ANNUAL REVIEWS

Annual Review of Law and Social Science

The Role of Social Science Expertise in Same-Sex Marriage Litigation

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Annu. Rev. Law Soc. Sci. 2017. 13:471–91

First published as a Review in Advance on July 21, 2017

The *Annual Review of Law and Social Science* is online at lawsocsci.annualreviews.org

https://doi.org/10.1146/annurev-lawsocsci-110615-084729

Keywords

same-sex marriage, litigation, social science, expertise, courts

Abstract

This article examines the role of social science in US same-sex marriage (SSM) court cases. The existing literature on the role of social science in courts is inconclusive, with studies suggesting social science exerts influence in some but not all areas of law. The literature on social science in SSM litigation is in its formative stage. This article reviews key SSM cases—including the three SSM trials and recent US Supreme Court cases—and describes how litigants and other interested parties invoked social science to address several key points related to legal recognition of SSM. A review of these cases suggests that social science may have exerted influence in SSM litigation because of the large volume of available evidence, the high level of scientific consensus on key issues, and contextual factors such as shifts in public opinion.

INTRODUCTION

On June 26, 2015, the US Supreme Court issued its 5–4 decision in *Obergefell v. Hodges*, extending the right to marry to same-sex couples nationwide. Although public opinion on the same-sex marriage (SSM) issue had shifted quickly and dramatically in recent years (Hull 2016), the legal path to marriage equality was a long road, traversing many courts and legislatures over the course of nearly a half century. This review focuses on the role of social science in the courtroom battles over SSM. One of the more striking features of SSM litigation in the United States was the prominent role of social science in addressing factual issues germane to the legal arguments on both sides. I briefly review the general literature on social science in the courts and the nascent literature on social science in gay rights and marriage equality cases. I then provide a brief chronology of SSM litigation in the United States and a descriptive review of social science in several key marriage equality cases: the three state and federal trials on SSM and the three US Supreme Court cases decided in 2013–2015. I conclude by discussing how social science may have influenced SSM litigation and whether such influence was appropriate.

SOCIAL SCIENCE IN THE COURTS

Historical reviews of social science in the courts reach back to the turn of the twentieth century and cite the influence of legal giants such as Holmes, Pound, and Brandeis (Larsen 2014; Monahan & Walker 2014, pp. 1–13). The Legal Realism movement of the 1930s bolstered the role of social science in legal cases, with its emphasis on incorporating empirical information into legal decision making. Commentators point to the famous footnote 11 in the majority opinion in *Brown v. Board of Education of Topeka* (1954)—citing psychological studies on the negative effects of school segregation on children—as a milestone in social science influence in Supreme Court jurisprudence (Moran 2010, Rublin 2011). In a classic law review article, Davis (1942) articulated a distinction between adjudicative and legislative facts in legal cases. Adjudicative facts are specific to the case and the involved parties, whereas legislative facts address broader questions of law or policy that transcend the individual case and inform legal decision makers when they are making law. Scholars discussing the role of social science in courts routinely employ this distinction, and much of the social science introduced in courts falls into the category of legislative facts relevant to constitutional questions (Monahan & Walker 2014, p. 175). In an influential series of articles, Monahan & Walker proposed a refinement and expansion of the adjudicative/legislative fact dichotomy. They advocated replacing the term legislative fact with "social authority" and argued that "social science research, when used to create a legal rule, is more analogous to 'law' than to 'fact,' and hence should be treated much as courts treat legal precedent" (Monahan & Walker 1986, p. 478). They also proposed renaming adjudicative facts as "social facts" (Monahan & Walker 1988, 1991) and creating a third category called "social frameworks" (Walker & Monahan 1987). The social frameworks concept represents a hybrid of social facts and social authority; the term applies to the use of social science information to provide background information about social life that is relevant for determining case-specific facts.

Empirical research on social science in courts includes works that review and assess the impact of social science in particular areas of law; studies that evaluate the impact of amicus briefs on opinion content and case outcomes; and examinations of the experiences of social scientists, attorneys, judges, and law clerks in presenting or evaluating social science evidence. Direct evaluation of the impact of social science on opinion content or case outcomes faces two significant obstacles. First, judges may cite social science evidence in their rulings even when this evidence had little or no impact on how they decided the case, the so-called window dressing problem (Moran 2010,

Zick 2003). Second, the absence of direct citation to social science evidence presented in briefs or expert testimony cannot be assumed to signal its lack of influence. Judges may factor social science information into their analysis without specifically citing it. Further, social science evidence may have indirect influence through various channels, such as influencing the reasoning and outcomes of cases that are cited as precedent or causing shifts in public opinion that weigh on jurists' views of a case.

Studies that assess the impact of social science in different areas of legal decision making have produced mixed results. Studies in some areas suggest social science may be influential (Acker 1990, Fiske & Borgida 2008, Vidmar & Schuller 1989), but Nelson et al.'s (2008, p. 116) review of social science in employment discrimination cases concludes,

> Judges tend to grant little credence to social science, in large measure because their worldview and legal training is inconsistent with the behavioral realist perspective that is the norm in social scientific research . . . . The social sciences have not gained authority within law, even regarding issues on which scholars have produced an enormous body of published, refereed research.

Numerous studies have analyzed the impacts of amicus briefs, which often convey social science evidence not introduced at trial. The number of amicus filings has exploded in recent years (Franze & Anderson 2015, Kearney & Merrill 2000), and their content sometimes impacts the crafting of judicial opinions (Collins et al. 2015). Briefs from certain high-profile interest groups, states, and the US Solicitor General appear to be most influential (Box-Steffensmeier et al. 2013, Caldeira & Wright 1988, Kearney & Merrill 2000). But it remains unclear whether social science evidence delivered in amicus briefs has much impact:

> Even with a dramatic increase in amicus participation, there is no decisive support for the argument that briefs filed by social scientists shape the judicial decisionmaking process . . . Until further study is done, the impact of social science evidence—at least when introduced in amicus briefs—will remain an open question. (Moran 2010, p. 535)

Other empirical research on social science in courts focuses on the experiences and capabilities of legal actors. A survey of state court judges found that judges embrace their gatekeeping role regarding the admission of scientific evidence (including social science) but sometimes lack the scientific literacy to perform this role (Gatowski et al. 2001). An interview-based study of social science expertise in school desegregation cases found that some social science expert witnesses experience role conflict because of normative discrepancies between legal and social scientific approaches to knowledge production (Chesler et al. 1988). Reflecting on her own experience as an expert witness on sexuality issues in Canadian courts, Valverde (1996) concluded that social scientific expertise is routinely subjugated to law's logic and used primarily for legitimation. An experimental vignette study of law students and judges found that subjects rated social science evidence more favorably when it matched their existing views, and their written comments often reflected a distrust of social science and expert witnesses (Redding & Reppucci 1999). By contrast, a survey of 70 former Supreme Court clerks found that over half said briefs with social science content merited special consideration and were especially helpful when they added new facts or gave insight into the practical consequences of court decisions (Lynch 2004).

No scholarly consensus exists on the impact of social science in courts as a general matter. Some scholars view courts' use of social science evidence skeptically (e.g., Faigman 2008a, Lempert 2013, Nelson et al. 2008), whereas others observe that social science's influence on legal decision

making has waned (Yudof 1978) or that there is not enough empirical evidence to assess its impact (Moran 2010). Others have theorized factors that might determine when social science affects legal outcomes, as well as its impacts on legal legitimacy (Rublin 2011, Stryker 1994). Rublin (2011) speculates that social science evidence may have greater impact when scientific consensus is high, when an issue is in play across many jurisdictions, and when public opinion on an issue has begun to coalesce. Goldberg (2006, p. 1989) theorizes that social science research has the most influence when it "can destabilize traditional views of social groups" by exposing the inaccuracy of perceived facts and the effects of bias on perceptions.

Going beyond the question of whether social science does have significant influence, scholars also tackle the thorny question of whether it should have influence. Commentators have raised concerns about legal actors' ability to use and assess social science evidence correctly (Faigman 1989, Larsen 2012, Moran 2010), about the quality and impartiality of social science evidence (Larsen 2014, Moran 2010, Moynihan 1979), and about the way social science evidence introduced through amicus briefs evades the principle of adversarial justice with full airing and cross-examination of relevant information by competing parties (Gorod 2011, Larsen 2014). Others contend that high-quality, objective social science evidence can make a valuable contribution to legal processes (Faigman 1989, 2008b; Fiske & Borgida 2008); mistakes may occur, but good social science research is a better basis for deciding many issues than reliance on legal decision makers' intuitions or common sense (Grunwald 2013, Saks 1990). Commentators have also offered a range of suggestions for improving the use of social science in law (e.g., Blumenthal 2002; Borgmann 2009; Faigman 1989, 2008a; Faigman & Monahan 2004; Gorod 2011; Larsen 2014; Parker 2013; Ramsey & Kelly 2004; Rustad & Koenig 1993).

STUDIES OF SOCIAL SCIENCE IN GAY RIGHTS LITIGATION

A sizable interdisciplinary literature has emerged over the last two decades on the role of litigation in LGBT movements (e.g., Andersen 2006, Kane & Elliott 2014, Mezey 2007, Pierceson 2005) and in the fight for SSM recognition specifically (Cummings & NeJaime 2009–2010, Hume 2013, Keck 2009, Klarman 2013, Mezey 2009, NeJaime 2011, Pierceson 2013, Rosenberg 2008), but the literature on the role of social science in such litigation is much more compact. An early study examined social science citations in cases through 1987 in four areas of gay rights, not including marriage or partnership recognition (Falk 1994). The study found high rates of citation to social science and attributed this pattern to the controversial nature of gay rights issues and the high volume of social science evidence proffered by litigants, advocacy groups, and professional organizations in legal briefs. More recent work specifically examines social science evidence relevant to marriage litigation. Ball (2014) provides a careful, exhaustive review of social science evidence related to children in SSM cases, organized around key arguments made by opponents of SSM. Ball (2014, pp. 127–28) speculates that social science has played a central role in SSM litigation because there is an established body of knowledge on the impacts of various family structures and because of legal strategies pursued by SSM opponents. In a related work, George (2016) traces the genesis of social science research on the impacts of gay and lesbian parenting to child custody cases fought in courts in the 1970s in the wake of homosexuality's declassification as a mental illness.

Yoshino (2015) provides a valuable description of the first federal court trial on SSM, the case that eventually made its way to the US Supreme Court as *Hollingsworth v. Perry*. His book details the role of expert witnesses from history and social science in addressing several key questions in the *Perry* trial and concludes that the legislative facts established in that trial reverberated beyond the specific case in several ways. The trial findings were cited by several other courts that

struck down SSM bans and served to "discredit fringe scholars and viewpoints with finality and authority" (Yoshino 2015, p. 271).

In a review of courts' use of social science evidence on same-sex parenting and the immutability of homosexuality, Levit (2010, p. 62) notes "a fairly dramatic shift in the past twenty years, [in which] science is becoming an ally to rather than an oppressor of gays and lesbians." Levit's observation receives support from a recent study of citation patterns in social science research on the effect of parents' sexual orientation on child outcomes. adams & Light (2015) conclude that a scientific consensus in support of the "no differences" hypothesis—the idea that outcomes for children raised by gay and lesbian parents do not differ significantly from outcomes for other children—begins to emerge in the mid-1980s, with "achieved scientific consensus" (p. 306) from the late 1990s onward. Powell et al. (2015) use data from the 2010 Constructing the Family Survey to assess several other issues raised in SSM court cases. The survey data show a high correlation between negative views of homosexuality and opposition to SSM, contrary to courtroom assertions that opposition to SSM is not driven by animus. In responses to open-ended survey questions on reasons for opposing SSM, two-thirds of respondents pointed to religious or moral disapproval of homosexuality. The survey data also call into question the contention that same-sex couples can achieve equal treatment through alternative legal vehicles such as civil unions: Survey respondents are more likely to view same-sex couples as families and support extending legal rights and benefits to them if they are married, and most survey respondents did not clearly grasp the legal meaning of civil unions (Powell et al. 2015).

A recent study compared the role of different forms of expertise in battles over gay family rights, including marriage, in France and the United States (Stambolis-Ruhstorfer 2015). The study notes the central role of courts in the US context and concludes that the elite experts—academics and professional organizations—who have weighed in on marriage cases through amicus briefs or expert testimony in trials have disproportionately favored legal recognition of SSM. The study also highlights the ways legal actors actively shape social scientific expertise. According to interviews with both lawyers and expert witnesses, litigators train academics to speak on issues in an authoritative, nonqualified manner that is contrary to the caution about causal claims and attention to complicating nuance that typify academic discourse. Stambolis-Ruhstorfer (2015) concludes that the institutional logic of American courts molds knowledge presentation by academic experts. Because of the adversarial system of justice and existing rules about expert evidence, witnesses must establish their credibility, stick to the issues they are qualified to address, and withstand harsh questioning by opposing counsel in depositions and cross-examinations. Reflecting on her own experience as an expert witness in Canadian SSM cases, Stacey (2004) likewise concludes that social scientific experts cede control over question framing and standards of scientific credibility to legal actors in the courtroom context.

A CHRONOLOGY OF SAME-SEX MARRIAGE LITIGATION IN THE UNITED STATES

Although sociolegal scholars have long debated the effectiveness of litigation as a social change strategy, the achievement of a legal right to SSM provides a dramatic illustration of the successful use of courts to accomplish a significant social movement goal. When *Obergefell* was decided in June 2015, only 11 states and the District of Columbia had extended recognition to SSM through legislation or ballot initiatives. The remaining 39 states arrived at SSM recognition as a result of state or federal court rulings. But the process of securing marriage equality through the courts was neither swift nor simple. This section provides a brief history of SSM litigation as a background to reviewing the role of social science in major marriage equality court cases.

For the last two decades, marriage equality has been one of the principal goals of the mainstream LGBT rights movement (Bernstein & Taylor 2013). Yet litigation for SSM began not as a campaign orchestrated by major LGBT social movement organizations but as a grassroots effort by couples seeking marriage licenses. The first appellate court ruling on the issue came from the Minnesota Supreme Court in 1971, upholding denial of a marriage license to a male couple; the following year, the US Supreme Court tersely dismissed the case as well (*Baker v. Nelson*). In the 1970s and 1980s, couples continued to file such suits in state and federal courts around the country, but the issue did not gain legal traction until the Hawaii Supreme Court ruled in *Baehr v. Lewin* (1993) that the denial of marriage licenses to same-sex couples might violate that state's constitution, sending the case back to state trial court. The Hawaii ruling catapulted SSM onto the national political stage. Congress passed the federal Defense of Marriage Act (DOMA) in 1996, and many states passed their own "baby DOMAs" to ensure that they would not be forced to recognize SSMs performed in another state.

By the time the Hawaii case went to trial, the national LGBT rights movement was getting involved; attorney Evan Wolfson from Lambda Legal, a leading national gay-rights litigation group, joined the case as co-counsel. The State of Hawaii defended its denial of marriage licenses to the three plaintiff couples primarily on the grounds that the government sought to promote the optimal development of children. In his ruling, Judge Kevin Chang found that the existing marriage law did violate the state constitution [*Baehr v. Miike* (1996)]; however, the ruling was stayed pending appeal and never took effect because of a subsequent constitutional amendment.

In the years that followed, several other state supreme courts ruled in favor of legal recognition for same-sex relationships. In *Baker v. State* (1999), the Vermont Supreme Court found the denial of SSM violated its state constitution, and the legislature redressed the constitutional violation by creating civil unions. Then in *Goodridge v. Department of Public Health* (2003), the Massachusetts Supreme Judicial Court ruled that the state must issue licenses to same-sex couples, making Massachusetts the first state to recognize SSM qua marriage. Plaintiff couples also prevailed in state supreme courts in California [*In re Marriage Cases* (2008)], Connecticut [*Kerrigan v. Commissioner of Public Health* (2008)], and Iowa [*Varnum v. Brien* (2009)]. At the same time, the backlash against SSM continued around the country, with many states passing statutes or, increasingly, constitutional amendments to prohibit SSM. The 2008 California court victory was short-lived, because later that year state voters approved Proposition 8, a state constitutional amendment that repealed SSM recognition.

The main action in marriage equality litigation shifted from state to federal courts with *Perry v. Schwarzenegger*, a case challenging Proposition 8 as a violation of the US Constitution. The State of California declined to defend the case, so the court authorized the ballot measure's proponents to defend it. After a 12-day trial with 11 expert witnesses, Judge Vaughan Walker ruled that Proposition 8 violated the Due Process and Equal Protection Clauses of the Fourteenth Amendment [*Perry v. Schwarzenegger* (2010)]. The Prop 8 proponents appealed the ruling, and the case eventually reached the US Supreme Court as *Hollingsworth v. Perry*. Meanwhile, marriage equality litigation continued to percolate in courts around the country. The US Supreme Court heard two marriage equality cases in its 2012 term. In addition to the appeal from California, it heard a case challenging the federal DOMA. The Court's rulings in these cases represented a significant turning point in the litigation-based movement for marriage equality. In *U.S. v. Windsor* (2013), the Court struck down Section 3 of DOMA, which defined marriage as limited to opposite-sex unions for federal purposes. In *Hollingsworth v. Perry* (2013), the Court dismissed the appeal from the proponents of California's Proposition 8 for lack of standing, restoring legal SSM in California.

The *Windsor* and *Perry* rulings opened the floodgates for challenges to SSM bans around the country. SSM gained recognition in 22 additional states in the aftermath of these rulings, with most state and federal courts interpreting *Windsor* to require that outcome. Many courts also cited the *Perry* trial court ruling to support their decisions (Watts 2015, p. S75; Yoshino 2015, p. 271). The third and final SSM trial then took place in a US District Court in Michigan. The plaintiffs challenged Michigan's marriage ban because it prevented them from establishing legal parenthood for both partners, who were raising adopted children together. The eight-day trial featured nine expert witnesses and primarily focused on the impacts of same-sex parenting. Judge Bernard A. Friedman ruled that the Michigan ban violated the Fourteenth Amendment under rational-basis review [*DeBoer v. Snyder* (2014)]. This ruling was reversed by the Sixth Circuit Court, a decision that was appealed to the Supreme Court along with cases from Ohio, Tennessee, and Kentucky; the consolidated appeals became *Obergefell v. Hodges*.

Because there had been such a flurry of successful marriage equality litigation in lower courts in the wake of the *Windsor* ruling, by the time the Supreme Court issued its 5–4 majority opinion in *Obergefell* in June 2015, declaring a fundamental right to marry that included same-sex couples, it delivered marriage equality to only 14 additional states. Nonetheless, the ruling had enormous symbolic significance insofar as it appeared to definitively settle the issue in legal terms.

SOCIAL SCIENCE EXPERTISE IN KEY SAME-SEX MARRIAGE CASES

To gain further insight into the role of social science in SSM litigation, I reviewed selected case materials from six pivotal court cases, including the three SSM trials (in Hawaii state court and California and Michigan federal courts) and the three recent US Supreme Court cases (*Hollingsworth v. Perry* and *U.S. v. Windsor* from 2013, as well as *Obergefell v. Hodges*). For the trials, I examined trial transcripts and written opinions. For the Supreme Court cases, I reviewed parties' briefs, amicus briefs filed by social scientists and historians, transcripts of oral arguments, and court opinions. Based on these materials, I identified the key issues addressed by social science expertise and the kinds of evidence offered by experts for both sides. I also formed impressions about the relative strength of the evidence supporting each side and the possible impact of the evidence on legal outcomes. My purpose was not to conduct a formal empirical analysis but to provide a lay of the land regarding social science in marriage equality litigation. I chose to examine the three trials because the trial format produced a substantial body of social science evidence delivered by a wide range of expert witnesses, dominated by social scientists (**Table 1**). The trial evidence was subject to the rigors of the adversarial process, and the social science findings offered by expert witnesses figured prominently in judges' opinions in all three cases. I examined the US Supreme Court cases because of their obvious legal and historical significance, and because many if not all of the social scientific issues and evidence put forward in lower state and federal courts eventually appeared in the Supreme Court cases in parties' briefs, amicus briefs, and oral arguments. I limited my review of amicus briefs in the Supreme Court cases to briefs submitted by social science and history experts (**Table 2**), on the assumption that arguments and evidence delivered directly by such experts would carry more weight than social scientific or historical evidence tendered in briefs of other parties. However, a very high volume of amicus briefs was filed in the Supreme Court marriage cases (Franze & Anderson 2015), and some of the briefs from parties besides social scientists and historians also referenced social scientific evidence.

I identified the following broad categories addressed by social science and historical evidence in the trials and Supreme Court cases: optimal child development, marital and procreative behaviors of opposite-sex couples, marriage's social purpose, harms imposed by SSM bans, and whether

Table 1 Expert witnesses in same-sex marriage (SSM) trials

Pro-SSM experts	Anti-SSM experts
Baehr v. Miike (1996)	
Pepper Schwartz (sociology) Charlotte Patterson (psychology) David Brodzinsky (psychology) Robert Bidwell (pediatrics)	Kyle D. Pruett (psychiatry) David Eggebeen (sociology) Richard Williams (psychology) Thomas S. Merrill (clinical psychology, private practice)
Perry v. Schwarzenegger (2010)	
Nancy Cott (history) George Chauncey (history) Letitia Anne Peplau (psychology) Edmund Egan (economics) Ilan Meyer (social epidemiology) Michael Lamb (psychology) Lee Badgett (economics) Gary Segura (political science) Gregory M. Herek (psychology)	Kenneth Miller (political science) David Blankenhorn (family studies)
DeBoer v. Snyder (2014)	
David Brodzinsky (psychology) Michael Rosenfeld (sociology) Vivek Sankaran (law) Gary Gates (demography) Nancy Cott (history)	Mark Regnerus (sociology) Loren Marks (family studies) Joseph Price (economics) Douglas Allen (economics)

sexual orientation merits heightened scrutiny under federal equal protection jurisprudence. I briefly sketch each of these categories, the relevant expert evidence, and case outcomes.

Optimal Child Development

The issue of how SSM might impact children has long dominated legal and political debates on the issue. In key SSM court cases, anti-SSM parties have asserted that gay and lesbian or same-sex parenting[1] on average leads to worse outcomes for children, with the implication that legal recognition of SSM should be denied to discourage same-sex parenting. Pro-SSM parties, by contrast, maintain that existing research does not support the claim of inferior child outcomes. Parties reference four main kinds of social science evidence on family structures and optimal child development in these debates: (*a*) studies that directly examine same-sex or gay/lesbian parenting; (*b*) studies that examine gender-diverse parenting structures (i.e., children being raised by both male and female parents); (*c*) studies of the impacts of parent-child biological ties; and (*d*) studies of alternative family structures (single parenting, cohabiting parents, adoption, and step-parenting). The question of optimal child development was central in two of the three trials and was addressed in numerous briefs in all three Supreme Court cases.

Expert testimony in the Hawaii trial focused heavily on parenting impacts. Expert witnesses for the state testified to the benefits of gender-diverse and biological parenting and the risks for

[1]Legal and scholarly works often use the generic term "same-sex parenting" to refer to all cases of children being raised by gays or lesbians. The term is somewhat misleading, because some research studies and legal cases concern single gay and lesbian parents who are technically not engaged in same-sex parenting.

Table 2 Amicus briefs from social science and history experts, filed in Supreme Court cases regarding same-sex marriage (SSM)

Pro-SSM briefs	Anti-SSM briefs
Hollingsworth v. Perry (2013)	
American Psychological Association, et al. American Anthropological Association, et al. Political Science Professors Organization of American Historians and American Studies Association Gary J. Gates American Sociological Association	Scholars of History and Related Disciplines Professor Daniel N. Robinson, PhD Social Science Professors Leon R. Kass, Harvey C. Mansfield and the Institute for Marriage & Public Policy
U.S. v. Windsor (2013)	
Political Science Professors American Sociological Association Organization of American Historians, et al. Gary J. Gates Historians, American Historical Association, et al. American Psychological Association, et al.	Social Science Professors
Obergefell v. Hodges (2015)	
Organization of American Historians American Sociological Association American Psychological Association, et al. Gary J. Gates American Public Health Association and Whitman-Walker Health Historians of Marriage and American Historical Association	Professor Daniel N. Robinson, PhD Scholars of History and Related Disciplines 100 Scholars of Marriage American College of Pediatricians, et al. Ruth Institute and Jennifer Roback Morse, PhD Organizations and Scholars of Gender-Diverse Parenting 47 Scholars Dr. Judith Reisman and Liberty Center for Child Protection Scholars of Fertility and Marriage Scholars of the Welfare of Women, Children, and Underprivileged Populations

children raised in alternative family structures. The anti-SSM experts dismissed existing research on same-sex parenting as methodologically flawed owing to small sample sizes and nonrandom sampling techniques. The pro-SSM witnesses testified that existing studies suggested no detrimental effects of same-sex parenting. Judge Chang's opinion concluded that there was no credible evidence that same-sex parents are less fit or capable of good child-rearing [*Baehr v. Miike* (1996)]. In the California trial, the question of same-sex parenting was less prominent because a broader range of issues was addressed by expert testimony. The plaintiffs' expert on parenting impacts, psychologist Michael Lamb, testified that research has found no negative impacts of same-sex parenting. Lamb explicitly rejected the gender-diverse and biological parenting arguments as lacking empirical foundation. Anti-SSM expert witness David Blankenhorn of the Institute for American Values argued that parents are predisposed by evolution to invest more in their own genetic offspring, resulting in better outcomes for children raised by their own biological parents. But on cross-examination, Blankenhorn admitted that studies of adoptive families did not support the genetic argument and that he knew of no studies of children raised by same-sex parents from birth showing worse outcomes than children raised by their genetic parents. In his ruling for the plaintiffs, Judge Vaughan Walker cited Lamb's testimony to affirm that existing research does not support the gender-diverse or genetic-tie parenting theories, and that "[s]tudies comparing

outcomes for children raised by married opposite-sex parents to children raised by single or divorced parents do not inform conclusions about outcomes for children raised by same-sex parents in stable, long-term relationships" [*Perry v. Schwarzenegger* (2010), p. 981].

In 2012, a study on same-sex parenting by sociologist Mark Regnerus provoked considerable controversy in both scholarly and legal arenas. Regnerus asserted that his New Family Structures Study was methodologically superior to previous research, in part because it used a random sample; the study identified a range of negative outcomes for children of same-sex parents (Regnerus 2012). This study formed the centerpiece of an amicus brief filed by social science professors, including Regnerus himself, in the 2013 Supreme Court marriage cases.[2] The brief laid out the familiar anti-SSM arguments about the benefits of gender-diverse parenting and the weakness of past studies of same-sex parenting and cited the Regnerus study as the best available social scientific evidence for the harms of same-sex parenting. Regnerus's study has itself been widely critiqued for methodological shortcomings and the questionable peer review process that led to its publication (e.g., Ball 2014, Cheng & Powell 2015, Gates et al. 2012, Perrin et al. 2013, Rosenfeld 2015, Sherkat 2012). Amicus briefs from the American Psychological Association and the American Sociological Association in the *Perry* and *Windsor* Supreme Court cases asserted a broad social scientific consensus that same-sex parenting is not harmful and devoted significant space to critiquing Regnerus's methods and conclusions (also see Manning et al. 2014). Despite these strong assertions of scientific consensus, Justice Antonin Scalia commented at the oral argument in *Perry* that "there's considerable disagreement among . . . sociologists as to what the consequences of raising a child in a . . . single-sex family, whether that is harmful to the child or not" [*Hollingsworth v. Perry* (2013), Oral Argument, p. 19].

Parenting impacts constituted the focal issue in the *DeBoer v. Snyder* trial in Michigan. Expert witnesses for the defense included Regnerus and three other social scientists; pro-SSM witnesses included three social scientists, a historian, and a law professor. Pro-SSM expert David Brodzinsky, a psychologist, testified that scientific consensus had emerged on the lack of harm from same-sex parenting, that methodological critiques of this parenting research were overblown, and that no good evidence supported the gender-diverse parenting argument. Sociologist Michael Rosenfeld (2010) also testified to the consensus on lack of harm from same-sex parenting and discussed his own research finding no differences in school progress for children raised by same-sex couples. Regnerus testified that his own study was methodologically superior to earlier studies and highlighted how his findings called into question the no-differences hypothesis. The other anti-SSM experts mostly focused on the shortcomings of previous parenting research. Economist Douglas Allen (2013) also testified that his own research using Canadian Census data showed lower high school graduation rates for children raised by same-sex parents.

Judge Bernard Friedman's opinion made it abundantly clear that he was persuaded by the pro-SSM witnesses' testimony and found the testimony of Regnerus and the other anti-SSM experts not credible. Friedman was especially harsh in his condemnation of Regnerus. He correctly summarized the two most critical flaws in Regnerus's study design.[3] Friedman also called "unbelievable" Regnerus's testimony that his research was not influenced by its funding source [*DeBoer*

[2] Regnerus's participation in the brief was particularly notable because in his 2012 article he explicitly stated that the study was "intended to neither undermine nor affirm any legal rights concerning [same-sex marriage]" (Regnerus 2012, p. 766).

[3] First, Regnerus defined parents who had had any same-sex relationships over the course of survey respondents' childhoods as "gay fathers" and "lesbian mothers" regardless of the length of such relationships or the length of time respondents spent living with those parents during those same-sex relationships. Second, Regnerus compared respondents with "gay fathers" or "lesbian mothers" only to respondents raised by intact families headed by married biological parents, without controlling for the impacts of family transitions.

v. Snyder (2014), p. 766]. Friedman described Regnerus's expert testimony as "entirely unbelievable and not worthy of serious consideration," and said of the anti-SSM expert witnesses as a group, "They . . . clearly represent a fringe viewpoint that is rejected by the vast majority of their colleagues across a variety of social science fields" [*DeBoer v. Snyder* (2014), p. 768]. The ruling rejected the state's assertion that concerns about optimal child-rearing represented a rational basis for Michigan's marriage ban.

Friedman's ruling was overturned by the Sixth Circuit Court and ultimately reached the US Supreme Court as part of the *Obergefell* case. The briefs for the anti-SSM litigants in *Obergefell* avoided the subject of same-sex parenting, perhaps assuming that the strongly worded opinion in *DeBoer* made it a vulnerable line of argument. But numerous anti-SSM amicus briefs weighed in, rehashing the familiar arguments. Several scholars (including Regnerus) filed an amicus brief with the American College of Pediatricians (a conservative alternative to the mainstream American Academy of Pediatrics) citing supposedly superior new studies and asserting that mainstream social science organizations were so intensely politicized that contrary findings could not get a fair hearing. Briefs for the pro-SSM petitioners, by contrast, reiterated the social scientific consensus on lack of same-sex parenting harms and noted the discrediting of the recent anti-SSM studies in the Michigan trial. The pro-SSM amicus briefs from the American Psychological Association and the American Sociological Association also updated their filings from earlier cases to address the methodological flaws of the recent research by Regnerus and others. The same-sex parenting issue emerged briefly in the oral arguments for *Obergefell*, with Justice Kennedy commenting on the newness of the research in this area; attorney Mary Bonauto responded that the issue had been addressed repeatedly in earlier court cases and noted "a social science consensus that there's nothing about the sex or sexual orientation of the parent that is going to affect child outcomes" [*Obergefell v. Hodges* (2015), Oral Argument, p. 21]. The majority opinion in *Obergefell*, finding a right to marriage for same-sex couples, acknowledged that same-sex couples were capable of creating loving families but did not comment directly on the social science evidence on same-sex parenting.

"Responsible Procreation" and the Deinstitutionalization of Marriage

Defenders of SSM bans have argued that legal recognition of SSM would have socially undesirable effects on the marital and procreative behaviors of opposite-sex couples. Such arguments have been labeled "responsible procreation" and the deinstitutionalization of marriage. Specifically, responsible procreation arguments start from the assumption that society has an interest in seeing children raised in families headed by their married (opposite-sex) parents (based on some of the same research cited by anti-SSM forces to frame same-sex parenting as risky, such as research on child outcomes for alternative family structures, including divorced, single, cohabiting, and step parents). The argument then asserts that legal SSM would weaken the linkage between marriage and procreation, because same-sex couples are biologically incapable of procreating, and this delinking of marriage and procreation would lead to fewer opposite-sex couples getting married, staying married, and having children within marriage, i.e., engaging in "responsible procreation." The concept of deinstitutionalization of marriage, first developed by sociologist Andrew Cherlin (2004), refers to the weakening of marriage as an institutional structure, reflected in trends such as declining marriage rates, rising or high divorce rates, and rising rates of cohabitation and nonmarital childbearing. Opponents argue legal SSM would accelerate deinstitutionalization as opposite-sex couples would come to view marriage as a less desirable status.

The responsible procreation and deinstitutionalization arguments featured prominently in SSM litigation, but their empirical support has been found wanting in several key rulings. In the

Hawaii trial, the judge's opinion noted that the state had furnished "meager evidence" on "the adverse effects, if any, that SSM would have on the institution of traditional marriage and how those adverse effects would impact on the community and society" [*Baehr v. Miike* (1996), p. 20]. In the California trial, anti-SSM witness David Blankenhorn acknowledged that deinstitutionalization of marriage was already well under way but warned that legal SSM would hasten its unwanted effects. Cross-examination revealed that he was unfamiliar with a peer-reviewed study (Langbein & Yost 2009) that found no adverse effects of SSM on opposite-sex marriage and procreation patterns. Pro-SSM expert witness Lee Badgett (2009) testified, in part based on her own research, that legal SSM had not led to lower marriage rates or increased cohabitation in jurisdictions where it had been implemented. Judge Walker ultimately ruled that Blankenhorn's testimony on this issue was not reliable, and concluded, "Permitting same-sex couples to marry will not affect the number of opposite-sex couples who marry, divorce, cohabit, have children outside of marriage or otherwise affect the stability of opposite-sex marriages" [*Perry v. Schwarzenegger* (2010), p. 972]. Responsible procreation and deinstitutionalization were less significant in the Michigan trial, which primarily focused on same-sex parenting. However, plaintiffs' expert witness Michael Rosenfeld, a sociologist, did testify based on his ongoing research and other published studies (Dinno & Whitney 2013, Langbein & Yost 2009) that there was no evidence to support the idea that SSM weakened opposite-sex marriage.

Despite the fact that the responsible procreation and deinstitutionalization arguments had not fared well at the trial court level in *Perry*, the anti-SSM litigants repeated these arguments in their appeal of the case to the US Supreme Court (*Hollingsworth v. Perry*). Briefs from the anti-SSM side cited studies on nonmarital childbearing and cohabitation (e.g., Doherty et al. 1998, Manning et al. 2004) to assert that marriage stabilizes society by promoting responsible procreation; these briefs also presented data from Massachusetts and the Netherlands to argue that SSM reduces marriage rates and increases divorce and nonmarital childbearing (empirical claims that had been refuted at trial). The Court did not weigh in on these matters because the case was decided on procedural grounds, but the issue returned two years later in *Obergefell v. Hodges*. In that case, the anti-SSM litigants again proffered responsible procreation as a justification for banning SSM. Pro-SSM litigants' briefs again pointed to the lack of empirical evidence presented at trial and cited amicus briefs from social scientific professional organizations and scholars to reinforce the point. Indeed, amicus briefs supporting both sides addressed responsible procreation and deinstitutionalization, with anti-SSM amici forecasting adverse impacts on marriage, divorce, fertility, and nonmarital childbearing and pro-SSM amici attesting to the lack of empirical foundation for such predictions. At oral arguments, when Justice Stephen Breyer asked counsel for the anti-SSM side what evidence existed to support the idea that SSM would undermine opposite-sex marriage, counsel's response was that "it's reasonable to believe that" [*Obergefell v. Hodges* (2015), Oral Argument, p. 51]. In the end, the Court's majority concluded that this line of argument "rests on a counterintuitive view of opposite-sex couple's [sic] decisionmaking processes regarding marriage and parenthood . . . and it is unrealistic to conclude that an opposite-sex couple would choose not to marry simply because same-sex couples may do so" [*Obergefell v. Hodges* (2015), p. 2607].

Definition and Purpose of Marriage

Academic experts also contributed to SSM litigation on the question of the definition and purpose of marriage as a social institution. On this question, the expertise primarily came from historians of marriage, but some social scientists also addressed the issue, and arguments equating marriage with procreation were a building block of the responsible procreation arguments more directly addressed by social science. The question of the nature of marriage—how it is defined, why it

exists—arose at least briefly in all three SSM trials and all of the Supreme Court cases. The anti-SSM position was that the purpose of marriage has always been to funnel procreation into a stable social structure, linking children to their parents. The logical implication is that same-sex couples' inability to procreate makes the institution unsuitable or unnecessary for them, giving governments rational grounds to limit marriage to opposite-sex couples. The pro-SSM position defines marriage more expansively, noting that the social functions of marriage have evolved over time and contemporary marriage serves multiple purposes, including but not limited to reproduction and child-rearing.

In the California trial, plaintiffs' expert witness historian Nancy Cott (2000) drew on her own research on American marriage to describe the broad range of social functions fulfilled by the marriage institution. Anti-SSM witness David Blankenhorn countered by citing anthropologists and sociologists who identified child-rearing as the central purpose of marriage, noting that conceptions of marriage focused on adult commitment and satisfaction are a recent development. The judge ultimately sided with the pro-SSM side's view, observing that "[t]he state has many purposes in licensing and fostering marriage," and citing Cott's trial testimony in support of this conclusion [*Perry v. Schwarzenegger* (2010), p. 961]. The issue was revisited in parties' and amicus briefs in the two 2013 Supreme Court cases, and Justice Samuel Alito addresses it in his dissent in *Windsor*. Alito acknowledges the existence of "two competing views of marriage" and protests that the Court is being asked to choose between these views, "thereby arrogating to ourselves the power to decide a question that philosophers, historians, social scientists, and theologians are better qualified to explore" [*U.S. v. Windsor* (2013), p. 2718, footnote omitted]. In *Obergefell*, parties' and amicus briefs again tackle the issue, drawing more on historical than social scientific expertise. The majority in *Obergefell* weighs in by declaring that "[t]he history of marriage is one of both continuity and change" [*Obergefell v. Hodges* (2015), p. 2595], but this claim does not appear central to the logic of the ruling. In their dissents, both Chief Justice John Roberts and Justice Clarence Thomas align themselves with the traditional view of the institution, citing both political science and historical expertise.

Harms Imposed by Lack of Same-Sex Marriage Recognition

Litigants and amicus filers also used social science to address the harms imposed by lack of legal SSM, including harms to children of same-sex couples, to gay and lesbian adults, and to the economy. This is mostly a one-sided conversation, with pro-SSM voices detailing the harms and little response from the anti-SSM side. Specifically, pro-SSM expert witnesses at all three trials testified on matters such as the material and symbolic costs to children of having their parents' relationships not recognized as marriages, as well as the health and economic burdens such lack of recognition imposed on gay men and lesbians. Some experts conveyed these messages in positive terms, noting existing research on the benefits of marriage for children and adults and the likelihood that same-sex couples and their children would reap such benefits. Trial testimony and amicus filings from social scientists asserted that same-sex couples were capable of stable long-term relationships and desired the recognition of marriage for their commitments. Regardless of whether the rhetorical approach was to decry the harms of withholding marriage or extol its potential benefits, some judges appeared to find the message compelling. In the Hawaii case, Judge Chang made a finding that "if same-sex marriage is allowed, the children being raised by gay or lesbian parents and same-sex couples may be assisted, because they may obtain certain protections and benefits that come with or become available as a result of marriage" [*Baehr v. Miike* (1996), p. 18]. Plaintiffs' expert witnesses in the *Perry* trial in California testified that both children and adults would reap benefits from allowing same-sex couples to marry, and that the marriage ban

negatively impacted San Francisco's economy. Social epidemiologist Ilan Meyer (2003) testified based on his research on minority stress that the existence of SSM bans stigmatizes gay men and lesbians, exacting a psychological and physical toll, an argument also highlighted in amicus briefs from psychology and public health professional organizations.

When the *Perry* case went to the Supreme Court, the anti-SSM litigants pushed back against these arguments by noting in their reply brief that their opponents had not produced empirical evidence showing that same-sex couples and their children would reap incremental benefits from marriage beyond those already provided by California's domestic partnerships, equivalent to marriage in all but name under state law. When Justice Kennedy raised the issue of harms to children at oral arguments, counsel for the anti-SSM side repeated the assertion that domestic partnerships might be sufficient. At the Michigan trial, demographer Gary Gates testified that 5,300 children being raised by same-sex couples in that state were at risk of worse outcomes owing to lack of marriage access. Judge Friedman noted this testimony in his opinion in the context of rejecting the optimal child-rearing argument presented by the state. The harm arguments were recited one last time in the *Obergefell* case, with parties' and amicus briefs laying out the now-familiar evidence. The question of harm, at least with respect to children, appeared to make an impact with the *Obergefell* majority. Its opinion noted that hundreds of thousands of children are being raised by same-sex couples in the United States (citing an amicus brief from Gary Gates) and stated,

> Excluding same-sex couples from marriage thus conflicts with a central premise of the right to marry. Without the recognition, stability, and predictability marriage offers, their children suffer the stigma of knowing their families are somehow lesser. They also suffer the significant material costs of being raised by unmarried parents, relegated through no fault of their own to a more difficult and uncertain family life. The marriage laws at issue here thus harm and humiliate the children of same-sex couples. [*Obergefell v. Hodges* (2015), pp. 2600–1]

In the end, the Court's majority rejected the idea that the hypothetical harms to children of opposite-sex couples outlined in the responsible procreation argument were more worrisome than the existing material and symbolic harms to children of same-sex parents.

Equal Protection Factors

A final issue receiving social science input was the question of whether sexual orientation is entitled to heightened scrutiny under the Equal Protection Clause of the Fourteenth Amendment. This question received extensive attention in the *Perry* trial and was addressed in briefs for all three Supreme Court cases. Federal equal protection jurisprudence has identified four criteria to evaluate whether a legal classification impacting a particular social group merits heightened scrutiny (i.e., whether the government must go beyond showing merely a rational basis for differential treatment), including whether the group (*a*) has historically experienced discrimination; (*b*) is politically powerless; (*c*) shares an immutable, distinguishing characteristic; and (*d*) has the ability to contribute to society (Yoshino 2015, pp. 120–21). In the *Perry* trial, plaintiffs furnished a wealth of social scientific evidence to demonstrate that sexual orientation meets the criteria for heightened scrutiny. Historian George Chauncey testified on the history of antigay discrimination. Psychologist Gregory Herek testified on the immutability of sexual orientation and gays' and lesbians' ability to contribute to society. Political scientist Gary Segura testified that gays and lesbians are a politically powerless group insofar as they routinely have their rights stripped by direct-democracy measures, such as Proposition 8, and remain targets of prejudice and violence. The anti-SSM litigants countered by challenging Herek on cross-examination on

the immutability issue and presenting their own political scientist to rebut the claim of political powerlessness. Judge Walker's opinion gave some credence to the heightened scrutiny claim but did not settle it because the case was decided at the rational-basis level of review.

The heightened-scrutiny factors were also discussed in briefs from the parties and amici in the three Supreme Court cases, but none of the Supreme Court rulings definitively addressed whether sexual orientation merits heightened scrutiny. The *Obergefell* majority did acknowledge the history of discrimination against gays and lesbians, citing an amicus brief from the Organization of American Historians and the former classification of homosexuality as a mental illness, now replaced by an understanding of homosexuality as "both a normal expression of human sexuality and immutable" [*Obergefell v. Hodges* (2015), p. 2600], citing a brief filed by the American Psychological Association and other amici. But by basing its ruling on marriage as a fundamental right protected by the due-process and equal-protection guarantees of the Fourteenth Amendment, the Court's majority skirted the question of whether sexual orientation warrants heightened scrutiny (Perry 2015). In the end, the plethora of social scientific and historical evidence addressing equal protection factors did not have much direct impact on legal outcomes in SSM litigation.

DID SOCIAL SCIENCE MATTER?

A broad range of social scientific evidence was introduced in SSM court cases. Experts from psychology, economics, sociology, political science, anthropology, and related fields such as history and psychiatry weighed in through expert trial testimony and amicus filings. Almost all of the social science evidence addressed legislative facts—general information about the social world—rather than case-specific questions. In proportional terms, social science's largest contributions were on the issues of parenting impacts and the responsible procreation and deinstitutionalization arguments, but social scientific input was also present on other questions, including the social purpose of marriage, the harms of marriage bans, and the criteria for evaluating whether sexual orientation classifications merit heightened scrutiny. The pro-SSM forces made greater use of social science in building their case, and overall their evidence was received more favorably by the courts (for example, recall the *Perry* trial judge's dismissal of anti-SSM witness David Blankenhorn's testimony and the *DeBoer* trial judge's harsh condemnation of Mark Regnerus's testimony). Still, the anti-SSM forces were somewhat effective in using social science evidence to sow doubt in the minds of some judges (recall Justice Scalia's oral argument proclamations about the lack of scientific consensus on parenting effects).

It is impossible to say with certainty whether social science played a decisive role—whether it influenced legal outcomes—in SSM litigation. The usual caveats apply: We cannot assume that more evidence equals more influence, that judges' citation to such evidence signals actual influence (as opposed to window-dressing for conclusions reached on legal or ideological grounds), or that lack of explicit citation to evidence equates with lack of influence. It is also notoriously difficult to gauge indirect influences, such as impacts on legal decisions that serve as precedent in later court cases. Despite these caveats, I would cautiously assert, based on the record in the cases reviewed here, that social science did have significant influence in several ways. It may have been determinative in the SSM trials, in which social science evidence was center stage in parties' presentation of their cases. It may have been especially important in issues related to children, both in dispelling false claims about the negative effects of same-sex parenting and in highlighting the presence of real children enduring ongoing harms as a result of their parents' inability to marry. And it may have mattered when anti-SSM forces pursued speculative legal arguments unsupported by sound evidence and the pro-SSM side was able to discredit those arguments with social scientific data.

In their use of social science evidence, the two sides in the legal contests over SSM engaged in a series of credibility contests. On issue after issue, judges were required to assess the weight and credibility of each side's evidence. The trial court opinions in *Baehr*, *Perry*, and *DeBoer* encapsulate this assessment process. In each of these rulings, the judges explicitly state which witnesses and evidence they found credible and how such evidence links to their legal conclusions. A careful reading of these opinions suggests that all of these trial judges accepted the idea that a broad scientific consensus finds no evidence that children are harmed by being raised by same-sex parents. Further, in contrast to commentators who express skepticism about judges' ability to evaluate the merit of social scientific evidence, the trial judges were clear and specific in the criteria they applied. Recall, for example, Judge Friedman's takedown of Mark Regnerus in the Michigan opinion, in which he faulted Regnerus's study for both methodological weaknesses and biased motivation (based on evidence about his communications with the study's funder).

At both the trials and the Supreme Court, the pro-SSM side consistently emerged victorious in the credibility contests involving social science. On responsible procreation and deinstitutionalization, anti-SSM parties had weak evidence to support their speculations about the future impact of SSM on opposite-sex marital and childbearing behaviors. Yet by the time marriage came back to the Supreme Court in *Obergefell*, the anti-SSM litigants had pretty much abandoned arguments about same-sex parenting, leaving responsible procreation and deinstitutionalization as a central line of attack. Although it is notoriously difficult to prove a negative (in this case, that SSM will not weaken opposite-sex marriage and lead to more children of opposite-sex couples being raised in less optimal family structures), the anti-SSM side had limited data to work with to support their predictions, and they manipulated the data they did have in ways that were fairly transparent and easily refuted by the pro-SSM side. The *Obergefell* majority opinion explicitly discusses child impacts, but not in the way the anti-SSM litigants would have hoped. The majority focuses on the existing harms to children of same-sex couples rather than the speculative harms to future children of opposite-sex couples. This focus suggests that concerns about children did penetrate the thinking of the majority and that the relevant social science evidence favored the pro-SSM outcome. (Ironically, much of the evidence presented in anti-SSM briefs about the importance of marriage for adults and children may have actually strengthened the hand of the pro-SSM litigants, because it highlighted the stakes for same-sex couples and their children.) Just as Regnerus's claims in the Michigan trial were exposed as weak and misleading by fellow expert witnesses and eventually by the judge, the paltry evidence for responsible procreation/deinstitutionalization did not survive the skeptical gaze of most judges. In their dissents sympathetic to the anti-SSM arguments, Supreme Court justices could only argue that caution dictated a wait-and-see approach.

If social science did have significant influence in SSM litigation, we might ask why this occurred, given the apparent lack of influence in recent years in other areas of law, such as the death penalty, employment discrimination, and school desegregation. I would point to three main factors. First, there is a large volume of social science evidence relevant to some of the central issues in the marriage litigation, especially research on the impact of various family structures—including same-sex parenting—on child outcomes (Ball 2014, p. 127). Second, the social science evidence on key questions has achieved a high degree of consensus and consistency; it is lopsided in favor of the pro-SSM side. This is the case not only with research relevant to optimal child development (adams & Light 2015) but also regarding the (lack of) impact of SSM on opposite-sex marriage and procreation (Badgett 2009, Dinno & Whitney 2013, Langbein & Yost 2009). This raises the question of why anti-SSM litigants pursued arguments with such an unfavorable evidentiary basis. The focus on parenting impacts and responsible procreation likely resulted from a process of elimination. Prior Supreme Court rulings, such as *Romer v. Evans* (1996) and *Lawrence v. Texas* (2003), made it clear that animus or moral disapproval alone was not sufficient justification for

laws that disadvantaged gays and lesbians. Moral condemnation and extremist depictions of gays as child sexual predators had also lost favor with the public over time. So gentler, child-focused arguments about children's optimal development and responsible procreation were perhaps the best remaining options, despite the weakness of the underlying evidence. Third, the weight of social scientific evidence pointed in the same direction as public opinion and legal trends on SSM. With growing public acceptance of the idea and judicial "herding" (Watts 2015) around the pro-SSM position, the *Obergefell* majority may have been especially receptive to social science evidence that helped justify going with the flow of public opinion and prior court rulings (Rublin 2011).

Whether it did or not, should social science have played a decisive role in marriage equality litigation? Certainly the cases could have been decided based on legal principles alone, without reference to social science evidence. Indeed, significant prior Supreme Court jurisprudence on marriage (including dismantling interracial marriage bans and protecting the legal status of non-marital offspring) disregarded social science evidence in favor of broad legal principles of equal treatment and nondiscrimination (Ball 2014, pp. 126–27). By incorporating social science into its justification for marriage equality, the courts might have set a dangerous precedent by making particular groups' access to constitutional rights contingent on tests not imposed on other groups, such as the ability to produce child outcomes equivalent to the gold standard of intact biological-parent families (Ball 2014, Meadow 2013). Reliance on social science also runs the risk that future evidence will point toward a different outcome or that existing scientific consensus will be clouded by future research findings, as occurred with research on the deterrent effect of the death penalty (Nagin et al. 2012). Finally, to the extent courts relied on social science evidence presented in amicus briefs, rather than at trial, such evidence lacked the built-in quality control provided by the adversarial process.

Despite these legitimate concerns, my conclusion is that social science had an important and legitimate role to play in SSM litigation. When a large and consistent knowledge base exists on relevant questions, it is hard to make the case that courts are likely to produce more just outcomes by ignoring such evidence and instead relying on the common sense or intuitions of individual jurists (Grunwald 2013). In the cases I reviewed, most judges appeared to be savvy consumers of social scientific evidence, not easily duped by the misleading operationalization of core concepts, analytic procedures that failed to include proper statistical controls, or easily disproved claims of lack of scientific consensus. Indeed, the single most compelling argument in favor of incorporating social science into the determination of SSM law may be an argument of necessity. The record shows that in some cases ideological opponents of marriage equality attempted to use social science research as a tool to produce a particular legal outcome, even if that meant engaging in shoddy and deceptive research practices. Under such conditions, the cost of omitting sound social scientific evidence from the record would simply be too high.

DISCLOSURE STATEMENT

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

ACKNOWLEDGMENTS

Special thanks to Carlos Ball for sharing case materials, and to audience members who provided valuable feedback on earlier versions of this paper at presentations at the 2016 Annual Meeting of the American Sociological Association and the Sociology Department Workshop Series at the University of Minnesota.

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