In The
Supreme Comut af the Alnited States

James Obergefell and brittani henry, et al., Petitioners, v.

Richard Hodges, Respondent.
(Additional Case Captions Listed on Inside Front Cover)
On Writs of Certiorari to the United States Court of Appeals for the Sixth Circuit

## BRIEF OF AMICI CURIAE AMERICAN COLLEGE OF PEDIATRICIANS, FAMILY WATCH <br> INTERNATIONAL, LOREN D. MARKS, MARK D. REGNERUS AND DONALD PAUL SULLINS IN SUPPORT OF RESPONDENTS

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William Edward "Bill" Haslam, et al., Respondents. Timothy Love, et al. and Gregory Bourke, et al., Petitioners,
v.
Steve Beshear,
Respondent.
Brittani Henry, et al., Petitioners,
v. Richard Hodges, Respondent.

## QUESTIONS PRESENTED

1. Does the Fourteenth Amendment require a state to license a marriage between two people of the same sex?
2. Does the Fourteenth Amendment require a state to recognize a marriage between two people of the same sex when their marriage was lawfully licensed and performed out-of-state?

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## INTEREST OF AMICI CURIAE1

The American College of Pediatricians (ACP) is a nonprofit organization of pediatricians and healthcare professionals dedicated to the health and well-being of children, with members in 44 states and in several countries outside the United States. ACP's Mission is to enable all children to reach their optimal physical and emotional health and wellbeing. To this end, ACP recognizes the basic fathermother family unit, within the context of marriage, as the optimal setting for childhood development, but also pledges its support to all children, regardless of their circumstances. ACP encourages mothers, fathers and families to advance the needs of their children above their own, and is committed to fulfilling its mission by encouraging sound public policy, based upon the best available research, to assist parents and influence society in the endeavor of childrearing.

Family Watch International (FWI) is a nonprofit international organization with members and supporters in over 170 countries. FWI is accredited with the Economic and Social Council of the United Nations and works to preserve the family, based on marriage between a man and a woman, as the societal unit that provides the best outcomes for men, women and children. FWI works at the

[^0]international level and in countries around the world to educate the public and policymakers regarding the central role of the family and advocates for women, children and families. FWI also provides family-based humanitarian aid to orphans and vulnerable children.

The following Amici are highly-esteemed scholars who have studied and published on parental and household distinctions and their association with developmental outcomes in children. Their expertise in these fields would assist the Court's consideration of the issues presented by these cases. The Amici scholars include:

- Loren D. Marks (Ph.D., Family Studies, University of Delaware), Program Director and Professor of Child and Family Studies, School of Social Work, Louisiana State University.
- Mark D. Regnerus (Ph.D., Sociology, University of North Carolina), Associate Professor of Sociology at the University of Texas at Austin; Faculty Research Associate, Population Research Center, University of Texas.
- Donald Paul Sullins (Ph.D., Sociology, Catholic University of America), Associate Professor, Department of Sociology, Catholic University of America.


## SUMMARY OF ARGUMENT

Despite being certified by almost all major social science scholarly associations-indeed, in part because of this-the alleged scientific consensus that having two parents of the same sex is innocuous for child well-being is almost wholly without basis. All but a handful of the studies cited in support draw on small, non-random samples which cannot be extrapolated to the same-sex population at large. This limitation is repeatedly acknowledged in scientific meetings and journals, but ignored when asserted as settled findings in public or judicial advocacy.

Of the several dozen extant studies on same-sex parenting in the past two decades, only eight have used a random sample large enough to find evidence of lower well-being for children with same-sex parents if it exists. Of these eight, the four most recent studies, by Dr. Mark Regnerus, Dr. Douglas Allen and two by Dr. Paul Sullins, report substantial and pertinent negative outcomes for children with same-sex parents. The four earlier studies, by Dr. Michael Rosenfeld and three by Dr. Jennifer Wainright and colleagues, find no differences for children with same-sex parents because, due to errors in file coding and analysis, a large portion of their samples actually consists of children with heterosexual parents. When the sample used by Wainright's three studies is corrected of this error and re-analyzed, these data also show negative outcomes for children with same-sex parents similar to those reported by Regnerus and Sullins. More importantly, they also show substantially worse
outcomes for children who have lived an average of ten years with same-sex parents who are married than for those who have lived only four years, on average, with unmarried same-sex parents.

At this time, the three largest statistically representative datasets used to address the question-Regnerus's New Family Structures Survey, with 3,000 cases; the National Health Interview Survey, with 1.6 million cases; and the National Longitudinal Survey of Adolescent Health, with 20,000 cases-have all found that children with same-sex parents fare substantially worse-most measures show at least twice the level of distressthan do children with opposite-sex parents on a range of psychological, developmental and emotional outcomes. The longer social scientists study the question, the more evidence of harm is found.

In analyzing the questions presented, special consideration must be given to the states' interests in the well-being of children, who are uniquely vulnerable and have little recourse against harm. Given the mounting evidence of harmful outcomes in children raised in households with same-sex parents, state laws restricting marriage to opposite-sex partners have a rational basis, and it would be imprudent to restrict the states from limiting marriage to opposite-sex partners for the well-being of children. At the same time, this outcome does not preclude the states from continuing to explore alternative resolutions to the conflicted and difficult question of how best to support same-sex couples and their children.

## ARGUMENT

## I. THE ALLEGED CONSENSUS THAT CHILDREN SUFFER NO DISADVANTAGE WITH SAME-SEX PARENTS IS A PRODUCT, NOT OF OBJECTIVE SCIENTIFIC INQUIRY, BUT OF INTENSE POLITICIZATION OF RESEARCH AGENDAS IN SOCIAL SCIENCE ASSOCIATIONS.

Nearly a century ago this Court accepted the alleged scientific consensus on eugenics, resulting in shameful decisions, as the patient progress of science eventually unmasked the alleged consensus and the ideology that produced it. See Buck v. Bell, 274 U.S. 200, 207 (1927). Scientific truth advances by observation and evidence adjudicated by reason, not by reference to elite opinion or the polling of experts. Witness Copernicus, Galileo, and Darwin, whose theories were famously rejected, even vigorously repudiated, by the consensus view of science when first reported, but whom we now know were correct.

The advance of science depends on open and vigorous debate about truth-claims. In the modern era, claims of a scientific consensus are often advanced, as with eugenics, when the underlying science is weak and the political stakes are high, and are set forth not with the purpose to encourage, but to foreclose, the healthy debate of reason and evidence that is the foundation of good science-and of good judicial decisions.

The remarkable claim that research on the question has terminated in a "consensus," see Brief of Amicus Curiae American Sociological

Association in support of petitioners 2 (hereafter "ASA Brief"), or unanimous conclusion, see Brief of American Psychological Association et. al in Support of Petitioners 28 (hereafter "APA Brief"), "that children raised by same-sex parents fare just as well as children raised by different-sex parents," see ASA Brief at 2, (referred to throughout as the "harm denial thesis") does not reflect the actual state of research in this area, but is the product of an ideological screen that has excluded, ignored or marginalized research that does not conform to this predetermined outcome.

Until 1985, research reflected a healthy variety of perspectives and findings on the question of child welfare with same-sex parents. In that year the APA's Committee on Lesbian, Gay and Bisexual Concerns ("LGB Concerns Committee") established a Task Force on Non-Homophobic Research, which produced detailed guidelines on avoiding research determined to be "heterosexist", defined as "conceptualizing human experience in strictly heterosexual terms and consequently ignoring, invalidating, or derogating homosexual behaviors and sexual orientation, and lesbian, gay, and bisexual relationships and lifestyles." Gregory M Herek \& Douglas C Kimmel, Avoiding Heterosexist Bias in Psychological Research, 46 The American PSYCHOLOGIST 957, 957 (1991). The guidelines are prominently displayed on the APA website (http://www.apa.org/pi/lgbt/resources/avoidingbias.aspx), and its contents are vigorously enforced by the LGB Concerns Committee, whose mission, in part, is "to reduce prejudice, discrimination and violence against lesbian, gay and bisexual people,"
and who also publish the list of research supporting the harm denial thesis.

As laudable as these social aims may be, it is not hard to see how such a norm can bias the objective pursuit of knowledge regarding children with samesex parents. How can a researcher who has discovered negative outcomes for children with same-sex parents publish such findings without "invalidating (or being perceived as invalidating) lesbian, gay and bisexual relationships"? Even worse, how can a researcher who suspects that he or she may find such outcomes find funding or support for the research? And if she or he does manage to publish, who would dare to cite such research? By the definition above, the mere hypothesis that samesex parents may not be as beneficial for children as opposite-sex ones is prima facie heterosexist.

In practice, the LGB Concerns Committee has rejected as heterosexist any research which uses married biological parents as a comparison group-a restriction which eliminates the most widely observed cause of differences in child outcomes, and relativizes family structure a priori. When same-sex couples, as a group, are compared to opposite-sex couples as a group-lumping together married, divorced, cohabiting, step-families, and often even single parents-most differences between the groups pertinent to the question of marriage are blurred. Yet, this is APA policy.

Studies with weak methodology that support harm denial have been included on the roster of gay parenting studies with little comment, and even
praise, while studies with strong methodology that contradict harm denial have been excluded on specious pretexts, such as that the journal is not prestigious enough, the study is not widely cited, a one-sided accounting of a study's supposed "flaws" with no opportunity for author response, or a concerted attempt to find flaws to justify the exclusion. Peter Wood, The Campaign to Discredit Regnerus and the Assault on Peer Review, 26 Academic Questions 171, 176 (2013) (describing "the straining by Regnerus's critics to find faults in an otherwise exemplary work of social scientific scholarship"). For the LGB Concerns Committee, the mere fact that a study challenges or contradicts the harm denial thesis can itself be reason to exclude the study from the roster. An early study by Sarantakos, an expert on research methods, that found lower developmental outcomes for children with same-sex parents by means of a strong matched-sample design, was excluded from the APA roster because, in part, its findings were published in an Australian journal which "cannot be considered a source upon which one should rely for understanding the state of scientific knowledge in this field, particularly when the results contradict those that have been repeatedly replicated in studies published in better known scientific journals." Charlotte J. Patterson, Lesbian and gay parents and THEIR CHILDREN: SUMMARY OF RESEARCH FINDINGS 6-7 n. 1 (American Psychological Association) (2005), http://www.apa.org/pi/lgbt/resources/parentingfull.pdf. Yet the APA roster includes a number of studies published in lesser-known journals with very
small readership, and even several unpublished dissertations-but which support, not challenge, the harm denial thesis.

Journal editors that publish findings contrary to harm denial have faced intimidating detraction. Three years ago, when Dr. Regnerus, using much stronger data than most prior studies, published a study that found negative outcomes among children with parents who have been in same-sex relationships, see Mark Regnerus, How different are the adult children of parents who have same-sex relationships? Findings from the New Family Structures Study, 41 Social Science Research 752 (2012), both Regnerus and the journal editor were widely vilified by scholars. See Wood, supra, at 174 (noting that the reaction to Regnerus's study came "some of it in the form of criticisms of his analytical methods and handling of statistical data, but much more of it in the form of character assassination and vituperative denunciation"); James D. Wright, Introductory remarks lto a symposium defending publication of the Regnerus study], 41 Social Science Research 1339, 1339 (2012) ("I was not prepared for the nastiness and vituperation that quickly ensued, much of it directed at me personally."). A board member appointed as an "internal auditor" to assess the editor's decisions had already gone on record against the study, see Wright, supra, at 1341 ("Sherkat [the auditor] was an early and ferocious critic of the Regnerus study ..."), and publicly displayed lurid ideological and religious bias. See The New Civil Rights Movement, http://thenewcivilrightsmovement.com/bombshell-
editor-darren-sherkat-admits-peer-review-failure-of-invalid-anti-gay-regnerusstudy/politics/2012/07/27/43778 (last visited Mar 16, 2015) (quoting Sherkat emails as stating: "Believe me, I know there is a vast right wing conspiracy and that Mark Regnerus is a part of it! ... How did the study get through peer review? The peers are right wing Christianists!"). This was not the measured, thoughtful response of scientists encountering an interesting contrary finding, but of ideologues repudiating a doctrinal heresy.

More often, contrary findings have simply been ignored. A study comparing eight dissertations with results favorable to same-sex parents, with four of equivalent methodology whose results had been unfavorable, found that the first group had been included in review articles and cited 238 times while the second group had been cited only once. Walter R Schumm, Re-evaluation of the "no differences" hypothesis concerning gay and lesbian parenting as assessed in eight early (1979-1986) and four later (1997-1998) dissertations., 103 PsYchOLOGICAL REPORTS 275, 275-304 (2008). Another study found that of three similar articles, two with results favorable to gay parenting and one with unfavorable results, the first two had been cited 28 and 37 times respectively while the latter had been cited only twice. Walter R Schumm, Evidence of prohomosexual bias in social science: citation rates and research on lesbian parenting., 106 Psychological REPORTS 374, 374-380 (2010). To compound the inequity, the APA then cites low citations as a reason to exclude studies with contrary findings from the roster. See Patterson, supra, at 7 n .1
(rejecting several studies because "[u]nlike research that makes a contribution to science, his key findings and conclusions have rarely been cited by subsequent scientific studies published in peerreviewed journals as informing their scientific inquiry".)

Discrimination to exclude conservative ideas is pervasive among academic psychologists. See Richard E. Redding, Likes Attract: The Sociopolitical Groupthink of (Social) Psychologists, 7 Perspectives on Psychological Science 512, 512 (2012) (noting the "growing empirical evidence of discrimination against conservative (right-of-center) people and ideas ... in social and personality psychology ..."); Yoel Inbar \& Joris Lammers, Political Diversity in Social and Personality Psychology, 7 Perspectives on Psychological Science 496, 496 (2012) (discussing a survey of 800 psychologists finding that "[i]n decisions ranging from paper reviews to hiring, many [up to $38 \%$ of] social and personality psychologists said that they would discriminate against openly conservative colleagues."). Former APA President Nicholas Cummings has written "The APA has chosen ideology over science," explaining since the mid-1970s "advocacy for scientific and professional concerns has been usurped by agendadriven ideologues who show little regard for either scientific validation or professional efficacy," and the result of this is that "topics that are deemed politically incorrect ... are neither published nor funded." Destructive trends in mental health: the well-intentioned path to harm xiv (R. Wright \& N. A. Cummings ed., 2005).

Thus the APA's absolutist claim of total research unanimity, see Patterson, supra, at 15 ("Not a single study has found children of lesbian or gay parents to be disadvantaged ...."), is not the result of disinterested science, but of the imposition of political will on the research process to exclude and discredit research that shows such disadvantages. Similar bias characterizes the alleged "consensus finding" claims of other major social science associations and the American Academy of Pediatrics, which explains the tolerance, even preference, for the methodologically weak studies discussed below.
II. PERVASIVE METHODOLOGICAL FLAWS UNDERMINE THE ALLEGED "CONSENSUS FINDING" THAT CHILDREN OF SAME-SEX PARENTS FARE JUST AS WELL AS CHILDREN OF OPPOSITE-SEX PARENTS.

The pervasive weaknesses in the stream of research studies on gay and lesbian parenting cited by the APA and ASA in support of "no differences" are widely known. The Eleventh Circuit has aptly summarized them, noting "significant flaws in the studies' methodologies and conclusions, such as the use of small, self-selected samples; reliance on selfreport instruments; politically driven hypotheses; and the use of unrepresentative study populations consisting of disproportionately affluent, educated parents." Lofton v. Sec'y of the Dep't of Children and Family Servs., 358 F.3d 804, 825 (11th Cir. 2004).

Since the early twentieth century, the statistical standard for credible population claims derived from
a sample has been based on two key tests: 1) every member of the population has an equal probability of being included in the sample (random sample), see Jerzy Neyman, On the Two Different Aspects of the Representative Method: The Method of Stratified Sampling and the Method of Purposive Selection, 97 Journal of the Royal Statistical Society 558, 558-625 (1934); and 2) the probability is less than one in twenty that the finding in question may be due to random fluctuation in drawing the sample ${ }^{2}$ (statistical significance). See Ronald Aylmer Fisher, Statistical methods for research WORKERS (Oliver and Boyd 1925). Every selfselected, recruited or convenience sample fails the first test, exhibiting statistical bias; samples that fail the second test, usually due to being too small, lack statistical power.

The disabling problem of small, recruited convenience samples in same-sex parenting research is repeatedly acknowledged by the very scholars whose work is mischaracterized in APA or ASA briefs as demonstrating a scientific consensus. See, e.g., J. Stacey \& T. J. Biblarz, (How) does the sexual orientation of parents matter?, 66 AMERICAN Sociological Review 159, 166 (2001) ("There are no studies [with same-sex parents] based on random, representative samples of such families. Most studies rely on small-scale, snowball ${ }^{3}$ and

[^1]convenience samples drawn primarily from personal or community networks or agencies."); Jennifer L. Wainright et al., Psychosocial adjustment, school outcomes, and romantic relationships of adolescents with same-sex parents, 75 CHILD DEVELOPMENT 1886, 1888 (2004) (hereafter "Wainright, Psychosocial") ("However, existing research is still sparse and based on small samples, the representativeness of which is generally difficult to assess."); Gunnar Andersson et al., The demographics of same-sex marriages in Norway and Sweden, 43 DEmography 79, 81 (2006) (noting that " $[t]$ he lack of representative samples is the most fundamental problem in quantitative studies on gays and lesbians, which commonly rely on self-recruited samples from an unknown population"); Gregory M. Herek, Legal Recognition of Same-Sex Relationships in the United States: A Social Science Perspective, 61 American Psychologist 607, 613 (2006) ("Because these studies [showing no difference in child outcomes] used convenience samples ..., they do not provide a basis for estimating population parameters for all children of sexual minority parents relative to those with heterosexual parents."); Michael J Rosenfeld, Nontraditional Families and Childhood Progress through School, 47 DEMOGRAPHY 755, 757 (2010) ("The universally small sample sizes in the existing literature has left room for several critiques, including the argument that small sample sizes would not have the statistical power to identify the effects of homosexual parents on childhood outcomes even if such effects did exist."); Wendy D. Manning et al., Child WellBeing in Same-Sex Parent Families: Review of

Research Prepared for American Sociological Association Amicus Brief, 33 Population Research and Policy Review 485, 487 (2014) ("Convenience samples are more common [noting that just four representative samples have been used in the literature] .... Relying on convenience samples means that the same-sex parents in these studies are not representative of all same-sex parents and represent only those who were targeted and agreed to participate, ....").

Many more examples could be cited to establish that, contrary to the assertion that the denial of harm rests on "[d]ecades of methodologically sound social science research," ASA Brief at 2, most studies in the field themselves acknowledge that the evidence from small, unrepresentative samples is far too limited to make such a claim. Dozens of weak and unrepresentative studies do not support strong conclusions about the presence or absence of harm, much less the persistent assurance that no such harm exists.

1. OF THE DOZENS OF STUDIES CITED IN SUPPORT OF THE CONSENSUS, ONLY EIGHT MEET SCIENTIFIC STANDARDS FOR POPULATION INFERENCE.

If one applies the above-noted standards of scientific credibility-random sampling and statistical significance-to the several dozen published studies of same-sex parenting, only eight studies are based on evidence that passes the two tests ("gold standard"). These eight include Wainright et al's three studies of adolescents raised by lesbian
mothers, based on the National Longitudinal Survey of Adolescent Health (Add Health); Wainright, Psychosocial, at 1886; Jennifer L. Wainright \& Charlotte J. Patterson, Delinquency, victimization, and substance use among adolescents with female same-sex parents., 20 JoURNAL OF FAMILY Psychology 526 (2006); Jennifer L. Wainright \& Charlotte J. Patterson, Peer relations among adolescents with female same-sex parents., 44 Developmental Psychology 117 (2008). These studies also include Rosenfeld and Allen's conflicting analyses of child progress in school, using data from the 2000 Census and the Canadian census respectively, see Rosenfeld, supra; Douglas W Allen, High school graduation rates among children of same-sex households, 11 Review of Economics of the Household 635 (2013); and Regnerus's retrospective study of children whose parents were in a same-sex relationship. See Regnerus, supra. Finally, and most notably, are two recent studies by Sullins on emotional problems and ADHD among children with same-sex parents, using data from the National Health Interview Survey (NHIS). See D. Paul Sullins, Emotional Problems among Children with Same-sex Parents: Difference by Definition, 7 BRITISH JOURNAL OF EDUCATION, SOCIETY AND BEHAVIOURAL SCIENCE 99 (2015) (hereafter "Sullins, Emotional'); D. Paul Sullins, Child Attention-Deficit Hyperactivity Disorder (ADHD) in Same-Sex Parent Families in the United States: Prevalence and Comorbidities, 6 British JOURNAL OF MEDICINE AND MEDICAL RESEARCH 987 (2015) (hereafter "Sullins, $A D H D^{\prime}$ ). Let us examine this small body of
genuinely scientific, gold standard research more closely.

## 2. OF THE EIGHT GENUINE STUDIES, FOUR—THE MOST RECENT—FIND THAT CHILDREN WITH SAME-SEX PARENTS SUFFER SUBSTANTIALLY REDUCED WELL-BEING.

As aforementioned, in 2012, Regnerus published the findings of a retrospective study based on representative national sample of 2,988 adults, including 248 whose mother or father had been in a same-sex relationship at some point during their upbringing. Regnerus, supra. A follow-up study in the same year elaborated essentially the same findings. Regnerus found that well-being for the adults who reported a parent having been in a samesex relationship (during the respondent's childhood) was significantly lower than in the general population, particularly when compared to persons who had grown up with parents who are still married or were married until one of them died. Id. at 752. The differences were striking. For example, persons with lesbian mothers were, as adults, over three times more likely to be unemployed and receiving public assistance, or to have had a marital affair. Id. at 761, Table 2. They were more likely to be depressed, smoke, use marijuana, to have been arrested and to have pled guilty when they were arrested. Id. at 762, Tables $3 \& 4$. Some of the largest, and most sensitive, differences were in reported childhood sexual abuse: the children of lesbian mothers were, as children, ten times more likely to have been sexually touched by a parent or
other adult and four times more likely to have been forced to have sex against their will. Id. at 761, Table 2. As adults, they had had a significantly larger number of sexual partners and were twice as likely to be cohabiting. Id. at 761-62, Tables $2 \& 4$.

The Regnerus study was limited in that few of the reported same-sex parents had been in a same-sex relationship for very long. Critics pointed out, correctly, that factors other than parental sexual orientation may account for the differences observed. Nevertheless, the study demonstrated that, even with an attenuated sample, large statistically significant differences were present where the "consensus finding" body of research had long claimed there were none. And the burden to show that other factors (rather than exposure to or residence with a same-sex parent) explains the differences rests with the critics, not Regnerus. So far, none have done so.

In 2013, Allen published a study based on the Canadian census that showed that children raised by same-sex parents were $35 \%$ less likely to graduate from high school. Allen, supra, at 635. Girls did worse with two fathers than with two mothers; boys did worse with two mothers than with two fathers. Id. at 649-50. Allen suggested that fathers and mothers may not be substitutable, and concluded "it is time to investigate the difference and reject the conventional wisdom of 'no difference'." Id. at 654 .

Regnerus's study was limited by a relatively small sample size; Allen's was limited to a single outcome measure. The final two studies in this section employed both a large representative sample and multiple outcome measures, also finding substantial disadvantages for children with same-sex parents.


In a study published in early 2015 examining the National Health Interview Survey (NHIS), a largesample public health survey ( 1.6 million cases during the period examined) administered by the Centers for Disease Control (CDC), Paul Sullins
found that the risk of child emotional and developmental problems was at least twice as high for children with same-sex parents than for those with opposite-sex parents on a range of related outcomes, including predicted risk of psychological disorders, learning disability, and attention-deficit hyperactivity disorder (ADHD). Sullins, Emotional, at 109, Table 3. Figure 1 illustrates; see Appendix for more details.

Serious emotional problems and/or elevated risk of an emotional disorder was reported for 17.4 percent of children with same-sex parents, compared to only 7.4 percent of children with opposite-sex parents. Children with same-sex parents were almost twice as likely to have a developmental disability and much more likely to have received medical treatment for an emotional or mental health problem. See Sullins, Emotional, at 109, Table 3. Most of the differences are statistically significant at .001, meaning there is less than one chance in a thousand that the findings are due to sample variability.

The harm deniers counter that Sullins's studies "fail to account for family stability" (ASA Brief at 11) or "children's histories of family disruption" (APA Brief at 27). This is a form of special pleading, since most studies alleging to show "no differences" between same-sex and opposite-sex parent families have not accounted for family stability. Perrin et al.'s 2013 critique of the Regnerus study, cited favorably in the ASA brief (at 25), asserted that "[i]f there is sufficient evidence to support [the proposition that] '[c]hildren from same-sex families display notable disadvantages when compared to children from other
family forms' with confidence, the no-differences hypothesis should be rejected ...." Yet when Sullins presented precisely such findings showing with very high statistical confidence that children from samesex families suffer twice the rate of serious emotional problems, the harm deniers raised a new proviso which they claim invalidates the findings.

The supposition on which the proviso rests is that the relative harm for children with same-sex parents discovered by Sullins could be due solely to residual effects from a prior opposite-sex setting, or from the transition from a prior opposite-sex family dissolution, and not at all due to current residence with same-sex parents, thereby maintaining the harm denial thesis intact. If this supposition were true, then controlling for family stability would eliminate all or almost all of the higher risk of emotional harm Sullins observed for children with same-sex parents. If it were not true, then controlling for stability would have little or no effect on the difference in child harm between the two family types.

The latter is precisely what Sullins found. Despite false assertions to the contrary, Sullins did examine the effects of family stability in two ways. See Sullins, Emotional, at 102 ("The present study tests the hypothesis that reduced stability relative to opposite-sex families may explain part or all of any increased emotional distress experienced by children in same-sex families.").

First, he separated families who owned their homes from those living in rented quarters. The ASA's assertion that housing status here "only measures socioeconomic means" (ASA Brief at 11) is absurd. Sullins imposed separate controls for income and education, thus nullifying any association of housing status with socioeconomic means; in his analysis, the variable expresses the effect of housing status net of socioeconomic factors. Abundant research has established that homeowning families are much more relationally stable than renters. DAVID F. Clapham et al., The SAGE Handbook of Housing Studies 60 (SAGE) (2012) (summarizing research that relational stability "is important for the transition to first-time homeownership" and "longterm housing decisions"); Peteke Feijten, Union Dissolution, Unemployment and Moving out of Homeownership, 21 European Sociological REVIEW 59, 64 (2005) (finding that "after [relationship] separation, the large majority [80\%] of moves were into rental housing"); Michael Bracher et al., Marriage Dissolution in Australia: Models and Explanations, 47 Population Studies 403, 421 (1993) (observing that "[g]reater marital stability is associated with home-ownership" and "greater instability is associated with renting," after finding that "the relative risk [of relationship disruption] associated with renting rather than owning was as high as $2.13 "$ ). Homeownership may not capture all the variation in family stability, but it certainly captures a large part of it.

If family stability were so strongly associated with the substantially higher child emotional harm found
in same-sex families as to explain it away completely, as both ASA and APA suppose, we would expect homeownership at least to reduce the observed difference substantially. But Sullins found that, although homeownership did have a strong effect on emotional problems, see Sullins, Emotional, at 108 ("children of families in rented quarters are $31 \%$ more likely to experience emotional problems than children of homeowner families"), thus confirming that it is associated with meaningful variation in child emotional problems, homeownership accounted for only a negligible amount (3\%) of the difference in risk of emotional problems between opposite-sex and same-sex parent families. Id. Children in stable families, in other words, are much less likely to experience emotional problems, but children in stable same-sex parent families are still about twice as likely to suffer serious emotional problems as are children in stable opposite-sex parent families.

Second, Sullins compared same-sex parent families with only opposite-sex step-parent or "blended" families, excluding the large body of more stable opposite-sex intact married families. Like same-sex parents, many partners in blended families have experienced a prior divorce or relationship dissolution. If child emotional problems in same-sex parent families were the residual effect of, or due to the trauma of transition from, a prior divorce or other family breakdown, this would be equally true for these opposite-sex step-parent families, and there would consequently be little or no difference in child emotional problems between these two family forms.

It is incomprehensible why the APA would criticize the paper for making such a worst case comparison of same-sex parents with the least stable oppositesex parents, thereby ceding as much ground as possible to the instability hypothesis. See APA Brief at 27 n .48 (including "creating more differentiated categories of children of opposite-sex couples (children residing with married versus single or divorced parents)" among the "methodological flaws" of the paper). Perhaps it has to do with the outcome: Sullins found that restricting the comparison to only opposite-sex step-parent families reduced the overall risk of child emotional problems due to same-sex parents by only 13 percent, from a risk of 2.4 to a risk of 2.2. Sullins, Emotional, at 110; see also id. at 111-12, Tables $4 \& 5$. Far from explaining the difference away, as the instability hypothesis would predict, the residual effects of prior divorce or family dissolution accounted for only a small part of the substantially higher risk of emotional problems faced by children with same-sex parents.

Sullins also tested to see if stigmatization or bullying explained away the difference and found that, on the NHIS, children with same-sex parents did not experience more peer stigmatization than did their counterparts with opposite-sex parents. Sullins, Emotional, at 108, Table 2. However, in a companion study also based on the NHIS, Sullins found that ADHD was separately associated with higher susceptibility to bully victimization among children with same-sex parents. See Sullins, $A D H D$, at 993-94.

Beyond what has already been discussed, both the ASA and APA predictably attempt to discredit Sullins's recent findings of serious emotional harm, presenting points that are misleading, uninformed or deceptive.

For example, the APA brief (at 27 n.48) notes that Sullins did not address an NHIS coding error that, for three of the seventeen years he examined, may have partially contaminated the category of samesex couples with opposite-sex cases. But the APA does not acknowledge that such contamination makes it more difficult to show differences between the two family types, and thus that the result of the error is that his reported findings likely understate the true level of increased risk of emotional problems for children with same-sex parents observed on the NHIS. Discussion of data validation issues was dropped from the published article for length, but Sullins has appended to the preprint at the Social Sciences Research Network an analysis which reports on his correspondence with the CDC about the problem, and which confirms that, without the error, the estimated relative risk of harm due to residence with same-sex parents would be about $20 \%$ higher than that reported in his study. See Donald Paul Sullins, Emotional Problems among Children with Same-Sex Parents: Difference by Definition (Social Science Research Network 2015), http://papers.ssrn.com/abstract=2500537 (last visited Mar 14, 2015).

In addition, both the ASA and APA briefs speciously allege that the peer review for Sullins's articles was
substandard. See, e.g., APA Brief at 27-28 n.48. Just the opposite is true. Although Sullins has published in top sociological journals, in this case, aware that his findings challenged the stated political positions of the APA and ASA and the associated ideology of harm denial, and aware of the unprecedented pressure placed on the journal editor and the peer review process after Regnerus published similar findings, he elected to pursue publication of his studies, based on a large public health survey, in international hard-science medical journals, where the standards of evidence are generally rigorous, but the imposition of groupthink orthodoxy is much less, than in American social science journals.

The ASA brief complains (at 11 n .10 ) that the review by the British Journal of Medicine and Medical Research was too short and critiques too brief to have been rigorous, taking only 16 days to first acceptance. ASA apparently is unaware that the peer review process is much shorter, and critiques much less verbose, in hard-science medical journals than in family sociology journals. For example, the Journal of the American Medical Association (JAMA), the top American medical journal, reports that median time to first editorial decision is just 3 days, though subsequent peer review takes up to an additional 36 days, on average. JAMA NETWORK | JAMA | Why Publish In JAMA, http://jama.jamanetwork.com/public/WhyPublish.asp x (last visited Mar 12, 2015). The British Medical Journal, arguably the most rigorous medical journal in the world, advises authors: "We aim to reach a
first decision on all manuscripts within two or three weeks of submission." PEER REVIEW PROCESS, http://www.bmj.com/about-bmj/resources-authors/peer-review-process (last visited Mar 12, 2015). By these standards, the time to acceptance of Sullins's article was not short. The ASA's complaint that proper peer review would take a full year is simply uninformed.

Similarly, the APA brief complains that "none of the journals in which Sullins's papers were published are indexed in major, reputable social science databases." APA Brief at 27 n.48. This is true but beside the point. As medical journals, the journals Sullins published in are indexed in medical indexes, such as Index Medicus and the National Library of Medicine database, not social science databases. This complaint also ignores the fact that the practice of abstracting, in which an information service gathers and organizes a body of research articles for scholars to search, has overtaken the older practice of indexing; and the journals in which Sullins published are abstracted by all the major scholarly services, including Ebscohost and Proquest, and thus are available to any academic research search process.

The APA brief next alleges that "a cursory examination of the reviews ... reveals that they raised few substantive concerns at all." APA Brief at 28 n.48. Perhaps the APA should have given more than a cursory examination, because a closer look reveals the following regarding Sullins's central study on child emotional problems: Although the
normal standard is for an editor to send an article to two reviewers, the journal, recognizing the complexity and significance of the study, sent the article out to four reviewers and appointed two independent editors to approve publication. See Sullins, Emotional, at 120 ("The peer review history for this paper can be accessed here: http://www.sciencedomain.org/review-
history.php?iid=823\&id=21\&aid=8172"). Thus, the article was subjected to twice the ordinary peer review. Moreover, though the usual practice is for one round of review and response before an editorial decision, in this case there were two rounds of review and response before both editors independently rendered a decision. See id. (directing the reader to a website where all the peer review information is contained). One reviewer, not satisfied merely with making comments about the article, presented Sullins with an extensively revised and commented draft using "track changes." See Peer Review Report 4, File 2, available at http://www.sciencedomain.org/reviewhistory.php?iid=823\&id=21\&aid=8172. This level of scrutiny is very rare in American social science journals.

The APA also fails to note that the publication of an article's peer review history for anyone to examine ("open peer review"), which enables them to express an opinion on the peer review of Sullins's articles, is itself a sign of peer review quality. Only a minority of the most rigorous journals in the world openly publish reviewer critiques and author defenses. No APA journal practices this level of transparency.

In a recent independent assessment of peer review at over three hundred scientific publishers by Science, the world's premiere scientific journal, involving the submission of a plausible but flawed study, the publisher of Sullins's studies attained the highest ranking possible for peer review rigor, a distinction earned by only the top $7 \%$ of journals worldwide. See John Bohannon, Who's Afraid of Peer Review?, 342 Science 60, 60-65 (2013) at 64; see also Supporting Data and Documents. The journals that published Sullins's studies have, in effect, passed peer review of their peer review with the highest mark.

The true objection of the APA and ASA to Sullins's articles has nothing to do with their scientific rigor, but with his findings, which do not conform to the ideology of harm denial. Despite mounting evidence to the contrary, the APA and ASA will doubtless continue to deny that any study has found evidence of harm to children with same-sex parents.
3. THE FOUR EARLIER STUDIES REPORTING "NO DIFFERENCE" FINDINGS ARE INVALID DUE TO CORRUPTED SAMPLES.

The four studies discussed in this section present the strongest evidence available for the harm denial thesis. They use gold standard data that have the power to reveal differences if they existed, and none of them claim to find any disadvantage for children with same-sex parents. Yet all four studies suffer from a fatal flaw: a large portion ( $40-60 \%$ ) of the children they report as being with same-sex parents
are actually children with opposite-sex parents, rendering any application of their findings to samesex couples invalid, or at least extremely problematic. Let us examine each study more closely.

1. In Rosenfeld's 2010 study, at least forty percent of couples classified "same-sex" are mistakenly coded opposite-sex couples.

In his 2010 study of child progress in school, Rosenfeld failed to acknowledge known coding errors in the Census 2000 data which resulted in the misclassification of many heterosexual partners as same-sex couples.

Black and colleagues, in their 2007 study exposing the problem, explained:"This misclassification is the consequence of a relatively rare error-the misreporting or miscoding of an individual's sex or the sex of a spouse or partner. ... [E]ven a minor amount of measurement error, when applied to a large group, can create a major problem for drawing inferences about a small group in the population." Dan Black et al., The measurement of same-sex unmarried partner couples in the 2000 US Census, California Center for Population Research 1 (2007), https://escholarship.org/uc/item/72r1q94b.pdf (last visited Sep 9, 2014). Black at al. estimated that at least forty percent of the cases in the same-sex couples sample "are actually different-sex married couples," id. at 9 , and concluded by warning researchers that "many of the inferences drawn from these data are incorrect." Id. at 10.

The inclusion of such a large proportion of oppositesex couples in the same-sex category masks differences between same-sex and opposite-sex couples. Although Black et al.'s study was published several years earlier, and would certainly be of great concern to any scholar aspiring to use the Census 2000 data to study same-sex couples, Rosenfeld appears to have been unaware of the problem. In reality, Rosenfeld compared opposite-sex couples with other opposite-sex couples mixed in with samesex couples. Such an error invalidates analyses that report no differences, while strengthening confidence in analyses that find differences, like Allen's rebuttal of Rosenfeld.

## 2. In Wainright's three Add Health studies, 27 of 44 same-sex couples are actually opposite-sex couples.

As already noted, three articles by Wainright and colleagues comprise the bulk of the gold standard research cited in support of harm denial. The APA and ASA briefs each cite them five times; the APA brief cites them as one of only three sets of studies of same-sex parenting based on national probability samples. APA Brief at 24 n.44. All three Wainright studies use the same sample of 44 adolescent children with lesbian mothers, statistically representative of the national population of such children in the National Longitudinal Survey of Adolescent Health (Add Health). Those children are compared with a matched group of 44 adolescents with opposite-sex parents in the same data, the authors finding no differences between the two groups on multiple pertinent outcome measures. But
in these studies, the comparison sample, which is presented as a sample of same-sex parents, consists mostly of children with both a female mother and a male father in the home.

The authors explain that they identified a smaller sample of 18 "clear cases in which adolescents described themselves as living only with two samesex adults", Wainright, Psychosocial, at 1890; but they chose to analyze the larger sample of 44 adolescents because they wanted to include "adolescents from divorced families in which one or both parents were currently involved in same-sex relationships" and children in joint custody arrangements. Id. Remarkably, the authors report that they did not exclude from these additional 26 cases any adolescents who "reported [a] male figure (biological father, stepfather) as residing in the household." Id. at 1890. An inspection of the Add Health data used by Wainright et al. reveals that for all 26 additional cases, plus one of the 18 "clear cases," the adolescents involved reported that, in addition to their female mothers, they were living with their male fathers. ${ }^{4}$ In sum, for 27 of the 44 "lesbian mother" couples in Wainright et al.'s sample, the responding adolescent reported that one of the parents in the household was his or her male father. See National Longitudinal Study of Adolescent to Adult Health (Add Health), Wave I; The Unexpected Harm of Same-sex Marriage: A Critical Appraisal and Re-Analysis of

[^2]Wainright's Studies of Adolescents with Samesex Parents (Submitted article working copy), www.ssrn.org/sullins (hereafter "Sullins, Unexpected Harm").

The family arrangement envisioned in same-sex marriage is generally understood to be the condition of actually having two parents of the same sex, not opposite-sex parents who may or may not be in a same-sex relationship with someone outside the home. Instead of comparing heterosexual parents with same-sex parents, Wainright et al's three studies compared a group of heterosexual parents with another group of (mostly) heterosexual parents. It is not surprising they found "no differences" in child outcomes between these groups, since they are, for the most part, the same group. The findings of these three studies do not apply at all to same-sex parenting, and form no reasonable basis to conclude that children of same-sex parents are not disadvantaged.
III. RE-ANALYSIS OF THE WAINRIGHT STUDIES DATA, AFTER CORRECTING THE SAMPLE FLAWS, REVEALS THAT ADOLESCENTS WITH MARRIED SAME-SEX PARENTS FARE WORSE THAN THOSE WITH UNMARRIED SAME-SEX PARENTS.

Petitioners and their amici assume that by granting legal marital status to same-sex partners, the benefits of opposite-sex marriage will extend in degree and kind to same-sex partnerships, particularly with regard to child well-being. If the harm denial thesis were correct, and any increased
distress observed among children with same-sex parents were due to factors external to the family, like stigmatization or lack of social standing, then it may well be alleviated in large part by increased legal status. But if the harm denial thesis is not correct, and the increased distress is due to factors internal to same-sex parent families, as demonstrated by Regnerus, Allen and Sullins, then increased legal status could well exacerbate child harm. Recent additional evidence strongly suggests that the latter is the case.

After correcting the sample to include only clear cases of same-sex parents, Sullins reanalyzed the same outcome variables used in Wainright et al.'s first study. See Wainright, Psychosocial, at 1886. Both APA and ASA agree see, e.g., APA Brief at 24 \& n.44, that the gold standard Add Health data used here are statistically representative, so that the differences of this group from other groups can be inferred with validity to the U.S. population. Sullins found that anxiety was significantly higher for children with same-sex parents, confirming his earlier NHIS findings, see Sullins, Emotional, at 99, and those of Regnerus; but more importantly, that marriage of same-sex parents was related to dramatically lower child outcomes overall.

About half of the same-sex parent couples on Add Health identified as "married." Since these interviews occurred in 1995, it is doubtful that these same-sex couples were legally married, but they may have been married in a private or religious ceremony, and in any event reported that they perceived their relationship as one of marriage. The
other half of the same-sex parent couples reported that they were living with each other in a marriagelike relationship, but were unmarried. Eighty-three percent of the unmarried parents were divorced or separated; the remainder were single, never married.

Comparing the married and unmarried same-sex parents with their opposite-sex counterparts, Sullins found that, while outcomes for children with opposite-sex parents improved if their parents were married, outcomes for children with same-sex parents were notably worse if their parents were married.

Bar charts below and in the Appendix illustrate the results. Asterisks by a number in the charts indicate that it can be inferred with confidence to the U.S. population of adolescents; the more asterisks, the greater the confidence.


Figure 2 reports results from the Depression scale of the Center for Epidemiological Studies (CES-D), see Lenore Sawyer Radloff, The CES-D scale: A selfreport depression scale for research in the general population, 1 ApPLIED Psychological MEASUREMENTS 385-401 (1977), a widely used measure of depressive symptoms that, according to the APA, screens for clinical depression "with good sensitivity and specificity and high internal consistency." Center for Epidemiological Studies DEPRESSION (CESD), http://www.apa.org/pi/about/publications/caregivers/ practice-settings/assessment/tools/depressionscale.aspx (last visited Mar 14, 2015). As used here,
it does not indicate clinical depression, but only above-average depressive symptoms. As Figure 2 shows, these dropped (from $56 \%$ to $47 \%$ ) with married opposite-sex parents, but rose dramatically (from $50 \%$ to $88 \%$ ) with married same-sex parents.


On a CES-D subscale ("Lack of Positive Affect") measuring unhappiness, shown in Figure 3, 95\% of children with married same-sex parents were above the average, compared to only an estimated third (34\%) of children with unmarried same-sex parents.


As Figure 4 illustrates, feeling fearful or crying every day or almost every day was reported by almost a third (32.4\%) of children with married same-sex parents, but only five percent of children with unmarried same-sex parents.


Figure 5 reports that child anxiety, which is significantly higher overall with same-sex parents, also follows the pattern of being lower with unmarried opposite-sex parents but increasing with married same-sex parents.

Figures 6 and 7 report evidence that strongly confirms Regnerus's findings on the sensitive topic of child sex abuse with same-sex parents. On the Add Health interview, adolescents who report that they have already had sexual intercourse are asked if they have ever been physically forced to have sex against their will. To ensure as honest a response as
possible, the adolescents hear the question via headphones and record their answers anonymously. Almost all the adolescents with same-sex parents giving a positive response are females with female same-sex parents.


As Figure 6 shows, over twice as many adolescents with same-sex parents reported being forced to have sexual intercourse, and the proportion with married same-sex parents who reported forced sex (70.5\%), was dramatically higher than the proportion doing so with unmarried same-sex parents (23.5\%).

Almost one in four children with unmarried samesex parents, and over two in three children with married same-sex parents, reported that they had been forced to have sexual intercourse.


Although the question in Figure 6 does not preclude the possibility of date rape, the association of such large differences with the different family forms suggests that a substantial portion of the forced sex occurred in the family. Figure 7 confirms this suggestion. This figure reports the responses to a question asking whether the responding adolescent
had, prior to the sixth grade, ever been forced by a parent or caregiver to have sexual intercourse, or to touch or be touched in a sexual way. Again, over a third of children residing with married same-sex parents reported that they had been sexually violated in this way by a parent or caregiver, compared to relatively small proportions in the remaining three family types, and nominally no children residing with unmarried same-sex parents.

Thus far the six findings presented all exemplify the same pattern: among opposite-sex parents, moving from an unmarried to a married state improves outcomes for children; but among same-sex parents, moving from an unmarried to a married state substantially degrades child well-being.


Figures 8-10 address explanatory suppositions or objections to a showing of harm raised by Petitioners and their amici. Contrary to the suggestion that child emotional harm with same-sex parents would be reduced with more stable parents, Figure 8 shows that the longer the adolescents were with same-sex parents, the worse they fared. Those who resided with married same-sex parents for over ten years, on average, fared much worse than those residing with unmarried, mostly divorced, same-sex parents for only four years, on average. Child harm with same-
sex parents may be amplified by a longer time spent with them, or by marriage itself, or both. In any event, the increased harm is clearly not a residual effect of former relationships.


Figure 9 suggests, as Sullins also found on the NHIS, that the increased emotional distress for children with same-sex parents is not due to pervasive stigma; children with same-sex parents were, in fact, much less likely to feel that people were unfriendly or disliked them.


Finally, Figure 10 confirms the widespread research finding that same-sex parents are just as loving and caring, perhaps more so, than are opposite-sex parents. However, the inference that these positive parenting qualities lead to equivalent or better child outcomes with same-sex parents is false. These admirable qualities of same-sex parents coexist with the experience of higher emotional distress for their children, particularly among married same-sex parents.

This is now the third nationally-representative dataset to report that children with same-sex
parents suffer substantially higher distress, or lower well-being, than do children with opposite-sex parents. If we include Dr. Allen's study of high school graduation differences among Canadian children, it is the fourth such study in as many years. In addition, the Add Health data strongly suggest that, for children with same-sex parents, marriage is associated with increased harm.

If the roster of harm denial studies ever reflected the true state of knowledge in the study of same-sex parenting, it emphatically does so no longer. The longer social scientists study the question, the more evidence of harm is found, and the fact that children with same-sex parents suffer significant harm in that condition, compared to children with oppositesex parents, particularly among same-sex parents who identify as married, has been established beyond reasonable doubt.

## CONCLUSION

Despite intense political bias to suppress the findings set forth herein, evidence from large, nationally-representative studies has demonstrated that children raised by same-sex parents, particularly those who identify as married, do not fare as well as those with opposite-sex parents, and many experience substantial harm. For these reasons, state laws restricting marriage to oppositesex partners have a rational basis, and the judgment of the Sixth Circuit should be affirmed.

Respectfully submitted,

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## APPENDIX

## Figure 1 <br> Child Emotional Problems, Developmental Disability, and Medical Treatment for Emotional Problem by Family Type



Source: National Health Interview Survey (CDC-NCHS) 1997-2013. ( $\mathrm{N}=207,007$ ). Data are a representative sample of all U.S. children. Contrasts are adjusted for child age, sex and race, and parent education and income, and are significant at .01 or better. Sullins, Emotional, at 109, Table 3.

## Figure 2

Child Depressive Symptoms (CES-D) (percent above average) by Family Type and Marriage


Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. CES-D, Center for Epidemiological Studies - Depression Scale. Values shown are not predictive of clinical disorder. Asterisks indicate significance of difference from opposite-sex married: ${ }^{*} \mathrm{P}<$ $.10,{ }^{* *} \mathrm{P}<.05^{* * *} \mathrm{P}<.01^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

| Figure 3 |
| :---: |
| Child Unhappiness |
| (CES-D Subscale Lack of Positive Affect: |
| percent above average) |
| by Family Type and Marriage |



[^3]Figure 4
Child Fearful or Crying Every Day or Almost Every Day in the Past Year (percent) by Family Type and Marriage


Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents Asterisks indicate significance of difference from opposite-sex married: * $\mathrm{P}<.10,{ }^{* *} \mathrm{P}<.05^{* * *}$ $\mathrm{P}<.01^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.


[^4]
## Figure 6

"Were you ever physically forced to have sexual intercourse against your will?" - percent "yes" (of those who have ever had sexual intercourse) by Family Type and Marriage


Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. Males were asked, "Did you ever physically force someone....?" All "yes" respondents with same-sex (lesbian) parents were female. Asterisks indicate significance of difference from opposite-sex married: * $\mathrm{P}<$ $.10{ }^{* *} \mathrm{P}<.05{ }^{* * *} \mathrm{P}<.01{ }^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

## Figure 7

"Before you were in the $6^{\text {th }}$ grade, had one of your parents or other adult care-givers touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations?" - percent "yes" by Family Type and Marriage


[^5]
## Figure 8

Years Child has been in Current Family (Stability) by Family Type and Marriage


Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. Asterisks indicate significance of difference from opposite-sex married: ${ }^{*} \mathrm{P}<.10,{ }^{* *} \mathrm{P}<.05{ }^{* * *}$ $\mathrm{P}<.01{ }^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

## Figure 9

People are unfriendly or dislike you (CES-D Interpersonal Subscale: percent above average) by Family Type and Marriage


Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. CES-D, Center for Epidemiological Studies - Depression Scale. Values shown are not predictive of clinical disorder. Asterisks indicate significance of difference from opposite-sex married: * $\mathrm{P}<$ $.10,{ }^{* *} \mathrm{P}<.05{ }^{* * *} \mathrm{P}<.01{ }^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

| Figure 10 |
| :---: |
| Parental Warmth and Caring (child-rated) by |
| Family Type and Marriage |



Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. Asterisks indicate significance of difference from opposite-sex married: ${ }^{*} \mathrm{P}<.10,{ }^{* *} \mathrm{P}<.05^{* * *}$ $\mathrm{P}<.01{ }^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.


[^0]:    ${ }^{1}$ Parties to these cases have consented to the filing of this brief and a letter indicating their consent is on file with the Clerk. Amici state that no counsel for a party authored this brief in whole or in part, and no person other than the amici and their counsel made any monetary contribution intended to fund the preparation or submission of this brief.

[^1]:    ${ }^{2}$ Sometimes relaxed to one in ten with very small samples, as often occurs studying same-sex partners; however such results are correspondingly considered provisional.
    ${ }^{3} \mathrm{~A}$ snowball sample is constructed by surveying a respondent's friends or acquaintances, then the friends of those friends, etc.

[^2]:    ${ }^{4}$ In order to reduce the error that occurred on the 2000 Census, this interview did not assume a parent's sex, but asked an additional question to verify the sex of each parent.

[^3]:    Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. CES-D, Center for Epidemiological Studies - Depression Scale. Values shown are not predictive of clinical disorder. Asterisks indicate significance of difference from opposite-sex married: * $\mathrm{P}<$ $.10,{ }^{* *} \mathrm{P}<.05{ }^{* * *} \mathrm{P}<.01{ }^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

[^4]:    Source: National Longitudinal Survey of Adolescent Health, Wave I ( $\mathrm{N}=20,746$ ). Data are a representative sample of all U.S. adolescents. Anxiety scale range is comprised of 6 items, range zero to 24. Asterisks indicate significance of difference from opposite-sex married: ${ }^{*} \mathrm{P}<.10,{ }^{* *} \mathrm{P}<.05{ }^{* * *}$ $\mathrm{P}<.01{ }^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

[^5]:    Source: National Longitudinal Survey of Adolescent Health, Wave III ( $\mathrm{N}=15,197$ ). Data are a representative sample of all U.S. adolescents. Asterisks indicate significance of difference from opposite-sex married: * $\mathrm{P}<.10,{ }^{* *} \mathrm{P}<.05{ }^{* * *}$ $\mathrm{P}<.01^{* * * *} \mathrm{P}<.0001$ Sullins, Unexpected, at 14, Table 3.

