Sociology, Sociology of
	Gender Roles, The Teaching of Undergraduate Sociology, Social
	Psychology, Social Change, Sociology of Family, Constructions of
	Families in the 21 st Century, Issues in Social Policy-Defining and
	Redefining the American Family, Honors College Research Internship,
	Honors College Research Seminar, Sociology Honors Research Seminar,
	Pro-Seminar in Sociology, Advanced Research in Social Stratification,
	Advanced Research in Higher Education, Advanced Research in Social
	Interaction and Social Structure, Sociological Research Practicum. Student
	evaluations are available upon request.
1982-1984	Instructor. Emory University, Atlanta, GA. Courses: Social Problems
	Gender, Race, and Education, Introduction to Sociology, Socialization,
	Sex Roles.
1981-1982	Visiting Instructor. Hobart and William Smith Colleges, Geneva, NY.
	Courses: Introduction to Sociology, Socialization, Research Methods,
	Research Practicum, Advanced Quantitative Methods.
1980-1981	Instructor (part-time). Georgia State University, Atlanta, GA. Courses:
	Introduction to Sociology, Social Problems.
1980	Visiting Instructor (part-time). Atlanta College of Art, Atlanta, GA.
	Course: Sociology of the Arts.
1977	Instructor and Academic Advisor. Yeshiva High School of Greater
	Washington, Silver Springs, MD. Courses: Advanced Algebra and
	Trigonometry.
1977	Instructor and Coach. Wheaton High School, Wheaton, MD. Debate and
	Speech. Maryland State Debate Champions.

APPLIED RESEARCH EXPERIENCE

1981

Research Analyst. Productivity Research Division, U.S. Office of

	Personnel Management, Washington, D.C.
1980	Equal Opportunity Specialist. Office for Civil Rights, Department of
	Education, Atlanta, GA.
1979	Program Analyst. Bureau of Analysis and Evaluation, National Institutes of Health, Bethesda, MD.

CURRENT OR FORMER PROFESSIONAL ACTIVITIES

Departmental Serve	ice
Chair	Department of Sociology, 2014-2017
Director	Associate Instructor Training and Supervision, Department of Sociology, 1990-1994, 1995-1997, 1999-2014
Co-Director	Program on Preparing Future Faculty, Department of Sociology, 1995- present
Director	Graduate Studies, Department of Sociology, 1996-2001
Director	Undergraduate Studies, Department of Sociology, 1991-1994
Member	Executive Advisory Committee, Department of Sociology, 1989, 1992- 1994, 1995-2000, 2001-2005, 2006-2008, 2009-2013, 2014-present
Member/Chair	Undergraduate Affairs Committee, Department of Sociology, 1986-1987, 1988-94, 2011-2012
Member/Chair	Graduate Affairs Committee, Department of Sociology, 1995-2001, 2004-2006, 2008, 2013-2014
Member/Chair	Teaching and Evaluation Committee, Department of Sociology, 1988-1989, 1995-2002, 2007-2008, 2012-2013
Member/Chair	Graduate Recruitment and Evaluation Committee, Department of Sociology, 1986-1987, 1995-2002, 2004-2005, 2007-2008, 2009-2011, 2012-2013
Member Member	Personnel Committee, Department of Sociology, 2000-2002, 2009-2010 Curriculum Committee, Department of Sociology, 2013-2014
Member/Chair	Various 2 nd Year, 4 th Year, Tenure, and Promotion Review Committees, 1994-2013
Mentor	First-year Advisor, Department of Sociology, 2000-2010, 2011-2013
Member/Chair	Social Action Award Selection Committee, Department of Sociology, 2002-2004
Chair	Public Relations Committee, Department of Sociology, 2011-2012
Chair	Asian American Communities Search Committee, Department of Sociology, 2006
Member	Schuessler Award Committee, Department of Sociology, 1995-1996
Member	Ad-hoc Graduate Program Review Committee, Department of Sociology, 1995-1996

College/University Service

President	Phi Beta Kappa, Gamma Chapter, Indiana University, 2007-2008
Vice President	Phi Beta Kappa, Gamma Chapter, Indiana University, 2006-2007
Graduate Faculty	Program in Regional Economic Development, School of Public and
-	Environmental Affairs, Indiana University, 1993-2005
Faculty	Honors College, 2006-present
Faculty	NIMH Pre- and Post-doctoral Programs in Affect, Measurement, and
	Self, 1986-2003

Га14	Conten for Education on 1 Society 2000 2000
Faculty	Center for Education and Society, 2000-2008
Member	Alliance of Distinguished Rank Professors, 2002-present
Member	College of Arts and Sciences Promotion Committee, 1996-1997
Member	College of Arts and Sciences Task Force on Teaching, 1993-1994
Member	College of Arts and Sciences Assessment Committee, 1993-1994
Member	College of Arts and Sciences Salary Review Committee, 1997
Member	Arts and Sciences Career Services Advisory/Steering Committee, 2004-2005
Member	College of Arts and Sciences Academic Fairness Committee, 2004-2006, 2008-2013
Member	College of Arts and Sciences Dissertation Year Fellowship Selection Committee, 2007-2008
Member	College of Arts and Sciences Statistics Courses Coordination Committee, 2012-2013
Member	Hutton Honors College Dean Search Committee, 2008
Member	
Member	Criminal Justice Search Committee, 2013-2014
	Center for Survey Research Director Search Committee, 2010-2011
Member/Chair	Graduate Training and Fellowship Committee, Graduate Training Program in Discipline-Based Scholarship in Education, Indiana University, 2001-2008
Member	Karl F. Schuessler Institute for Social Research Sociological Research
	Practicum Study Director Search Committee, 2011
Member	Women in Science Program Social Science Research Award Committee, 2007
Member	AI Affairs Committee, Bloomington Faculty Council, 1998-1999
Member	University Graduate School Loan and Academic Progress Review
	Committee, 1999
Member	Indiana University Graduate Council, 2000-2003
Member	Nominating Committee, Indiana University Graduate Council, 2004
Member	Review Committee, IUPUI Graduate Review Program
Member	Scholarship of Teaching and Learning Steering Committee, 2003-2011
Member	Roundtable on Doctoral Education, Indiana University and Woodrow
	Wilson Foundation, 2001-2002
Member	School of Social Work Interdisciplinary Advisory Group, 2000-present
Member	Gretchen Kemp Teaching Fellowship Selection Committee, Indiana
Wiember	University Journal School, 2003-2004
Advisor/Sponsor	CIC Summer Minority Research Opportunity Program, 1991-1993
Mentor	
	McNair Program, 1994, 2003, 2006, 2010 McNair Advisory Board, 2000, present
Member	McNair Advisory Board, 2009-present
Mentor	Minority Achievers Program, 1990-1991
Member	Indiana University Assessment Committee, 1994
Sociology Liaison	Advanced College Project, 1993-present
Adjunct Member	Gay, Lesbian, and Bi-sexual Anti-Harassment Task Force, 1995-1999
Member	FACET (Faculty Colloquium on Excellence in Teaching), 1993-present
Board Member	Center for Survey Research, 1988-1994
Instructor	Indiana University Summer Groups Program, 1990-1993
Panel Chair	33rd György Ránki Hungarian Chair Conference

Professional Service/Affiliations

Professional Service	
Vice President-Elect	American Sociological Association, 2012-2013
Vice President	American Sociological Association, 2013-2014
Past Vice President	American Sociological Association, 2014-2015
Deputy Editor	American Sociological Review, 2006
Deputy Editor	Journal of Health and Social Behavior, 2009-2010
1 0	
Deputy Editor	Sociology of Education, 1995-1998
Editorial Board	Social Psychology Quarterly, 2001-2002
Editorial Board	Sociology of Education, 1994-1995, 2008-2009
Editorial Board	Encyclopedia of Women and Work, 1992-1995
Editorial Board	American High Schools: An Encyclopedia, 2003-2007
Founding Editorial	Oxford Bibliographies Online, 2010-2011
Board	0 1101 a 212110g. apinto 0 11110, 2010 2011
Member	National Science Foundation Sociology Advisory Panel, 2009-2010
Member	National Science Foundation Dissertation Advisory Panel, 2002-2004,
	2006-2008
Member	Spencer Foundation Small Grants Advisory Panel, 2005-2007
Associate Principal	Time-Sharing Experiments for the Social Sciences, 2009-present
Investigator	
Member	General Social Survey Board of Overseers, 2015-2019
Member	2014 American Sociological Association Program Committee, 2012-2014
Member	2015 American Sociological Association Program Committee, 2013-2015
Member	Council, American Sociological Association, 2012-2015
Chair	
	Nominations Committee, American Sociological Association, 2013-2014
Member	Publications Committee, American Sociological Association, 2002-2005
Member	American Sociological Association Experts Database, 2012-present
Chair-Elect	Sociology of Education Section, American Sociological Association,
	2008-2009
Chair	Sociology of Education Section, American Sociological Association,
	2009-2010
Chair-Elect	Social Psychology Section, American Sociological Association, 2010-
	2011
Chair	Social Psychology Section, American Sociological Association, 2011-
Chun	2012
Secretary/Treasurer	Social Psychology Section, American Sociological Association, 1995-
Scorolary/ measurer	
N 1	
Member	Honors Program Advisory Board, American Sociological Association,
	2009-2011
Consultant/Member	Departmental Resources Group, American Sociological Association,
	2006-2008
Discussant/Presider	American Sociological Association, 1987, 1988, 2003, 2007, 2008, 2009,
	2010; Eastern Sociological Society, 2003
Co-Organizer:	Teaching Workshop: Teaching Sociology of Mental Health and Illness,
00000	American Sociological Association, 1999
Organizer	Professional Workshop for Young Scholars in Sociology of Education,
Organizer	
Orgonizar	Sociology of Education Section, American Sociological Association, 2003
Organizer	Sociology of Education: Recent Research and Policies Challenges"
	Session, Eastern Sociological Society, 2003
	21

Organizer	Career Workshop: Preparing for Graduate School, American Sociological										
	Association, 2003										
Organizer	Author Meets Critic Session, American Sociological Association, 2008,										
	2014										
Co-Organizer	Work and Parenting in Gay and Lesbian Families Session, Work and										
	Family Research Network, 2014										
Co-Organizer	Graduate Director Workshop, American Sociological Association, 2014										
Chair	Lifetime Achievement Award Committee, ASA Section on Sociology of										
	Emotions, 2011-2012										
Member	Cooley-Mead Award Committee, ASA Social Psychology Section, 2004-										
	2005, 2008-2009, 2013-2014										
Chair	Cooley-Mead Award, Committee, ASA Social Psychology Section, 2009-										
	2010, 2014-2015										
Member	David Stevenson Graduate Paper Award Committee, ASA Section on										
	Sociology of Education, 2000-2001										
Chair	David Stevenson Graduate Paper Award Committee, ASA Section on										
Chun	Sociology of Education, 2003-2004, 2006-2007, 2008-2009										
Member	Willard Waller Outstanding Book Award Committee, ASA Section on										
wiemoer	Sociology of Education, 2002-2003										
Member	Willard Waller Outstanding Article Award Committee, ASA Section on										
Wiember	Sociology of Education, 2004-2005										
Member	Nominations Committee, ASA Education Section, 2013-2014										
Member	Nominations Committee, ASA Education Section, 2013-2014 Nominations Committee, ASA Section on Sociology of Family, 2002-										
Wennoer	2003										
Member	William J. Goode Book Award Committee, ASA Section on Sociology of										
	Family, 2011-2012										
Member	John F. Schnabel Distinguished Contributions to Teaching Award										
	Selection Committee, North Central Sociological Association, 2011										
Member	External Review Committee for the Department of Sociology, University										
	of Massachusetts, 2011										
Member/Chair	External Review Committee for the Department of Sociology, Dartmouth										
	College, 2013										
Member	Grawemeyer Award in Education External Review Committee, 2011-2012										
Affiliated Faculty	Center for Advanced Social Science Research, New York University,										
	2000-2003, 2009										
Visiting Scholar	New York University, 2000-2003, 2008-2009, 2011-2012										
Founding Member	Teaching and Learning Introductory Sociology (TLIS) Network										
Founding Member	Work and Family Researchers Network										
Member	NLSY Postsecondary Research Network										
Member	Sociological Research Association										
Member	GSS Mental Health Module Working Group, 1995										
Member	American Educational Research Association										
Member	American Sociological Association										
Member	Southern Sociological Society										
Member	National Council on Family Relations										
Member	North Central Sociological Association										
Member	Midwest Sociological Society										
Member	Council on Contemporary Families										

Board Member Council on Contempory Families, Board of Directors, 2011-2012 Sociologists for Women in Society Member Acta Sociologica, American Journal of Sociology, American Reviewer: Sociological Review, Contexts, Corwin Press, Demography, Elsevier, Gender and Society, Harvard University Press, Holt, Rinehart and Winston, Indiana University Press, Journal of Family Issues, Journal of Family Studies, Journal of Gerontology: Social Sciences, Journal of GLBT Family Studies, Journal of Health & Social Behavior, Journal of Marriage and Family, McGraw Hill, McMillan, National Science Foundation, Nelson Hall, Oxford University Press, Pine Forge Press, Population Research and Policy Review, Psychology and Health, Public Opinion Quarterly, Qualitative Sociology, Research in Social Stratification and Mobility, St. Martins' Press, Science, Social **Currents, Social Forces, Social Problems, Social Psychology** Quarterly, Social Science Journal, Social Science Research, Sociological Compass, Sociological Focus, Sociological Methods & Research, Sociological Perspectives, Sociological Quarterly, Sociology of Education, Spencer Foundation, Teaching Sociology, University of California Press, W. W. Norton, Wadsworth Publications

REFERENCES

Available upon request.

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Exhibit C

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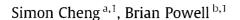
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journal homepage: www.elsevier.com/locate/ssresearch

Measurement, methods, and divergent patterns: Reassessing the effects of same-sex parents $\stackrel{\star}{\sim}$



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Keywords: Children Family structure Methodology Same-sex parenting Sexuality

ABSTRACT

Scholars have noted that survey analysis of small subsamples—for example, same-sex parent families—is sensitive to researchers' analytical decisions, and even small differences in coding can profoundly shape empirical patterns. As an illustration, we reassess the findings of a recent article by Regnerus regarding the implications of being raised by gay and lesbian parents. Taking a close look at the New Family Structures Study (NFSS), we demonstrate the potential for misclassifying a non-negligible number of respondents as having been raised by parents who had a same-sex romantic relationship. We assess the implications of these possible misclassifications, along with other methodological considerations, by reanalyzing the NFSS in seven steps. The reanalysis offers evidence that the empirical patterns showcased in the original Regnerus article are fragile—so fragile that they appear largely a function of these possible misclassifications and other methodological choices. Our replication and reanalysis of Regnerus's study offer a cautionary illustration of the importance of double checking and critically assessing the implications of measurement and other methodological decisions in our and others' research.

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1. Introduction

Research communities in the social sciences have long been aware that methodological decisions can potentially affect the inferences of survey research (Firebaugh, 2008). This threat to the validity of research inferences is particularly challenging for studies that focus on a very small group of interest, such as some racial minority groups, atypical families, and same-sex couples (Cheng and Powell, 2005, 2011). In such research, even a tiny percentage of measurement errors for the small subsamples could powerfully distort patterns from the surveys, and other methodological choices can similarly affect empirical results. When research findings from these analyses are used as policy guidelines, the threat goes even beyond scientific communities. It therefore is incumbent for scholars to critically assess the implications of these decisions in their own work as well as that of others.

In this paper, we use a recent article by Regnerus (2012a) in *Social Science Research* as an example to illustrate these points. In "How different are the adult children of parents who have same-sex relationships? Findings from the New Family Structures Study," Regnerus (2012a) introduces the New Family Structures Study (NFSS) and, with these data,

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[^] An earlier version of this paper was presented at the 2013 annual meetings of the American Sociological Association. We appreciate the suggestions of Kathryn Lively and Michael Yacavone.

¹ Authors are listed in alphabetical order; the authors' contributions are equal.

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S. Cheng, B. Powell/Social Science Research 52 (2015) 615-626

compares the outcome profiles of 236 adult children whose parents reportedly had a same-sex romantic relationship with the profiles of those who grew up in other family types, including "intact biological families," stepfamilies, and single-parent families. Examining 40 social, emotional, and relational outcomes, Regnerus concludes that adult children of same-sex parents generally fare less well than those from intact two-biological-parent families.

It is an understatement to describe this article as eliciting a great deal of interest. This is one of the most visible and controversial articles to appear in this journal—or, more broadly, social science journals—in recent history. It has been vigorously defended and critiqued in this journal (Amato, 2012; Barrett, 2012; Eggebeen, 2012, Gates et al., 2012; Schumm, 2012), other academic journals and forums (Perrin et al., 2013), the courts (Brief of Amicus Curiae American Sociological Association, 2013; Brief of Amici Curiae Social Science Professors, 2014), and the public sphere (Davidson, 2012, Gallagher, 2012; Luscombe, 2012). Defenders often point to what they see as the high quality of the data, which, they argue, "deserve[s] to be considered the gold standard in this field" (Spingg, 2012). Osborne (2012), identified as "key collaborator" on the NFSS website, praises the study for being "one of the most comprehensive and rigorous studies that has been conducted in this field to date" (p. 779). In contrast, critics call into question, among other things, the study design, the quality of the data, review process, and even the motives of the author and funders of this project (Cohen, 2013; Perrin et al., 2013, Sherkat, 2012). Both sides of the debate often characterize the other side as non-scientific and overly political.

We take a different approach in evaluating the NFSS and the findings reported by Regnerus. We agree with Smith (2012) who, in challenging critics of Regnerus, contends that "science already has its own ways to deal with controversial research results. Studies should be replicated. Data sets should be made public and reanalyzed. . Eventually the truth comes out. By those means, Regnerus might be shown to have been wrong or perhaps be vindicated. That is how science is supposed to work." To his credit, Regnerus has made his data publicly available and, in fact, notes that a goal of his original article is to "serve[s] as a call" (2012a, p. 766) to analyze NFSS. We have accepted this invitation to reanalyze these data. In this article, we report on the results of this reanalysis.²

The fact that Regnerus's findings are so markedly different from those reported by previous studies suggests that scholars and policymakers should more carefully scrutinize his analysis before reflexively accepting—or rejecting—its conclusion. To explain his different findings, Regnerus suggests that, "[t]he answer lies in part with the small or nonprobability samples so often relied upon in nearly all previous studies—they have very likely underestimated the number and magnitude of real differences between the children of lesbian mothers (and to a lesser extent, gay fathers) and those raised in other types of households" (2012a, p. 756).

We are hesitant to accept this explanation without further examination of the data because, as others have noted in their reanalyses of other national surveys (Bearman and Parigi, 2004; Fischer, 2009), findings from empirical analyses often are also affected by other factors, including the conceptualization and operationalization of key concepts and other methodological decisions made by the researcher in the research process (Firebaugh, 2008). These considerations are directly relevant to the comparison of same-sex parent families and other family forms because analyses of small-population groups using large survey data are particularly sensitive to different analytical decisions (Black et al., 2007; Cheng and Powell, 2005, 2011; Gates and Steinberger, 2009, O'Connell et al., 2010). In the case of Regnerus's study, the NFSS data are new, the measures of family types and respondents with same-sex parents are somewhat novel and potentially problematic, and the analytical decisions made by Regnerus arguably are not entirely consistent with the general practices in the field. In revisiting the Regnerus article and reanalyzing the NFSS, we ask one fundamental question: *To what extent are the patterns reported by Regnerus attributable to the conceptualization and operationalization of family types—in particular, gay/lesbian/bisexual families—and other analytical decisions?*

Our empirical reexamination of Regnerus's analysis is designed to answer this question. More broadly, it underscores the importance of, in the words of Fuebaugh (2008), "build[ing] reality checks into your research" (p. 64)—in particular, "internal reality checks" (p. 65), checks on "dubious values and incomplete data" (p. 65), and checks on "consistency in conceptualization and measurement" (p. 69)—and the serious implications of not attending to these concerns (Bearman and Parigi, 2004; Cheng and Powell, 2011; Fischer, 2009). In addition, it highlights the general challenges that social scientists continue to face in our examination of same-sex parent households and other emerging family forms using nationally representative datasets (Cheng and Powell, 2005).

Below, we first discuss the NFSS and Regnerus's measures of family types using the data, and then highlight the difficulties in using the NFSS to accurately distinguish between family types, using adoptive households and intact biological families as illustrations. We then discuss the challenges in accurately identifying same-sex families. We follow this discussion with a closer look at the NFSS survey and demonstrate the potential for misclassifying a non-negligible number of respondents as having been raised by parents who had a same-sex romantic relationship. Finally, we assess the cumulative implications of these possible classification errors and other methodological considerations from various stages of the research process by reanalyzing the NFSS in seven steps.³

These reanalyses provide a "reality check" regarding the conclusions from the original Regnerus study. The patterns from these reanalyses offer evidence of the fragility of these conclusions—so fragile, in fact, that they are due primarily to the methodological choices made by Regnerus. Or to put it another way, when equally plausible and, in our view, preferred

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² In the spirit of full disclosure² one of the authors declined an invitation by Regnerus to participate as a paid consultant on the NFSS sampling strategy and measurement.

³ For an insightful, complementary reanalysis that focuses primarily on same-sex couple households, see Rosenfeld (2012),

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methodological decisions are used, a different conclusion emerges: adult children who lived with same-sex parents show comparable outcome profiles to those from other family types, including intact biological families. That this revised conclusion is consistent with those reported in most previous studies and inconsistent with Regnerus's findings illustrates how the accumulation of research decisions throughout the research endeavor—and, in particular, measurement decisions that overlook inconsistent information within the data—may lead to questionable conclusions, even with a population-based large sample.

2. The New Family Structures Study and measures of family types

As described in its website, the New Family Structure Study "is a comparative project which seeks to understand how young adults (~ages 18–39) *raised by* (our emphasis) same-sex parents fare on a variety of social, emotional, and relational outcomes when compared with young adults raised in homes with their married biological parents, those raised with a step-parent, and those raised in homes with two adoptive parents" (Regnerus, 2012b). The data collection was in two stages. In the first stage, a screener survey was used to identify family types that respondents were raised in, while in the second stage, a detailed survey was used to gauge, among other items, respondents' experiences in young adulthood. Regnerus differentiates this study from others in four regards: (1) it uses a national population-based sample instead of snowball or convenience samples; (2) it uses a larger sample than do most other studies of same-sex families; (3) it focuses on the current experiences and "lives of young adults between the ages of 18 and 39, but not about children or adolescents" (Regnerus, 2012a, p. 755); and (4) it includes a wide array of items intended to gauge "subsequent life outcomes for adult children" (Regnerus, 2012c, p. 1367).

In his first article using the NFSS data, Regnerus (2012a) notes that his study offers "statistical comparisons of them [respondents' adult outcomes] among eight different family structures/experiences of origin" (p. 755), including adoptive families, single-parent families, and stepfamilies. He focuses, though, on the distinction between "intact biological families" (IBF) and "lesbian mother" (LM) and "gay father" (GF) families. In multivariate analyses of 40 outcomes,⁴ he finds significant LM– IBF differences for 24 outcomes and GF–IBF differences for 19 outcomes. Differences in some of these outcomes are merely differences, not necessarily disadvantages: for example, whether the young adult identifies as entirely heterosexual and whether the young adult is in a same-sex romantic relationship. Recognizing that some of these outcomes may be more consequential than others, he emphasizes outcomes "that are obviously suboptimal" (p. 764), pointing to "education, depression, employment status, or marijuana use" (p. 764) as examples. Regnerus indicates that the goal of his article is not to identify the reasons behind the patterns he reports here. That said, he does express concern that families with two same-sex parents still exhibit "a diminished context of kin altruism (like adoption, step-parenting, or nonmarital childbirth), which have [sic] typically proven to be a risk setting, on average, for raising children when compared with married, biological parenting" (p. 765). In later writings, he, along with some fellow social scientists, refers to the "benefit from the unique parenting contributions of both men and women" (Billef of Amici Curiae Social Science Professors, 2014, p. 4).

The data collection efforts for this project are certainly impressive, especially with its large nationally representative sample,^{5,6} multiple outcomes covered, and attempts to identify different family structures. While some portray the NFSS and, in turn, the Regnerus analysis, as a gold standard in family research, we contend that a critical hallmark of any study is its ability to accurately measure its key variables of interest—in this case, the different family types.

In revisiting the NFSS, we were struck by the difficulties in unequivocally categorizing respondents by family type—or to put it another way, the challenges in developing valid measures of family type. For example, Regnerus relies on a screener survey to identify 101 adult respondents who were "adopted by one or two strangers at birth or before age 2." The restriction to respondents who were adopted at such an early date presumably is to ensure that any documented patterns for this group can be attributed to having been raised in an adoptive family since early childhood. Regnerus also notes the presence of "calendar' data from each respondent about their relationship to people who lived with them in their household (for more than 4 months) from birth to age 18, as well as who has lived with them from age 18—after they have left home—to the present" (2012a, p. 757). Regnerus acknowledges that these data are "only sparingly used" in his analysis, but affirms that ". . such rich data enables [sic] researchers to document who else has lived with the respondent for virtually their entire life up to the present" (2012a, p. 757).

These data are rich, and Regnerus deserves credit for collecting these complicated data. When we compare the responses from the calendar data to those from the screener survey, however, we notice that 9 of the 101 respondents report that they

⁴ Controls include respondent's age, gender, race/ethnicity, mother's education, family income while growing up, experience of being bullied in childhood, and state's legislative gay friendliness

⁵ Others have questioned Regnerus's reliance on internet surveys collected by Knowledge Networks, now GfK (Sheikat 2012); however, the quality of data collected from internet surveys completed by a nationally representative, probability-based survey web panel is comparable to that of other data collection efforts that also rely on random digit dialing (Chang and Kiosnick, 2009) Despite some limitations to internet surveys of this type—or, for that matter, surveys in general—it bears pointing out these surveys have been productively used in sociological scholarship on family and relationships (Doan et al. 2014. Rosenfeld and Thomas 2012. Seltzer et al. 2012).

⁶ Response rates from Knowledge Networks/GfK are similar to the industry norms. That said, the "65% within survey response rate" reported by Regneuus (2012a p 756), although technically accurate, might mislead readers into believing that the overall response rate for NFSS is very high. As reported by others who have analyzed data collected by Knowledge Networks/GfK, the cumulative response rate—which takes into account not only within survey response rate but also recruitment rate and demographic profile completion rate—typically is less than 15%, a rate that still is consistent with those from comparable data collection efforts (Rosenfeld and Thomas 2012. Seltzei et al. 2012).

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actually had only lived with their adoptive parents for a very short period of time: 4 for less than a year, 2 for one year, 1 for two years, and 2 for three or four years. In one case, for example, the respondent reports that she lived with her adoptive father for one year only (when she was 1) while also living with her biological mother from birth until she was 16 years old. In another case, the respondent reports having lived with his adoptive mother for three years and then his biological mother for the next 15 years. Technically speaking, these 9 cases may be consistent with Regnerus's description that the respondents were "adopted by one or two strangers at birth or before age 2"; however, if we are to take the responses seriously (an issue we return to shortly), then the inconsistencies between the screener survey and the calendar data should give us concern over whether these cases are accurately classified as "adoptive families."⁷ These concerns, however, are not limited to adoptive families, but also extend to the descriptions and classifications of stepfamilies, single-parent families, and, perhaps most importantly as we discuss shortly, "lesbian mother" and "gay father" families in the Regnerus analysis.

Even in the absence of inconsistencies in responses, there is the potential to miscode or misclassify family types. For example, Regnerus's operationalization of "intact biological families" is puzzling. Of the 2988 respondents included in Regnerus's analysis, 1195 answer "yes" to the screening question "Did you live together with BOTH your biological mother AND biological father <u>the entire time</u> from when you were born until age 18 (or until you left home to be on your own)?" (original emphases). Yet, Regnerus chooses to include only 919 of these respondents in the category of "intact biological family" (IBF). Excluded from this category are the 116 respondents whose parents were not married at the time of the interview, which he places in the category "divorced later or had joint custody."

To the extent that the NFSS is intended to, among other things, examine the outcomes of "young adults (ages 18–39) who were *raised* (emphasis ours) in different types of family arrangements" (Regnerus, 2012a, p. 752), the distinction between these two groups—which, in the absence of other information, appear to be virtually identical in structure during the respondents' childhood—cannot be reconciled with the goals of the project.^{8,9} Where these two groups may differ is in the quality or functionality of the marriage—characteristics that may affect the well-being of children. For example, parents who divorced later may have had an unhappy marriage but nevertheless stayed married until their children had left their home. If so, the decision to exclude this group from the category IBF could overstate the positive consequences of being raised in this family type, especially compared to being raised in other family types.

3. Challenges in identifying parents who had a same-sex romantic relationship

The preceding discussion underscores the challenges in identifying children who were raised in adoptive families and intact biological families. Our primary concern, however, is in regards to Regnerus's classification of same-sex parent families. Regnerus (2012a) identifies children raised by same-sex parents on the basis of responses to the question, "From when you were born until age 18 (or until you left home to be on your own), did either of your parents <u>ever</u> have a romantic relationship with someone of the same sex?" If respondents responded affirmatively to this question, they were then asked, "Did you ever live with your mother/father while s/he was in a romantic relationship with another woman/man?"

Even if we are to accept Regnerus's position that these items accurately measure "LM (child of a lesbian mother), and GF (child of a gay father)" (2012a, p. 758)—a position that we challenge below—it is telling that these questions apparently were *not* asked of all respondents in the NFSS. Notably exempt from answering these questions, as indicated in the screener survey and the subsequent survey,¹⁰ were respondents who reported living "together with BOTH your biological mother AND biological father the entire time from when you were born until age 18 (or until you left home to be on your own)." In other words, Regnerus's analysis is based on the assumption that parents in intact biological families never have "romantic relationships with someone of the same sex" while the parents are married—an assumption that is highly difficult to defend.¹¹ To the extent that he equates lesbian and gay families with the parental relationship history (during the respondents' childhood), Regnerus underestimates the number of children from LM and GF households and, in turn, overestimates the number of children of IBF households.

⁷ We take a conservative approach in identifying these questionable cases of "adoptive families." Not included among these 9 cases, for example, is a respondent who claims to have always (from birth until leaving home) lived with her biological mother, adoptive mother, adoptive father, grandmother, grandfather, and foster parents

⁸ Respondents who fall into these two categories apparently were not asked to complete the calendar data Instead, the calendar data for these two groups are imputed solely on the responses to the screener survey, that is, as described in the NFSS survey, these respondents are "automatically assign[ed] 'always' to 'biological mother' and 'always' to 'biological father ''' In other words, in contrast to the respondents from other family types, there is no mechanism to check for consistency, or reliability, in responses for these two groups or to identify other adults who may have lived in the household

⁹ Perhaps the only way to justify this distinction is to point to the problematic nature of the screening question. Although the question asks whether respondent lived "together with BOTH your biological mother AND biological father," it is possible that a small number of respondents might have interpreted this to mean being raised by each parent but in a joint custody arrangement. Surprisingly and unfortunately, the NFSS does not ask when respondents' parents were divorced. In the absence of this potentially confirming or disconfirming information, the most intuitive coding, especially given the phrasing of the question, is to include the 119 respondents in the IBF category.

¹⁰ It is possible that Regnerus was reluctant to ask this question in the screener survey because of concern that doing so would result in a lower response rate from the IBF sample. That said, as in the case of other potentially controversial items, it could have been asked in the subsequent survey or, following protocol regarding potentially controversial items, could have been included in the end.

¹¹ Nor does the screener survey or the latter survey ask whether parents in intact biological families ever had a romantic relationship with an opposite-sex partner other than one's spouse.

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After examining the data, however, we see a potentially larger threat to validity at hand that Regnerus also may have *over-estimated* the number of children from LM and GF households and, in turn, misidentified respondents from other family types as coming from LM and GF households. In replying to critics, Regnerus (2012c) defends his reliance on respondents' reports of parental relationships, but acknowledges that these measures do not necessarily correspond with respondents' assessments of parental sexual orientation or parental assessments of their own behavior. What he does not acknowledge, however, is the possibility of inaccuracy even in respondents' reports of parental relationships. Like all studies that rely on surveys, Regnerus's study assumes that respondents interpret survey questions in the same way that the researcher intended them to be interpreted. Yet, there is ample evidence to question this assumption. In our own work, for example, we have documented the challenges that some individuals face and mistakes they make in understanding and interpreting questions regarding racial identification (Cheng and Powell 2011), and, more directly relevant to the question of same-sex households, words such as heterosexual, bisexual, civil unions, and "two women (two men) living together as a couple" (Powell et al. 2010 2015). Similarly, Savin Williams and Joynei (2014) attribute the large number of "dubious" cases of gay, lesbian, and bisexual adolescents in the Add Health data set to confusion over the meaning of "romantic attraction"—as well as to mischievous joke-sters who are not truthful or careful in their responses regarding their sexuality.

The potential for misconstrued interpretations—and, therefore, threats to validity—is among the reasons that so many scholars conduct cognitive interviews or pretesting before fielding their surveys. It is unclear, though, whether Regnerus followed this standard, or at least preferred, practice. Even if he did, it would be difficult to detect misinterpretations—or even careless or cavalier responses—made by a very small percentage of respondents. Fortunately, for most studies, these small errors likely have little impact on key patterns coming from surveys. Unfortunately, for studies focusing on a very small group of interest—in this case, people who were raised in same-sex parent households—even a tiny percentage of error could powerfully distort patterns from the surveys.

Researchers using nationally representative datasets to study same-sex parent families have routinely checked for potential coding errors or inconsistent cases in their data. For example, in their analysis of the National Longitudinal Survey of Adolescent Health (Add Health) (Hamis and Udry 2010), Wainlight et al. (2004) identified 44 cases of adolescents in same-sex families—a small sample size that Regnerus critiques for minimizing the likelihood of finding significant differences between same-sex and other families. To their credit, though, they also minimized the number of misclassified cases of adolescents in same-sex families by checking for consistency in parental reports of their sex and family relationship. Doing otherwise would have markedly overestimated the number of same-sex parental households as reported in the Add Health codebooks, a cross-check of parental responses identified 339 "male mother figures" and 45 "female father" figures

Similarly, programmers of the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) performed extensive triangulation checks to eliminate the inconsistent coding of same-sex parent families and other family types for example, families with a "male mother" or a "biological mother over age 80" (Potter 2012 Tourangeau et al 2006) Several years ago, we too contemplated using the National Education Longitudinal Study of 1988 (NELS) to study children from gay/lesbian households But in looking more closely at the parental and adolescent responses of the 69 cases that initially appeared to fit this description, we concluded that the high rate of discrepancies in responses (over 80%) presented an insurmountable problem of reliability and, in turn, of validity that effectively precluded any meaningful examination of same-sex families (Cheng and Powell 2005)

In the most publicized example of the misidentification of same-sex households, the US Bureau of the Census retracted its 2010 estimates of same-sex couple households. The initial estimates were derived from two questions from the Census relationship to householder and the sex of each person. The Census Bureau subsequently discovered that the number of same-sex couple households estimated from these two questions could be greatly inflated if a very small fraction of opposite-sex couples checked the wrong box for the sex of one's partner or spouse (O Connell 2011). In correcting the errors, ¹² the Census Bureau lowered its original estimate of 901,997 same sex couple households to 646,464—a reduction of 28%. The drop in the number of same sex married couples was even more dramatic, from 349, 377 to 131,729—a reduction of 62%.

4. Revisiting the Regnerus categorization of LM and GF households

In light of these documented cases of errors that appreciably inflated the number of same-sex couple households, it is untenable to automatically assume that NFSS is immune from challenges to validity. Still, Regnerus does not check for, or apparently even consider the possibility of, inconsistent, uncertain, and unreliable cases in his data—even though some other items in the NFSS offer some limited means to assess this possibility. For example, Regnerus (2012c) acknowledges that, according to the aforementioned calendar data, over half of the respondents never lived with a parent's same-sex partner, but fails to mention that many respondents—approximately one-third—also *never lived with their same-sex parents* or *lived with them very briefly*. As seen in Table 1, of the 236 respondents classified as being raised by a gay father (GF) or lesbian mother (LM), 24 (15 GF, 9 LM) report they had never lived with the parent for only two to four years.

¹² See O Connell 2011 for discussion of the techniques used to correct for these discrepancies

¹³ The error rate in overestimating same sex couple households and married same-sex couple households for the 2000 Census is even higher 40% and 83% respectively

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Table 1

Numbers of years respondents reported living with a same-sex parent or same-sex parent's partner, NFSS.

	Gay fa	ther (GF)	Lesbian n	nother (LM)			
	N	%	N	%			
A Number of years with a same-	sex parent						
Never	15	20.5	9	5.5			
1 year	18	247	16	9.8			
2-4 years	9	12.3	9	5.5			
More than 4 years	31	42.5	129	79.1			
Total	73	100 0	163	100.0			
	Father's	boyfriend	Mother's girlfriend				
	N	%	N	%			
B Number of years with same-se	x parent's partner						
Never	56	76 7	82	50 3			
1 year	12	16.4	29	17.8			
2-4 years	me-sex parent's partner 56 767		32	19.6			
More than 4 years	2	2.7	20	12.3			
Total	73	100 0	163	100.0			

Note-Analyses are restricted to the 236 LM/GF respondents identified in Regnerus (2012a).

While one should not discount the potential influence of non-residential parents and one should be cautious in identifying the exact number of years that a child needs to live with a parent to be considered raised by that parent, it is difficult to reconcile these patterns with Regnerus's assertion that the 236 respondents "were *raised* (emphasis ours) by parents that had a same-sex relationship." (2012a, p. 755).

Upon closer inspection of the calendar data and other responses, we discovered additional inconsistencies that call into question the coding of a sizeable number of the 236 LM and GF respondents. To identify the inconsistencies, each coauthor examined each case independently. A summary of our reanalysis, which displays only those cases in which the coauthors' ratings correspond, is provided in Table 2.

As a standard procedure of data analysis, we begin by first detecting 9 cases with highly unlikely or potentially unreliable and, in turn, invalid responses to other questions in the survey. The most blatant example of highly suspicious responses is the case of a 25 year-old man who reports that his father had a romantic relationship with another man, but also reports that he (the respondent) was 7-feet 8-inches tall, weighed 88 pounds, was married 8 times and had 8 children. Other examples include a respondent who claims to have been arrested at age 1 and another who spent an implausibly short amount of time (less than 10 minutes) to complete the survey.¹⁴ These cases are akin to the aforementioned jokesters in the Add Health data set (Savın-Wıllıams and Joyner, 2014) and also are consistent with ongoing concerns regarding truthfulness and satisficing in internet surveys (Baker et al., 2014).

After identifying these 9 cases, we compare responses in the screener survey with calendar responses in the following survey and locate an additional 53 respondents who report that they lived with their lesbian mother or gay father for a year or less.¹⁵ We then find 20 other respondents whose answers in the calendar data and screener survey appear inconsistent or improbable.¹⁶ Among these are:

- 1. Four respondents who report that they lived with their biological parent, that parent's opposite-sex partner (i.e., respondent's stepparent), *and* that parent's same-sex partner in the same year.¹⁷
- 2. Eight respondents who report that they lived with mother's girlfriend or father's boyfriend while the mother/father was absent in the family. That the biological parent also lived with an opposite-sex (step)parent, never lived with both the respondent and alleged same-sex partner at the same time, and/or was absent in the family suggests a good possibility that the "boyfriend" or "girlfriend" figure is potentially a close, non-romantic friend rather than the parent's partner.
- 3. Eight respondents who show various degrees of inconsistencies in their responses to calendar data and in other survey questions. For example, one respondent reports having *always* lived alone but also claims to have *always* lived with mother, father, and two grandparents. Another two respondents report that during their childhood, their mother had a same-sex relationship but also report that they *always* lived with mother but *never* lived with the mother while she had a same-sex relationship.

 $^{^{\}rm 14}$ According to the codebook, the median time to complete the main survey was 34 min.

¹⁵ Of these 9 cases, a few also report that they lived in a LM or GF household for a year or less, thereby explaining the seeming discrepancy between the 53 cases reported here and the 58 cases reported in Table 1.

¹⁶ It is possible, of course, that the respondents were inaccurate when completing the calendar data. This possibility, however, would place Regnerus in the paradoxical and indefensible position of defending the accuracy of one section of the NFSS by discounting the accuracy of another section.

¹⁷ There is a possibility that within the same year the parent switched partners, however, this possibility is slight given other problematic responses among these four cases (e.g., regarding income, household size, length of time to complete the survey). Of note, in each case the respondent reports living with the parent's same-sex partner in only one year.

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Table 2	
Potential unreliable, inconsistent, and uncertain cases, NFS	5.

	Ν	%	Cum N	Cum %
Unreliable and inconsistent cases				
Unreliable responses	9	3.8	9	3.8
Lesbian mother (LM) in household for a year or less	23	9.8	32	13.6
Gay father (GF) in the household for a year or less	30	12 7	62	26 3
Inconsistent responses in screener survey and calendar data	20	8.5	82	347
Uncertain cases	6	2.5	88	37.3
Same-sex parent minor roles	15	64	103	43.6
Total	103	43.6		

Note-Analyses are restricted to the 236 LM/GF respondents identified in Regnerus (2012a)

Taken together, these 82 cases account for *over one-third* (34.7%) of the 236 respondents categorized by Regnerus as LM or GF. Although this figure might include isolated cases in which inconsistencies merely reflect very complex family situations, this slim possibility does not match up with available information in the NFSS. In fact, this figure may be a conservative estimate of the rate of misclassification of respondents. In 6 cases, for example, the responses are sufficiently problematic or inconsistent that without additional information that was unfortunately not provided in the survey it is difficult to conclude with confidence that they actually had lived in a LM or GF household.¹⁵ An additional 15 of the remaining respondents report having lived in a LM or GF household for only 2–4 years—such a short period of time that it is uncertain whether these respondents are most accurately defined as having been "raised" by parents that had a same-sex relationship. If one includes these cases, the rate increases to 43.6%—a figure that still is consistent with the error rates detected, and then adjusted for, in the Census and other national surveys mentioned earlier in this paper.

5. Implications of methodological decisions and alternative coding

We readily acknowledge that some of our coding decisions are open to different interpretations and can be debated. What cannot be debated, however, is that there are uncertainties and potential errors in Regnerus's operationalization of LM and GF respondents and that there appears to be little attempt on Regnerus's part to uncover these possible classification errors or, more importantly, to assess the implications of the inclusion of cases that at minimum are contestable. As scholars have suggested elsewhere, in the analysis of small-subsample groups, even a small number of misidentified cases may alter the conclusions researchers draw from their data. Below we evaluate the extent to which the patterns reported by Regnerus are contingent on his coding and other methodological decisions.

We begin by replicating Regnerus's analysis (2012a), and then assess the implications of using alternatives to Regnerus's analytical decisions—alternatives that are common practices in social scientific research. Next, we consider how the potentially miscoded cases affect outcome differences between children raised by same-sex parents and children raised by intact biological families. Finally, we repeat this analysis but restrict the sample to children from same-sex couple households—i.e., households in which the same-sex partner ever lived with the child. These results are summarized in Table 3, in which we identify LM–IBF and GF–IBF differences that are significant at the .05 level at each step of our reanalysis. This table is restricted to the 32 of the 40 outcome variables that were significant at any point in Regnerus's multivariate analysis or in ours.

5.1. Correcting analytical considerations

We begin with a baseline model that replicates Regnerus's (2012a) original analysis. As others have noted, Regnerus did not report the regression coefficients or standard errors in the article (Perrin et al., 2013). Nevertheless, we were able to replicate the reported mean scores of the outcome variables for IBF, LM, and GF. Of the total 40 outcome variables (as noted above, only 32 are shown in Table 3), LM is significantly different from IBF in 24, and GF is significantly different from IBF in 19 (Table 3, first row). Since our attempts to replicate are successful, this baseline model allows us to assess the implications of alternative analytical and measurement considerations and corrections.

In the second step, we adjust for four coding decisions that either are errors or have a plausible alternative:

- 1. In two binary outcomes, refusals to respond to the question were coded as "0" when they should be coded as missing.
- 2. For the question about voting in the last presidential election, respondents who were not old enough to vote at the time of the election were included in the analysis when they should have been coded as missing.
- 3. Several outcomes measures have identifiable units (e.g., household income in thousand dollars), but were coded as categorical and analyzed using OLS. We recode these variables by their identifiable units.

¹⁸ Among these are respondents who lived with both parents and then lived with their father and stepmother and with their mother and stepfather.

Table 3Multivariate analyses of the outcome differences between children raised by same-sex parent families and those living with both biological parents until age 18.

			Family received welfare growing up 2	on public	Currently employed e full-time 4		Votud in lasi presidential election 6	recently	at		same-sex romantic relationship	married/cohabiting	Has Ever ever Louches had sexually an by pare STI adult 12 13	have see		of-origen safety/	of-origin negative	biological mother	depression	(depend)	 Current relationship quality index 77	relationship is in trouble	of	hrequency of smoking 25	of watclung TV	frequency of having been arrested 27	Frequency pled guilty to non- minor offense 28	N of female sex partners famong women) 79	sex parimers	sex partners	N of male sex partners (among men) 37
Replicate	LM	,		,	,	×			,	,		,	~ <i>,</i>		,								,	,						,	x
	GL		•				•	•		•			*	*		•	•	•	*		•	•		•		~	*	*			•
	LM				x							x	~ ×		×								,							×	,
far outcome	GF		•					*		•			~		*	*		~			*	¥							*	,	,
measure																															
	LM CF			·					•				• •			•				*						•	•	•			,
	GF IM		,					^						*		÷		<u>^</u>			,	•									,
supplementary controls			,	•				*		,				¢	×							*						•			
impute missing	LM				¥					x .		,		*		×										*	*				
values in controls	GF							٠		•			•	·		•	•											·		•	
Add potential	LM									,		*				*										1					
coding error controls	GF		•																										*	*	
	Same-		,							•	,					^															
the calendar data	sex																														

Note—LM signifies lesbian mother; GF signifies gay father; same-sex couple signifies LM or GF households in which the respondent lived with both the parent and the parent's same-sex partner for at least one year. This table does not include 8 of the 40 outcomes in which neither Regnerus (2012a) nor we found significant LM or GF effects. "×" indicates that the difference from IBF (intact biological families) is statistically significant at the .05 level.

4. The coding of number of sexual partners was not consistent with other comparable items in the study, which Regnerus (2012a) coded as count variables. We correct for this inconsistency by recoding the number of sexual partners as count variables and using count models.

Coding decisions such as these underscore the importance of taking the time to double check all analyses and consider alternative coding of dependent variables. In this case, however, these adjustments have minimal effect on the outcomes. As shown in Table 3 (second row), these corrections actually increase the number of significant differences between LM and IBF from 24 to 25. They also, however, decrease the number of significant differences between GF and IBF from 19 to 16.

In the third step, we expand the category IBF to include all respondents who reported living together with both their biological mother and biological father from birth to age 18. As discussed earlier, Regnerus identified 116 respondents who fit this description but coded them as a separate category because their parents were no longer married at the time of survey. This coding decision is incompatible with Regnerus's goal of analyzing the influence of the family arrangements in which youths were raised and further complicates any causal claims regarding outcomes in adulthood. In fact, this coding decision appears to have artificially increased the LM–IBF and GF–IBF differences. As shown in Table 3 (third row), when the IBF category is expanded, the number of significant differences decreases (to 20 between LM and IBF and 12 between GF and IBF).

In the fourth step, we reconsider Regnerus's inclusion of controls in multivariate models. Regnerus commendably added controls (e.g., gender, age, level of mother's education) to make sure that any ostensible effects of family structure on "sub-sequent life outcomes for adult children" (2012c, p. 1367) are not a function of sociodemographic background of the respondent or respondent's family. We too add these controls but make two adjustments—one involving recoding and one involving the inclusion of other controls. We recode the measure of race/ethnicity so that instead of making a mere binary distinction between white and non-white respondents, we can distinguish among respondents who identify as white, black, Hispanic, multiracial, or other. As Regnerus's collaborator Osborne (2012, p. 780) recommended, "to be consistent with the rest of the analysis," the variable "family received welfare growing up"—which certainly is reflective of family socioeconomic status—should be counted as a control variable. Following this recommendation, we add this variable—along with biological mother's age and biological father's age at birth of child, region, and residential area (metropolitan = 1)—as additional controls.¹⁹ As shown in Table 3 (fourth row), doing so reduces the number of LM–IBF significant differences to 10, but does not change the number of GF–IBF significant differences.²⁰ This change suggests that Regnerus's analysis underestimates the effects of respondents' sociodemographic background, at least in regards to LM–IBF differences.

In the fifth step, we use multiple imputation techniques for missing values in control variables. There are different approaches to handling missing cases, but Regnerus's decision to delete missing cases contradicts his goal of maximizing the sample sizes of respondents who report being raised by same-sex parents.²¹ It also is at odds with the assessment of some applied statisticians that multiple imputation offers a more efficient use of existing data, produces more unbiased estimates in multivariate analyses, and thus is a preferred solution to the missing data problem (Acock, 2005; Allison, 2002; von Hippel, 2007). When the missing data are completely at random (MCAR) or at random (MAR), the use of multiple imputation increases the likelihood of significant patterns. This applies to the LM–IBF comparison, as the number of significant differences increases from 10 to 11 (Table 3, fifth row). When the MCAR or MAR conditions are not satisfied, however, listwise deletion could lead to biased estimates. In Table 3, we see that the use of multiple imputation actually further reduces the number of significant GF–IBF differences from 12 to 10, which suggests that the GF–IBF differences in the deleted cases are smaller than the differences in the other cases. Compared to Regnerus's original findings, the difference that these simple methodological modifications from these five steps—corrections that certainly are not atypical practices in the discipline—make is remarkable.

5.2. Controlling for misclassified and uncertain cases

As noted in our earlier discussion (and presented in Tables 1 and 2), we have strong reason to question Regnerus's classification of over one-third of the 236 respondents identified as living with LM or GF parents. Eighty-two (i.e., 34.7%) provided responses that appear unreliable, indicated that they had lived with their LM or GF for a very short period of time (i.e., one year or less), or offered other information that seriously undermines Regnerus's classification scheme. We also have some doubts about the classification of another 21 respondents (8.9% of the 236 cases) either because of insufficient information in the data set or because they reported living with their LM or GF parents for only 2–4 years. As a corrective, in the sixth step we keep Regnerus's measures of the 163 LM and 73 GF respondents in the model, but we also add two

¹⁹ Osboine (2012 also suggests that two other outcomes—whether one was "ever touched sexually by a parent/adult" or "ever forced to have sex against will"—could be considered candidates for additional control variables. Although the models reported in Table 3 do not include these controls, following her suggestion would further reduce the number of significant differences across family structure.

²⁰ Although Regnerus's use of "family received welfare while growing up" as a dependent variable is contrary to his stated purpose is to explore "the lives of *young-adult* children of gay lesbian parents" and "their experiences and accomplishments as adults" (2012a, p. 755), we retain this childhood experience as a dependent variable in Table 3 and include all other control variables in the multivariate models predicting this item.

²¹ In Table 1 of his original study, Regnerus (2012a) reports 27 missing cases in experience being bullied as a youth, 8% of missing cases in mother's education, and 22% of missing data in family income. The missing cases in mother's education and family income are kept in the analyses using dummy variables. This approach tends to result in biased estimates in multivariate analyses. To replicate the results in Regnetus (2012a), however, we also use a series of dummy variables (including dummy variables for missing cases) for mother's education and family income. We also found one respondent with missing value in gender, which is not reported in Regnetus (2012a).

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dichotomous variables for the 82 and 21 cases to control for the potential confounding effects of these misclassified or uncertain cases, respectively.

As shown in Table 3 (row 6), the number of significant LM–IBF differences is reduced to only 6 of the 40 outcome measures, while the number of significant GF–IBF differences is cut to only 3.^{22,23} Additional sensitivity analyses suggest that, in the case of LM respondents, the significant effects for 3 of the 6 outcomes—i.e., family security, frequency of being arrested, and frequency of pleading guilty—are so fragile that they disappear simply by deleting 1 or 2 cases from the analysis.²⁴ With 163 respondents in the LM category, this is not an issue of statistical power.

These results suggest that 3 of the 6 significant coefficients are highly sensitive to 1 or 2 influential cases. The only three outcomes in which a significant LM–IBF difference remains are: (1) family received welfare assistance growing up, (2) self-identification as entirely heterosexual, and (3) had affair while married/cohabitating (#2, #9, and #11 in Table 3). Of these, receiving welfare assistance in childhood is an outcome that, as we noted earlier and others have articulated elsewhere (Osborne, 2012), more appropriately should be considered a control variable and certainly is not an indicator of the respondents' experiences as adult. Similarly, whether a respondent self-identifies as homosexual or heterosexual should carry no advantageous or disadvantageous implications as an outcome measure (i.e., neither outcome should be seen as, in Regnerus's term, "suboptimal"); moreover, this pattern already has been confirmed in other studies (Stacey and Biblarz, 2001). If these two variables are excluded from the list, only 1 coefficient for LM respondents is statistically significant and could conceivably be seen as a possible disadvantage to adult children from LM households.²⁵

5.3. Assessing the consequences of living in a two-parent LF or GM household

The above analyses focus on the experiences of respondents who report living in a household in which at least one parent had a same-sex romantic relationship. Of the 236 respondents identified by Regnerus (2012a) as living in a LM or GF household, we identify only 51 that can plausibly be coded as being raised for *at least a year* in a *same-sex couple household*.^{26,27} The other respondents are better characterized as living in other family types. In Table 3, we further examine whether and how the outcome profiles of the 51 adult children respondents from same-sex-two-parent households differ from the profiles of those from IBF households. Here we find only four significant differences, although the differences either are not indicative of any LM/ GF disadvantage (i.e., sexual self-identification and having a same-sex romantic relationship) or do not gauge adult experiences (i.e., receiving public assistance in childhood and sense of safety and security while growing up). These patterns also are highly fragile and based in part on a couple of influential cases or outliers. Admittedly, even with a large overall sample, a subsample of 51 cases still limits the statistical power of the analysis. Still, the results are either inconclusive or suggestive that adult children raised by same-sex two-parent families show a comparable adult profile to their peers raised by two-biological-parent families.

6. Conclusion

The standard advice in survey research textbooks—and presumably in most courses on research methods—is that researchers should double-check their concepts, variables, and statistical analyses, and be initially skeptical of the results, even if they correspond with the researchers' expectations. Confidence increases if the patterns are sufficiently robust that they hold up with the use of different coding and control variables and additional analysis of potential outliers and influential cases. These "reality checks"—as recommended by Firebaugh (2008)— can both build up trust in the substantive conclusions and increase the credibility of our research community as a whole.

In this paper, we document the empirical implications of not following this recommendation by using Regnerus's recent article on adult children of same-sex parents as a case in point. Our reanalysis of the NFSS and the Regnerus study

²² Recognizing that there can be disagreement over which cases should be classified as misclassified or uncertain, we also considered alternative classifications that were more expansive or more restrictive. Models using these alternative classifications also resulted in a notable decrease in the number of significant LM-IBF and GF-IBF differences.

²³ Importantly, the controls for misclassified or uncertain cases are significant for 13 outcomes. For example, respondents in the misclassified category are significantly more likely to report they thought recently about suicide and were not close to their mother. They also indicated a higher frequency of drinking to get drunk. In addition, and perhaps even more importantly, they also rated higher on the CES-D depression scale, family-of-origin negative impact scale, and lower on the current relationship quality index. That this group significantly differs from others in the LM and GF sample, as well as others from the overall sample, offers further support for our contention that respondents in this group were misclassified by Regnerus

²⁴ Residual analysis showed significant proportions of cases as potential outliers (i.e., standardized residuals greater than 2.5 standard deviations) in five of the six outcomes (approximately 3–4%) These large numbers of potential outliers may signal the abnormality of the data, the failure of the statistical models to capture the important characteristics of the data, or both Because the patterns of outliers are likely to change with different model specifications, our sensitivity analyses are not restricted to outliers.

²⁵ As seen in Table 3, there are statistically significant GF-IBF differences for only three outcomes whether the family received welfare at some point in the respondent's childhood, the number of male sexual partners among female respondents, and the number of female sexual partners among male respondents As noted earlier, the first—whether the family received welfare at some point in the respondent's childhood—is more appropriately considered a control variable than as an adult outcome. The patterns regarding the other two outcomes suggest that respondents from GF households are more sexually active (i.e., more opposite-sex partners) than those from IBF households. The extent to which these differences imply a disadvantage or advantage is unclear

²⁶ In the supplementary analyses, we also differentiated between respondents from LM-couple and GF-couple families. Given the small number of cases, however, the analysis in Table 3 is based on 51 respondents from either type of household.

²⁷ For a detailed analysis of NFSS that focuses on same-sex couple parents, see Rosenfeld (2012).

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demonstrates how the accumulation of contestable research decisions—from the initial conceptualization and measurement in the questionnaires to inattention to inconsistences in survey responses to coding, modeling and treatment of missing cases—can result in a notably ambitious study that still yields disputable patterns. The methodological problems we describe not merely are those of a given research question or one particularly flawed article, but pose a risk more generally to inference from social surveys.

Our primary concern regarding the NFSS in this paper, however, is in the measurement—or what we believe to be the mismeasurement—of same-sex families. Although the number of households headed by same-sex parents have rapidly increased over the past few decades, their proportion in the population remains very small (O'Connell, 2011; Rosenfeld, 2010; Stacey and Biblaiz, 2001). Scholars have noted that the analysis of same-sex parent families is sensitive to researchers' analytical decisions, and even small coding errors can seriously compromise empirical conclusions from the research (Cheng and Powell, 2005; Gates and Steinberger, 2009). Our replication and reanalysis of Regnerus's study offer a cautionary illustration of this point.

Regnerus's analysis of the NFSS generated strong reactions—some laudatory, some scathing—from various stakeholders in debates regarding family structure and same-sex marriage, despite Regnerus's assertion in the article that "the study is intended to neither undermine nor affirm any legal rights" regarding same-sex marriage (2012a, p. 766). What the analysis did not generate, however, was much empirical analysis. In fact, in a subsequent amicus brief advocating for the "government to continue to recognize marriage as a man-woman union" (Brief of Amici Curiae Social Science Professors, 2014, p. 21), Regnerus and his coauthors note that "despite the attention and scrutiny, the study remains in print and subsequent analyses of the (now publicly-accessible) data have revealed no analytic errors" (Brief of Amici Curiae Social Science Professors, 2014, p. 19).

Our study is an exception. Taking seriously both Smith's recommendation to reanalyze the NFSS and Firebaugh's rule to "build reality checks" in social science research, we revisit Regnerus's analysis, identify serious problems in his decisions regarding measurement and models, and offer evidence that the empirical patterns showcased in his article are largely a function of these decisions. In reanalyzing the data, we find:

- 1. A non-negligible number of respondents were miscounted as having been raised in LM or GF households. The sources of these potential errors—which we estimate to exceed one-third of Regnerus's subsample of LM and GF—were the inclusion of individuals whose highly implausible responses to other questions call all of their responses into doubt, individuals who reported living in these households for a very short period of time, and individuals whose responses in the calendar data were incompatible with the original categorization of being raised in a LM of GF household.
- 2. A number of other methodological and modeling decisions made by Regnerus—decisions that have plausible alternatives that at minimum should be checked to assess the robustness of the patterns—appear to artificially inflate the differences between LM/GF and IBF households.
- 3. Once corrections to these potential coding errors and alternatives to these methodological choices are made, the putative disadvantage in the outcome profile of respondents from same-sex parent families (both single-parent LM and GF households and two-parent LM and GF households) decreases dramatically—with some of the remaining differences not "sub-optimal" (e.g., whether or not the respondent identifies as entirely heterosexual and the number of other-sex partners) or a function of one or two influential cases.

We do not claim that the coding we followed or other methodological choices we made are the only reasonable ones, but we do contend that for a pattern to be believable—especially those that are antithetical with the patterns found in nearly every other study on the same topic—it should hold up to empirical scrutiny and should withstand the use of different coding and alternative specifications.²⁸ Regnerus's analysis does not meet this core requirement. In turn, it does not provide sufficiently credible counterevidence to the longstanding body of scholarship that confirms minimal differences in the consequences of living with same-sex or opposite-sex parents.

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²⁸ We similarly believe that scholars must maintain equally high standards when assessing studies that reach different conclusions than Regnerus's. Reflecting this belief, we have been in the position of (successfully) recommending rejection of such studies that have relied on other data sets for the some of the same concerns that we have outlined in this paper.

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