

EXHIBIT 61

iMAPP Research Brief

Institute for Marriage and Public Policy

Vol. 1, No. 1, July 2007

DOES DIVORCE LAW AFFECT THE DIVORCE RATE?

A REVIEW OF EMPIRICAL RESEARCH, 1995-2006

By Prof. Douglas W. Allen and Maggie Gallagher

Douglas Allen is a professor of economics at Simon Fraser University.

Maggie Gallagher is President of the Institute for Marriage and Public Policy

Executive Summary:

Did the introduction of no- divorce law affect the divorce rate? This study looks at all the empirical research since 1995 that examines the impact of no-fault divorce laws on divorce rates both in the United States and in other nations, 24 studies in all, and concludes:

****No-fault divorce did increase the divorce rate.** Seventeen of 24 recent empirical studies find that the introduction of no-fault divorce laws increased the divorce rate, by one estimate as much as 88 percent. More typically, studies estimate no-fault divorce increased divorce rates on the order of 10 percent.*

****Divorce law, however, is not the major cause of the increase in divorce over the last 50 years.** Clearly many other factors besides divorce law influence the divorce rate.*

****The effect of no-fault divorce laws on the overall divorce rate appears to fade with time;** couples respond to the increased divorce risk from no-fault divorce law by delaying or forgoing marriages at higher risk of divorce, and states adopt related legal reforms that mitigate some of no-fault's consequences.*

****For couples of a given match quality, no-fault divorce may have resulted in a permanent increase in divorce risk.** Studies which take into consideration age at marriage tend to show a permanent increase in divorce risk after no-fault divorce.*

The idea that family law has no independent effect on family behaviors is difficult to reconcile with either economic theory or existing empirical research. Family scholars, policymakers, legislators, and media need to consider and take seriously the complex ways in which family law affects the likelihood that couples and children will enjoy the benefits of stable marriage.

Introduction

Between 1960 and 1980, the U.S. divorce rate roughly doubled.¹ During the same time period, most American states adopted some version of no-fault divorce.² Specifically, 35 states expanded no-fault to include not only the grounds for divorce but consideration of fault in alimony and the distribution of property.³

The reforms keep coming. In the past decade, more than 15 American states have considered divorce law reform. Louisiana

recently expanded its waiting period for no-fault divorces that affect minor children.⁴ New Jersey this year shortened the waiting period for no-fault divorce to six months.⁵ The Chief Judge of New York's highest court has called for a similar move to no-fault divorce in that state,⁶ while the prestigious American Law Institute recommends eliminating all vestiges of "fault" in family law, including the distribution of property and the determination of alimony.⁷

In the shadow of these changes both here and abroad, the scholarly and the public policy debate about the consequences of no-fault divorce for children and families continues. More than 40 studies—in the United States, Canada, Europe, and Australia—have empirically examined the question of whether or not no-fault divorce laws increase the divorce rate, including 24 studies in the last decade. What does the latest research tell us about the empirical impact of no-fault divorce on divorce rates?

This study looks at all the available empirical research since 1995 that examines the impact of divorce law on divorce rates both in the United States and in other nations. This research has been published in economic, family, and legal journals, or as working papers. In addition to searching academic databases, we examined bibliographies of published research and made inquiries among scholars to locate relevant empirical research.

In recent years scholars have also asked how divorce law affects other family behaviors including marriage rates, unpartnered births, women's labor force participation, family violence, and suicide. We have included this broader research in a separate appendix, for the ease of scholars and policymakers interested in other family outcomes that may be affected by divorce laws.

The empirical no-fault divorce literature is a complicated response to what appears to

be a simple question. With hope, this brief will organize most of it.

I. Defining Terms: What Is "No-Fault Divorce" and Why Would it Matter?

"No-fault divorce" is not a single, simple piece of legislation. The term refers to a cluster of family law changes that took place in the United States, Canada, and many other "Western" nations in the late Sixties to mid-Eighties. Divorce law regulates *grounds* for divorce, *property* distribution, and *alimony*, and a given state or other legal regime may move towards "no-fault" principles in any or all of these areas. Such changes include: adding new no-fault grounds for divorce (e.g. "irretrievable breakdown") that do not require a party to allege any particular fault; reducing "waiting periods" for no-fault divorce (such as divorces based on living separate and apart); removing fault from consideration in the awarding of alimony and/or the distribution of property upon divorce; and/or eliminating fault grounds entirely from divorce law.

Under the older fault system, "faultless" divorces could be informally obtained by a couple, but only by mutual consent; that is, a couple who wished to divorce for no particular legally acceptable reason could agree in advance to present to the court an uncontested fault ground, and obtain a divorce. Therefore, the most significant practical legal change created by "no-fault" divorce in grounds was that it licensed *unilateral divorce*: for the first time, one spouse could successfully petition for divorce over the objections of his or her spouse, without alleging any grounds.⁸ No longer would the spouse who wants a divorce have to negotiate with his or her spouse to get it. In addition, some, but not all, jurisdictions introduced no-fault principles into the distribution of property and/or alimony upon divorce.

There are two theoretical reasons no-fault divorce might increase the divorce rate. First, some argue it made divorce less costly for the initiating party because often there

were changes in the financial and emotional consequences of divorce that came along with no-fault divorce. That is, concomitant changes in terms of property settlement, maintenance (alimony), or child custody often improved the welfare of the divorce initiator. Thus, if bad behavior doesn't result in a less financially rewarding divorce settlement, the argument goes, we might expect there to be more bad behavior by spouses and therefore more divorce.

Second, the change from mutual consent divorce to unilateral divorce might change the ability of spouses to prevent a divorce through bargaining. Under the old fault system the party least wanting a divorce had to be "paid" to consent to one. Under the no-fault system this party must pay the other to stay. The outcome in either case is unlikely to be the same.⁹ If one spouse is unable to convince the divorce instigator to stay, then more divorce is likely.

II. Empirical Difficulties in the "No-Fault" Debate

Reaching a scholarly consensus about the consequences of divorce law has proved complicated for many reasons. In the first place, studying family law is complex because family law is complex. As we indicated above, "no-fault divorce" is not one specific discrete legal change but a bundle of changes in legal rules affecting grounds, property division, and alimony rules upon divorce, which different jurisdictions move toward in different ways. Canada has a version of "no-fault" divorce; so do England, South Carolina, California and New Jersey (to name just a few states). But the laws in each of these jurisdictions are not identical.

Moreover, in nations like Canada the grounds for divorce are federal law, while property division is governed by provincial law. In Europe, most (but not all) family law systems are national. Studying the effects of no-fault divorce on divorce rates is easier in nations that have national family laws, because migratory divorce is less of a

problem, and because basic questions (such as when the legal change took place) are less contested.

Yet to date, the majority of research looking at how no-fault divorce affects the divorce rate have investigated legal changes in the United States, where the legal definitions are most varied and complicated from state to state and where the change in law before and after no-fault was much smaller than in Canada and much of Europe. In the United States, scholars have not always agreed even on the basics, such as what cluster of legal changes constitutes a "no-fault" divorce law, and when a particular state has moved to a no-fault divorce system.

North Carolina, for example, always had "separation" as a ground for divorce. Should separation be considered a mutual or unilateral ground (*i.e.*, a "fault" or a "no-fault" ground)? Did the judicial interpretation of separation change over time? And should separation grounds be classified by scholars as exactly the same type of no-fault law as irretrievable breakdown or irreconcilable differences?

Moreover, formal legal rules and informal interpretation of legal rules may differ across jurisdictions, leading to different outcomes from what appear to be the same formal rules. When "mental cruelty" grounds are liberally interpreted by courts, is that just the same in terms of its effects as formally enacting "irretrievable breakdown" as a ground for divorce? Scholars have varied on whether and when to classify states such as North Carolina (and many others) as adopting no-fault divorce.

Some states added no-fault grounds to existing fault grounds, while others eliminated all fault grounds. Some states changed fault provisions in alimony, property, and custody rules, while others did not, at least not at the same time or in the same way. Estimates of the effects of no-

fault divorce on the divorce rate have proved highly sensitive to these kinds of problems.

Different disciplines (economists, family specialists, demographers, and legal scholars) have focused on different aspects of the question, and scholars in one field are often unaware of the parallel analyses going on in the other disciplines.

Finally, investigating the consequences of no-fault divorce on the divorce rate has also proved complicated because human behavior is fluid and dynamic; when legal rules change, men and women respond in a variety of complex and sometimes contradictory ways that can be difficult to disentangle.

III. New Empirical Research: 1995-2006

Despite these difficulties there are signs of an emerging consensus about the effects of divorce law on the divorce rate. Our search process yielded 24 studies in the last decade that fit the criteria: new empirical research into how no-fault divorce affected the divorce rate. A careful review of these studies suggests the following:

No-fault divorce laws did increase the divorce rate. Seventeen of 24 recent empirical studies find that the introduction of no-fault divorce laws increased the divorce rate. The size of the increase attributed to legal change varies considerably in the research literature. One of the higher estimates (Kidd (1995)) found no-fault divorce boosted divorce rates as much as 88 percent. More typically, studies estimate no-fault divorce increased divorce rates on the order of 5 to 30 percent (e.g., Drewianka (2006), Friedberg (1998), Gruber (2004), Iverson (2005), Matouschek and Rasul (2006), Reilly and Evenhouse (1997), Rogers et al. (1997)).

Divorce law, however, is not the major cause of the increase in divorce over the last 50 years. Studies which find that no-fault divorce increased the divorce rate typically estimate the size of this effect as only a modest fraction of the increase in the

divorce rate since 1960. Clearly many other factors besides divorce law influence the divorce rate.

The effect of no-fault divorce laws on the overall divorce rate appears to fade with time. A number of recent studies (e.g., Drewianka (2006), Matouschek and Rasul (2006), Mechoulan (2006), Reilly and Evenhouse (1997), Wolfers (2006)) found that the increase in the overall divorce rate under no-fault, while sustained for a number of years, eventually fades and the divorce rate moves back to trend.

Why? The increases in the divorce rate are sustained for too long (about a decade) to be produced by faster divorce processing times.¹⁰ The emerging consensus among law and economics scholars is that unilateral divorce influences the divorce rate in three ways: First, there is an increase in the divorce rate among existing couples, who married before the divorce law changed. Second, no-fault divorce laws produce substantial new selection effects for couples entering into marriage, in ways that mitigate the overall divorce rate. Finally, over time the state has patched various legal “loopholes” that allowed for transfers of wealth and encouraged unilateral divorce.

The first, direct, effect is straightforward. When the no-fault laws were enacted it caught existing couples by surprise. The no-fault provisions were a windfall for many married individuals. Some winners were able to abandon their marriages and take much of the marital wealth with them, leaving behind many losers.

There were two subtle effects of this. First, the incentives to marry changed and this changed the pool of married couples. As the law retreats from enforcing marriage contracts, some couples respond by searching longer, delaying marriage and (sometimes) avoiding it altogether. Others might jump into marriage quickly, knowing that if the marriage fails it is “easy out.” Thus the lowering of divorce rates from the

peak in the early 1980s may be partially explained by more better-matched, more intrinsically stable couples choosing to marry.¹¹

Second, the high divorce rates of the 70s and 80s were partially driven by failures in old elements of family law to match the new no-fault provisions. When no-fault laws were first introduced, inadequate marital property laws allowed one spouse (mostly husbands) to leave the family and take marriage assets with them. In both Canada and the United States, courts and legislatures quickly moved to patch the leak. Other issues followed in the areas of definition of property, child support guidelines, custody changes, and the like. In most cases, the legal change tried to prevent a spouse from unilaterally improving their own welfare at the expense of the rest of the family. In doing this these subsequent laws reduced the incentive to divorce, and the divorce rate receded a bit.

For individual couples, the increase in divorce risk under unilateral divorce may be permanent. We note that some studies that control for age at marriage (e.g., Andersson (1997); Kidd (1995); Reilly and Evenhouse (1997) (PSID sample); but see also Sweezy and Tiefenthaler (1996)) have found that no-fault divorce causes a permanent increase in the divorce risk. Stability in the overall divorce rate may disguise the increased divorce risk that unilateral divorce laws pose for individual couples of a given match quality. Couples who marry under unilateral divorce laws may face a permanent increase in divorce risk relative to similarly well-matched couples who married under the older, “stricter” mutual consent divorce law regimes. We note recent evidence suggests the lower divorce rates are confined in this country to couples with at least a college education; less educated couples have faced a continuing rise in divorce risk into the 1990s.¹² More research is needed to tease out with confidence the selection effects from any underlying increase in divorce risk for individual couples.

If these emerging theories on the double effects of unilateral divorce are confirmed, it also suggests an important new area for future research: Are permissive divorce laws partly responsible for the simultaneous large increase in nonmarital childbearing that occurred in recent time periods? The social effects of unilateral divorce depend in part on the answer to this question. For if unilateral divorce merely discourages divorce-prone couples from marrying, most would find this a social good. But if as a result of permissive divorce laws, younger, more at-risk couples increasingly choose not to marry at all (and thus have more children outside of marriage in cohabiting or dating relationships), studies that look only at the effects of divorce law on divorce rates may be underestimating its influence on rates of family fragmentation generally.

IV. Some Specific International and U.S. Studies of Note

An interested reader going through the summary of research listed in the appendix might come away with the impression that nothing is settled. However, not all research is created equal. In this section we summarize the most important and significant research.

International studies

There have only been a handful of divorce rate studies in countries other than the United States. These include Canada (Allen (1998)), England (Binner and Dnes (2001)), Portugal (Coehlo and Garoupa (2006)), Sweden (Livia (2001)), and Great Britain (Smith (1997)). All of these cases differ from the United States in that the grounds for divorce are national. This means the entire country switched from fault to no-fault at the same time, and therefore the only test that can be conducted is to look at divorce rates before and after the legal switch. These studies have some natural advantages. First, the issue of migratory divorce (or people escaping more restrictive divorce laws in their state by petitioning for divorce in more permissive states) is

eliminated, or greatly mitigated. Second, the legal change is clear: not only what the law changed to, but what it changed from.

The down side of these international studies is that they can only test for changes over time, and it may be impossible to control for other changes that are highly correlated with the legal change.

The international studies generally find a large and statistically significant positive effect of no-fault divorce on the divorce rate. For example, Binner and Dnes find that no-fault divorce increased the divorce rate in Great Britain by 0.8 divorces per 1000 people. Considering the average divorce rate is 1.84 divorces per 1000 people in a given year, this is quite a substantial effect (about a 43% increase).

*U.S. Studies*¹³

Friedberg and Wolfers

Much of the debate over no-fault divorce and divorce rates seemed to be over with the publication of Friedberg's (1998) seminal work in the *American Economics Review*. This paper created a panel data set of every divorce in the United States from 1968 to 1988. It used sophisticated econometric techniques to control for state endogeneity and changes in behavior over time. She tested for different legal classifications, and performed a series of robustness tests. In the end she found that no-fault divorce laws led to a 6% higher divorce rate and that they accounted for about 17% of the increase in divorces over the time period studied. She also found that the change was permanent, and exogenous. Differences between states and changes over time, however, accounted for most of the divorce trends. She concluded: "The results above make it clear that unobserved covariates and unobservable divorce propensities — which may include for instance, social attitudes, religious beliefs, and family size — are the main determinants of divorce." [p. 616, 1998]

Friedberg's study stood as the high-water mark of the no-fault divorce literature until the arrival of Wolfers (2006). Furthermore, it was corroborated by a number of other papers examining other aspects of no-fault divorce.¹⁴

Justin Wolfers' paper is an extension of Friedberg. He uses the same basic data set over a longer period of time, replicates her results, and then respecifies all of her state trend variables. Wolfers' point, which has been made by theorists for the past several years, is that exogenous changes to laws are followed by endogenous changes in behavior. As divorce laws change, people might be more or less careful in choosing a spouse. They might marry sooner or later. Laws protecting marital property put at risk by no-fault might be changed. When these things are adjusted for, Wolfers finds that the divorce rate still increases (although the effect is not as large as with Friedberg), but the increase only lasts for about 10 years. As Wolfers acknowledges, though, his test is not really a test of "no-fault" divorce *per se*, but rather a test of the set of legal changes that took place over the past 30 years. Taken together, divorce rates were higher throughout the 1970s and early 1980s, but then they leveled out and may have fallen after that (although not to 1960 levels).

The most important contribution of the Wolfers study, along with other papers on behavior within the household, is the idea that the effect of no-fault divorce laws on the divorce rate *depends* on the environment one is divorced in. Although Wolfers thinks internal marriage bargaining best explains the small long-run effect of the law, an alternative and complementary explanation is found in other legal changes. As mentioned, other legal changes followed no-fault laws that help prevent some of the most egregious cases of wealth transfers brought on by divorce.

V. Conclusions

Does the divorce law affect the divorce rate? Yes. Divorce law is not the primary

cause of increases in divorce rate, but it is a contributing factor. Estimates vary, but the best evidence suggests no-fault divorce increases the divorce rate on the order of 10 percent.

These changes are caused by a low cost of divorcing that allows one party to unilaterally break the marriage vows. The effect of no-fault divorce laws on the divorce rate is critically conditional on the legal, social, and cultural environment. Thus the same legal change can have different effects across jurisdictions, and over time the effect probably dissipates. Some of the other legal changes in the past 30 years (in child support, custody, and marital property) may have mitigated the consequences of no-fault divorce. New research is needed to establish the “side effects” of weaker marital contracts on rates of cohabitation and non-marital births.

The premise of many family law scholars—that legal change is only a response to underlying cultural shifts and never an independent cause—is difficult to reconcile with either economic theory or existing empirical research.

Changing divorce law can affect the divorce rate, and likely the rate of unmarried childbearing and cohabitation as well. Family scholars, policymakers, legislators, and media need to consider and take seriously the complex ways in which family law affects real families and real children.

Suggested Citation:

Douglas Allen and Maggie Gallagher, “Does Divorce Law Affect the Divorce Rate?” *iMAPP Research Brief* 1(1) July 2007. (Manassas, VA: Institute for Marriage and Public Policy).

Endnotes

¹ A U.S. Census Bureau report shows the annual divorce rate per 1,000 married women rose from 16 per 1000 for the period 1960-62, to 40 per 1000 for the period 1978-1980. U.S. Bureau of the Census (1992), *Current Population Reports, Marriage, Divorce, and Remarriage in the 1990's*, P23-180: 2 (Table A). Looking at cohort data, the National Survey of Family Growth found that 14% of first marriages entered between 1955 and 1959 ended in divorce within 10 years, compared to 31% of first marriages entered from 1975-1979. National Center for Health Statistics (July 2002), *Cohabitation, Marriage, Divorce, and Remarriage in the United States*, Vital and Health Statistics 23 (22): 27. The overall divorce rate appears to have peaked around 1980, but the modest decline since that time appears to be driven by a bifurcation in divorce risk, with highly educated couples experiencing dramatic drops in divorce risk, while divorce rates among Americans with less than college degrees continue to rise. Steven P. Martin, 2006. “Trends in Marital Dissolution by Women’s Education in the United States.” *Demographic Research* 15:537–560.

² No-fault divorce is now available in every state, with all but a handful permitting such divorce unilaterally, not requiring consent of the other spouse.

³ 20 states have adopted complete no-fault rules for spousal support and property distribution following divorce. An additional 15 states have adopted no-fault rules for either spousal support or property distribution. American Law Institute, *Whether Marital Misconduct should be Considered in Property Allocations and Awards of Compensatory Payments*, Reporter’s Notes, PRINCIPLES OF THE LAW OF FAMILY DISSOLUTION: ANALYSIS AND RECOMMENDATIONS (2002); see also Lynn Wardle, “Beyond Fault and No-Fault in the Reform of Marital Dissolution Law,” in *Reconceiving the Family: Critique on the American Law Institute’s Principles of the Law of Family Dissolution* (Robin Fretwell Wilson, ed., Cambridge University Press, 2006).

⁴ La. Civ. Code Art. 103.1 (2007).

⁵ N.J. P.L. 2007, c.6.

⁶ Danny Hakim, “Panel Asks New York to Join the Era of No-Fault Divorce,” *The New York Times*, Feb. 7, 2006 at A1.

⁷ American Law Institute, *Whether Marital Misconduct should be Considered in Property Allocations and Awards of Compensatory Payments*, Summary and Conclusion, PRINCIPLES OF THE LAW OF FAMILY DISSOLUTION: ANALYSIS AND RECOMMENDATIONS (2002).

⁸ Of course such a mutual agreement to present divorce grounds could be considered a collusive fraud on the court, albeit one that was undetectable to outsiders and widely tolerated at the time.

⁹ The famous Coase theorem in economics states that in the absence of transaction (bargaining) costs, a switch from mutual to unilateral divorce should not affect the divorce rate (because under the old fault system, the spouse who wished to divorce should simply offer to increase the compensation to the other spouse in order to achieve his or her goal). But as many point out, divorce is never costless. Hence, under real-world conditions of high-transaction costs, economic theory predicts the move to unilateral no-fault rules should increase “inefficient” divorces (*i.e.*, cases in which a spouse leaves a marriage because it makes them as an individual better off, even if the rest of the family is made worse off). An important point, often missed by those simply trying to estimate an empirical reaction to the law, is that there is no economic reason for no-fault divorce *by itself* to have any effect on any behavior. It is only when combined with other laws, family circumstances, or social customs, that the switch *may* provide an incentive for *some* spouses to terminate their marriage when it is not in the best joint interests of the couple to do so.

¹⁰ This finding is different from the idea, popular among family law scholars in the 1970s, that the increase in divorce rate observed after no-fault divorce was spurious—a statistical artifact of speeding up divorce processing times such that divorces in say, 1970 and 1971, were both suddenly processed in 1971. Faster processing times under no-fault would produce a statistical bump in the divorce rate but no real increase in the underlying divorce risk. Recent studies, by contrast, suggest that no-fault divorce did result

in a sustained increase in divorce risk for existing married couples, but that over time, the effects are cancelled out, or masked, as couples at greater risk of divorce increasingly decline to marry at all.

¹¹ Only a few studies have begun to look at this marriage effect and the results are preliminary.

¹² Steven P. Martin, 2006. “Trends in Marital Dissolution by Women’s Education in the United States.” *Demographic Research* 15:537–560.

¹³ The U.S. studies can be divided into three periods. The first wave of papers from 1970–1985 were characterized by small samples and simple test design. The second wave mostly consisted of Peters’ (1986) seminal study using a large individual data set, and rebuttals to her work by Allen (1992) and Parkman (1992). The third wave is made up of the sophisticated papers after Friedberg (1998).

¹⁴ For example Gruber (2004), Johnson and Mazingo (2000).

APPENDIX
Does Divorce Law Affect the Divorce Rate?
Empirical Research 1995-2006

STUDIES SHOWING NO-FAULT DIVORCE AFFECTS THE DIVORCE RATE

1. Allen, Douglas W. (1998). No-Fault Divorce in Canada: Its Cause and Effect. *Journal of Economic Behavior & Organization*, 37: 129-149.

Background: In 1968, Canada created no-fault grounds for divorce. (Prior to this change, adultery was the only grounds for divorce in 8 provinces, while Quebec and Newfoundland permitted divorce only by a private act of the parliament's senate.) In 1985, Canada introduced a second major legal change, reducing the number of fault grounds for marriage from 15 to one (marital breakdown) and reducing the separation period for a no-fault divorce from 3-5 years to just one year.

This study analyzes two different samples to test the effect of both the 1968 and 1985 divorce law changes on the overall divorce rate. The first consists of Canadian women who had been married only once, and who had married prior to 1968, drawn from the 1984 Family History Survey (a supplement to the 1984 Labor Force Survey conducted by Statistics Canada). The second sample consists of a panel of every Canadian divorce from 1950-1992 created using data from *Census of Canada*.

Results: First, after analyzing data from the 1984 Family History survey, this study concludes: "a movement to the nofault period increased the probability of divorce, conditional on the length of marriage by 1.09 percent. This result is statistically significant, and is consistent with the recent U.S. findings that no-fault divorce increases the divorce rate." (p. 144) The author concludes: "The variable indicates that a particular *type* of divorce increased, namely, inefficient divorces, where one spouse used the new law to the disadvantage of his or her partner." (p. 145) A second analysis using Census data on divorce from 1950 to 1992 concludes: "As with the Family History Survey, this indicates that both changes in divorce law increased the number of inefficient divorces. This holds even when provincial effects and inter-temporal provincial effects are controlled for." (p. 147)

2. Andersson, Gunnar (1997). The Impact of Children on Divorce Risks of Swedish Women. *European Journal of Population* 13(2): 109-45.

Background: In 1974, procedures of divorce in Sweden were simplified so that no specific reason for divorce need be alleged; waiting periods were eliminated for childless couples and reduced to six months for couples with children. This study looks at formal divorces occurring after first marriages formed between 1968 and 1994 in Sweden taken from the Statistics Sweden Fertility Register.

Results: While the main purpose of the study was to study the impact on children from divorce risks, the paper also suggests that the "general picture of Swedish divorce-risk trends shows a strong increase in 1974, mostly among childless women, in response to a reform of the divorce legislation." (p. 109) However, the authors also suggest the finding of a sustained increase in divorce risk is partly a result of controlling for age at marriage, which increased over the period: "the increase in divorce risks...mainly appears because

we have removed the effect of an ongoing transition of married women in our data set towards ages at marriage that are associated with lower divorce risks, i.e., towards higher ages.” (p. 121)

3. Binner, Jane M. & Antony W. Dnes (2001). Marriage, Divorce, and Legal Change: New Evidence from England and Wales. *Economic Inquiry*, 39(2): 298-306.

Background: In 1969, the British Parliament passed “the Divorce Reform Act of 1969,” which added no-fault grounds alongside fault grounds for divorce. This study uses long-run time-series analysis and short-run error-correction models to determine impact of the introduction of unilateral divorce on the divorce rate, after accounting for other possible explanations, including male to female earnings ratios and postdivorce welfare benefits. The study analyzes data on all marriages in England and Wales from 1948-1996, including marriage and divorce rates created using annual data from the Office for National Statistics and the Office of Population Census and Surveys. (p. 305)

Results: “[U]nilateral divorce raised the divorce rate by more than 0.8 divorces per thousand people, a substantial impact relative to the average divorce rate of 1.84 over the period....We therefore find a permanent impact from the easing of divorce law in the 1970s.” (p. 303) and “We can conclude that the law increased divorce by making it easier to divorce.” (p. 304) The study observed no impact on marriage rates, however, which the authors interpret as perhaps reflecting “the canceling out of two trends. First, making divorce easier reduces the irreversibility of marriage and possibly makes it more attractive to some people. Second, observing a rising divorce rate may make others cynically aware that marriage may not last and cause them to avoid it (e.g., by cohabitation...)” (p. 303)

4. Brinig, Margaret F. & F.H. Buckley (1998). No-Fault Laws and At-Fault People. *International Review of Law and Economics*, 18: 325-340.

Background: This study defines no-fault divorce states in the U.S. as those in which “fault is irrelevant at both dissolution and at financial settlement.” (p. 326). The study codes 17 states as unilateral divorce regimes. It uses a fixed-effects model to analyze annual *per capita* divorce rates from 1980-1991 in 49 states (excluding Nevada as an outlier) from Census data, isolating no-fault divorce law reform from other demographic and social factors that might also explain the variation in divorce rates across states and across time including two state-level measures of economic wellbeing (unemployment rate and employment growth), and four social predictors of divorce rates: Date of entry into the U.S. union (a proximate measure of region, *i.e.*, “westernness,” of states), the proportion of the population living in metro areas, the amount of life insurance issued as a proportion of state income (a proxy for risk averseness), and the proportion of Catholics.

Results: “Our principal finding is that divorce levels are positively and significantly correlated with state laws that do not penalize marital misbehavior at the time of divorce.” (p. 331) “Our study of divorce rates from 1988 to 1991 provides the strongest evidence to date that no-fault divorce laws are associated with higher divorce levels. Prior studies failed to detect a significant no-fault predictor of long-term divorce rates because they defined ‘no fault’ solely in terms of the dissolution of the marriage and ignored the financial penalty that a court might impose on at at-fault party.”(p. 340) However, the authors also caution “our results are suggestive only....Divorce levels likely will be lower in societies that stigmatize divorce. Such societies are also less likely to enact no-fault

divorce laws. The legal predictor thus might serve as a proxy for more fundamental social norms.” (p. 340).

5. Coelho, Clarisse & Nuno Garoupa (2006). Do Divorce Law Reforms Matter for Divorce Rates? Evidence from Portugal. *Journal of Empirical Legal Studies* 3(3): 525-542.

Background: In 1975, Portugal approved a new divorce law that extended no-fault divorce by mutual agreement to Catholic marriages (for which legal divorce had previously not been available). In 1995, Portugal permitted couples to receive a mutual consent divorce by a simple administrative procedure if the couple had no children or after child custody has been adjudicated by a judge. This study tests the impact of both these legal changes on Portuguese divorce rates, using a time-series econometric model, using data from 1960 to 2002 for divorce and marriage rates in Portugal (from the Instituto Nacional de Estatística de Portugal).

Results: After controlling for economic growth (per capita GDP), secularization (measured by the out-of-wedlock birth rate and the proportion of Catholic rather than civil marriages), and infant mortality (a proxy for technological progress), the study finds that the 1975 Divorce Law (which introduced no-fault regime to Catholic marriages) had significant positive impact on the divorce rate, but the 1995 Code of Civil Registration (which permitted mutual consent divorce by civil registration for childless couples or after custody issues are adjudicated) did not. “[O]ur most important finding is that a major reform of divorce law such as the one in 1975 had a significant positive effect on the divorce rate, but a less substantial change such as the one in 1995 does not seem to be statistically important.” (p. 535, 539)

6. Drewianka, Scott (2006). Divorce Law and Family Formation. (forthcoming in the *Journal of Population Economics*) paper available at <http://www.uwm.edu/~sdrewian/DivorceLawAndFamilyFormation.pdf>.

Background: This study measures the effects of both no-fault and unilateral divorce laws on state-level rates of divorce, marriage, fertility, and legitimacy in 49 states (excluding Nevada). It follows Jonathan Gruber (2004) codings of no-fault and unilateral divorce. It uses crude divorce rates, or divorces per 1000 population.

Results: “[T]here was little to indicate that either no-fault or unilateral divorce had any effect on marriage rates. As in the existing literature, there was some indication that unilateral divorce causes a modest increase in divorce rates, at least during the first five or ten years after the law passes, but no-fault divorce does not seem to have any meaningful effect on divorce rates.” (p. 15) More specifically, “[U]nilateral divorce laws lead to 2–4 additional divorces each year per 10,000 people in a state (6–10 percent of the mean over this period)...However...we find that the effect only lasts for 6–8 years.” (p. 11)

The study also found effects on fertility: “[U]nilateral divorce seems to increase marital birth rates and decrease non-marital birth rates, and both of those effects seem to grow the longer the law is in effect.” (p. 15) The study concludes: “[C]hanges in divorce law were not a major cause of changing family structure.” (p. 2)

7. Friedberg, Leora (1998). Did Unilateral Divorce Raise Divorce Rates? Evidence from Panel Data. *The American Economic Review*, 88(3): 608-627.

Background: This study assembles a panel of state-level divorce rates between 1968-1988 from data collected by the National Center for Health Statistics. Friedberg compares legal regimes in three ways: unilateral no-fault divorce versus mutual consent divorce

states, unilateral divorce states with waiting periods before divorce versus unilateral divorce states without separation requirements or waiting periods, and states where marital fault may be considered in property settlements at divorce versus states with no-fault property distribution laws.

Results: “The estimates suggest that the divorce rate would have been about 6 percent lower in 1988 if no type of unilateral divorce had been adopted in those states that switched to unilateral divorce after 1968. The move towards unilateral divorce accounted for 17 percent of the increase in divorce rates between 1968 and 1988.” (p. 608). Furthermore: “[T]he effect of unilateral divorce on divorce behavior was permanent, not temporary.” (p. 608.)

“[T]he type of unilateral divorce a state adopted mattered. The strictest unilateral divorce, without separation requirements or fault considerations in property division, raised the divorce rate by 0.549 per thousand people—11.9 percent of the average of 4.6 during the sample period... Separation requirements proved more of a constraint on divorce behavior than fault-based property division did.” (p. 620)

8. Gruber, Jonathan (2004). Is Making Divorce Easier Bad for Children? The Long-Run Implications of Unilateral Divorce. *Journal of Labor Economics*, 22(4): 799-833.

Background: This study estimates the impact of unilateral divorce laws on the incidence of divorce. It also examines the impact of living under unilateral divorce regimes and later life outcomes for children, including adult suicide. Only states which do not require separation periods for unilateral no-fault divorces are coded as unilateral divorce states.

Results: “[U]nilateral divorce regulations do significantly increase the incidence of divorce. Adults who were exposed to unilateral divorce regulations as children are less well educated, have lower family incomes, marry earlier but separate more often, and have higher odds of adult suicide.” (p. 799) Specifically: “I find that there is a very sizable and significant impact of unilateral divorce regulations on the likelihood of being divorced. For women, unilateral divorce being in place raises the odds of divorce by...11.6%. For men the increase is...11.6%. The results are even stronger when state-specific trends are included.” (p. 812) Gruber also finds “a very large impact on the odds of living with a never-married mother or father; however, both results are insignificant when trends are included.” (p. 814) On the other hand, “the rise in unilateral regulation can explain less than 10% of the overall rise in the stock of divorced women.” (p. 814)

9. Iverson, Torben et al. (2005). Divorce and the Gender Division of Labor in Comparative Perspective, *Social Politics* 12(2): 216-242.

Background: This study compares divorce rates in developed countries that have either unilateral or mutual consent divorce laws with developed countries that have high barriers to divorce (“such as Ireland, Italy, and Spain”); these high legal barriers to divorce include fault systems, long mandatory waiting periods, and “additional judicial hurdles.” (p. 233) Divorce rates are the number of divorces per 100 marriages, with data from 18 countries in the OECD every five years between 1970 to 1995. Other potential explanatory variables explored include relative wages of women, size of the public sector, and “skill specificity” (the mean of vocational training intensity and firm tenure rate).

Results: “[T]he restrictiveness of divorce legislation *does* appear to reduce the rate at which people divorce. Going from a legal system with easy unilateral no-fault divorce (such as Sweden) to one with fault and long mandatory separation periods (such as Spain)

is associated with 13 fewer divorces per 100 marriages in the short run and more than 20 in the long run.” (p. 234)

10. Johnson, John H., IV & Christopher J. Mazingo (2000). The Economic Consequences of Unilateral Divorce for Children. Social Science Research Network Electronic Paper Collection: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=236227.

Background: This study examines (among other outcomes) the effect of having lived as a child in a unilateral divorce state on the likelihood that child’s parents had divorced. The authors “mainly employ the law coding used by Brinig and Buckley (1998) (also used by Friedberg), but also test our results with law coding from Ellman and Lohr (1998). Our results are insensitive to the legal classification we use.” (p. 5) For each child under age 17, the authors construct the number of years they lived in a unilateral divorce state and current age, and evaluate its effect on the likelihood that that child’s parents had divorced.

Results: “[A]n extra year of exposure to unilateral divorce increases the probability that a child’s parents are divorced by 5/10th of a percentage point” or “about a three-percent increase in the divorce rate.” (p. 16) (The study also found that increased childhood exposure to unilateral divorce laws reduced wages and schooling for women.) “[W]hile we confirm that unilateral divorce increased divorce rates, we also provide evidence that bargaining power within the household was a key factor in affecting children. Many previous studies treat these channels as being mutually exclusive.” (p. 21)

11. Kidd, Michael P. (1995). The Impact of Legislation on Divorce: A Hazard Function Approach. *Applied Economics* 27(1): 125-130.

Background: In 1975, Australia adopted the Federal Family Law Act of 1975, which altered the grounds for divorce from proof of misconduct by one party to irretrievable breakdown. This study uses a hazard model of the divorce rate to estimate the probability of leaving a given marriage before and after 1975, which allows the authors to estimate the effect of the introduction of no-fault on marriages of varying duration. Data is taken from 8,608 females aged less than 55 who had married at least once by 1982 from the Australian Bureau of Family Statistics Family Survey, a nationally representative sample. Control variables included age, age at first marriage, years of education, whether there was a child born prior to the marriage, country of birth, length of residency in Australia, and employment status.

Results: “[N]o-fault divorce legislation appear to have had a positive impact upon the divorce rate in Australia.” (p. 129) “These results imply the legislation increased the hazard rate [i.e. divorce] by between 45 and 88%.” (p. 129)

12. Matouschek, Niko & Imran Rasul (2006). The Economies of the Marriage Contract: Theories and Evidence. (Forthcoming, 2007, in the *Journal of Law and Economics*), working paper available at <http://www.homepages.ucl.ac.uk/~uctpimr/research/marriage%20contract.pdf>.

Background: The study constructs and tests three models of why legal marriage may matter, compared to the alternative of cohabitation: legal marriage as a preference for social custom, legal marriage as a commitment device, and legal marriage as a “signal” of true and permanent love. In the process, the authors empirically test the idea that unilateral divorce may affect the divorce rate in two ways: by increasing the incentive of existing couples to divorce and by changing the composition of couples who choose to marry in the first place.

Using individual marriage and divorce certificate data from the U.S., the study constructed year-of-divorce, duration-of-marriage, and state-specific divorce propensities for all marriages that occurred in 33 states after 1968 and divorced before 1995, including 19 states that adopted unilateral divorce in some year. This dataset represents the universe of all marriages in small states and a representative sample of marriages in larger states.

Because there is disagreement on the dates in which various states adopted unilateral divorce (due to varying definitions of unilateral divorce), the authors tested alternative codings of unilateral divorce, using Gruber (2004) who codes as unilateral divorce states those states that permit no-fault divorce without significant waiting periods, and Ellman and Lohr (1998) who code unilateral divorce as the date in which a state adopted either irretrievable breakdown or incompatibility as a grounds of divorce. Authors report results were similar using either coding system.

This study compares divorce risk between (a) states that adopted unilateral divorce and those that did not; (b) between couples married before the introduction of unilateral divorce and those who married after the state adopted unilateral divorce; and (c) couples who married between one and four years after the adoption of unilateral divorce and those who married at least five years afterwards. (By investigating the divorce propensities of marriages of different durations within the same state and year of divorce, the authors seek to control for unobserved state specific trends, such as social attitudes or labor market conditions, that may affect both the adoption of unilateral divorce and marriage and divorce risk.)

Results: “[A]fter the introduction of unilateral divorce, the propensity to divorce at any given marital duration increases by 4.08 divorces per 1000 marriages...[T]he implied effect of unilateral divorce is to increase the divorce propensity, averaged across marriages of all durations, by 18.5%.” (p. 26) However this increase is not sustained over time because less well-matched couples respond to the reduced effectiveness of marriage as a legal commitment device by failing to marry, which reduces the divorce rate over time. “[W]hen the costs of exiting marriage fall, only higher match quality couples are willing to marry. This reduces the divorce rate in the long run as these better matched couples form a greater share of all married couples...” (p. 28) Thus, “for cohorts of married couples that live under unilateral divorce for up to 10 years, the propensity to divorce increases. However for marriages that experience living under unilateral divorce for more than 10 years, the propensity to divorce falls.” (p. 29) “Our findings give support to those who argue that divorce costs can be ‘too low’ and that when they are too low, the very purpose of the marriage contract is undermined.” (p. 5)

13. Mechoulan, Stéphane (2006). Divorce Laws and the Structure of the American Family, *Journal of Legal Studies* 35(1): 143-174.

Background: The study uses cross-sectional micro data of recently married U.S. white women interviewed between 1971 and 1990, taken from the June Supplements of the Current Population Survey (CPS). Divorce and marriage rates are from *Vital Statistics* (National Center for Health Statistics 1950-2000) and the *Statistical Abstract of the United States* (U.S. Census Bureau 1999). The study “define[s] as having no-fault grounds only those states that have enacted specific no-fault statutes.” (p. 150) Regarding property division, the study notes: “many states barred the consideration of fault in asset division and spousal support settlements. With regard to property regimes, this work focuses on that no-fault dimension.” (p. 151)

Results: Creating no-fault grounds for divorce did not appear to increase the divorce rate, but moving from fault to no-fault in the distribution of marital property did appear to increase divorce rates. “[F]or those women who married under a fault regime for property, a change to a no-fault regime was responsible for a significant increase in divorce odds...On the other hand, we see that adding no-fault grounds to the statutes (whether supplementing fault grounds or supplanting them) seems to be irrelevant.” (p. 160) Comparing the divorce patterns of women who married before and after the legal changes, “the impact of a no-fault for grounds regime is to decrease age at first marriage, although not statistically significantly, while the effect of no-fault for property is to significantly delay marriage,” (p. 163) suggesting reduced risk of divorce through better matching. “The main conclusion of the paper is that this better sorting decreased the probability of divorce by about as much as the institution of no-fault divorce increased it...[U]nder no-fault for property laws on average women marry when they are significantly older than are women in fault states.” (p. 165)

14. Nakonezny, Paul A., et al. (1995). The Effect of No-Fault Divorce Law on the Divorce Rate Across the 50 States and Its Relation to Income, Education, and Religiosity. *Journal of Marriage and the Family*, 57(2): 477-488.

Background: This study investigates the effect of no-fault divorce on a state’s average divorce rate in the first three years after its adoption, controlling for state median family income, education (the proportion of people age 25 or older who have four year college degrees or more), and three measures of religion: the proportion of the state that was Roman Catholic, Southern Baptist, or United Methodist. The definition of a switch to “no-fault divorce” was not provided, although Table 1 lists the date at which states are held to have adopted no-fault divorce.¹⁵

Results: After controlling for religiosity, income, education, and period effects, the study finds that “[T]he switch from fault divorce law to no-fault divorce law led to a measurable increase in the divorce rate.” (p. 485) (The effect size was .91, “a large effect size as defined by meta-analysis standards.” (p. 485)) Neither the proportion of college graduates nor religious denomination had any effect, but higher state median income appeared to increase the impact of legal change on the divorce rate: “[N]o-fault divorce had a greater impact on high-income families...than on low-income families.” (p. 484) “Two important results emerge from the current study. First, the enactment of no-fault divorce law had a clear positive influence on divorce rates...Second, median family income had a small but significant positive relation to the post-no-fault divorce rate when the effects of the pre-no-fault divorce rate were statistically controlled.” (p. 487)

15. Reilly, Siobhán & Eirik Evenhouse (1997). Divorce Laws and Divorce Rates: Evidence from Panel Data, working paper.

Background: This study uses twenty-five years of state-level panel data on the divorce rate (1963-1987) reported by the U.S. National Center for Vital Statistics, and twenty years of data on individuals taken from the 1989 Panel Study of Income Dynamics (PSID) [Wave 22], consisting of 6,505 ever-married individuals who were married during at least one year after 1968 (the start of the study), representing 7,034 marriages (of which 1,058 ended in divorce or separation during the survey period). Marriages that lasted two years or less were excluded. Following Peters (1986),¹⁶ the authors classify a state as permitting “unilateral divorce” if it (a) allows for a no-fault divorce and (b) the waiting or separation period for such a divorce is less than one year.

Results: For the state panel sample, the study's results suggest that "other things equal, unilateral divorce law corresponds to an increase of in [sic] the state's divorce rate of 1.5 per thousand residents, a 36 percent increase over the overall average of 4.2 per thousand." (p. 14-15) However, the study observes that this almost certainly overstates the effects of unilateral divorce. Controlling time-varying state effects, the state's 1969 divorce rate and the growth in the state's divorce rate between 1963 and 1969, suggests that "the law is associated with an 8 percent rise in the divorce rate." (p. 16-17) Comparing "no-fault" with "unilateral" divorce laws suggests that "[n]o-fault laws are indeed associated with a rise in the divorce rate, but it is the unilateral aspect of some of them that causes the effect." (p. 17) Ultimately, "[t]hese simple regressions suggest that (a) unilateral divorce has a rather modest impact on divorce rates, on the order of 5 to 8 percent; (b) the effect is short-lived...and (c) it is sensitive to the misclassification of state laws." (p. 18)

Using data on the hazard of divorce from the PSID: Controlling for age at marriage, duration of marriage, presence of children, income variables, and trend, unilateral divorce appeared to be associated with a 17 percent increase in divorce propensity (p.23): "This is a large effect relative to the effects of other variables: Its impact on the odds of divorce is five times that of having married a year younger, three times that of the local unemployment rate, nearly three times that of another year of marriage, and more than two times that of another ten to fourteen thousand dollars in annual income." (p. 23-24) Unilateral divorce also appears to affect couples who married prior to 1968 more than couples married afterwards and to increase the odds of divorce more for marriages with children at home than marriages without minor children. (p. 25-26)

In summary: "State-level data suggest that the switch from mutual consent to unilateral divorce did raise states' divorce rates, particularly in the two or three years after the new laws were introduced, but that the longer-term effect was a mere 0.2 divorces more per 1000 residents, a 5 percent increase. Individual-level data from the PSID yield ambiguous results: Estimates of the impact of unilateral divorce on an individual's annual divorce hazard range from zero to 35 percent. The sample is small enough, however, that results should be interpreted with caution." (p. 31)

16. Rodgers, Joseph Lee, et al. (1997). The Effect of No-Fault Divorce Legislation on Divorce Rates: A Response to a Reconsideration. *Journal of Marriage and the Family*, 59(4): 1026-1030.¹⁷

Background: This study expands on the findings of an earlier study (Nakonezny, Paul A., et al. (1995)) as a response to a subsequent critique (Glenn (1997)) of that study. The original study used as its data the state divorce rate, measured as the number of divorces (including annulments) per 1000 individuals for each of the 50 states for the three consecutive years before the enactment and after the enactment of no-fault divorce law for each state, data from *Vital Statistics of the United States* (National Center for Health Statistics, 1987, 1989; United States Bureau of the Census, 1950-1990). The current study added to this original data file "the divorce rates 10 years prior to the implementation of the no-fault law [for each state]." (p. 1028)

Results: "There was an increase in the divorce rate across the 10 years in 44 of the 50 states, as expected. In 34 states, the 10-year divorce trend underestimated the actual average of the 3 years following the enactment of no-fault divorce law, suggesting a net effect of the law itself. In 16 states, the net effect was negative, suggesting a lower divorce rate than the 10-year linear trend would have predicted." (pg. 1028) The study finds that "around 30% of the raw change [in the divorce rate] that we reported in our

original article [Nakonezny, Paul A., et al. (1995)] was due to no-fault laws, and around 70% was due to the prevailing divorce pattern.” (pg. 1028) That translates into “around 57,000 extra divorces per year in the whole U.S. that are directly attributable to the implementation of no-fault divorce law.” (p. 1028)

17. Wolfers, Justin (2006). Did Unilateral Divorce Laws Raise Divorce Rates? A Reconciliation and New Results. *American Economic Review* 96(5): 1802-1820.

Background: To reexamine the results of Friedberg (1998), which found that unilateral divorce laws have caused one-sixth of the divorce rate increase since the late 1960s, the current study extends Friedberg’s data sample back from 1968 to 1956 so as to allow for a better identification of pre-existing state-specific trends, controlling for state and year fixed effects, state-specific time trends, and quadratic state-specific time trends. (p. 1807-1808) To check these effects on the flow of new divorces against the effects of unilateral divorce laws on the stock of divorcees, the current study then replicates the results of Gruber (2000), which examined the effects of divorce laws on the pool of those individuals divorced at a given point in time; to account for divorcees who remarry, the current study also analyzes the effects of divorce laws on the ever-divorced population.

Results: “A clear finding from this analysis is that the divorce rate exhibits interesting dynamics in response to a change in legal regime... The data broadly indicate that divorce law reform led to an immediate spike in the divorce rate that dissipates over time. After a decade, no effect can be discerned... It should be clear that unilateral divorce laws explain very little of the rise in the aggregate divorce rate.” (p. 1816-1817)

STUDIES SHOWING NO EFFECT FROM CHANGE IN DIVORCE LAW

1. Ellman, Ira Mark & Sharon L. Lohr (1998). Dissolving the Relationship Between Divorce Laws and Divorce Rates. *International Review of Law and Economics*, 18: 341-359.

Background: First, the study critiques conclusions of Nakonezny et al. (1995) and Brinig and Buckley (1998) that unilateral divorce raised the divorce rate. Then it presents its own analysis of available data for all states excluding Nevada and Louisiana, “to see whether there were any changes in divorce rates after the enactment of a no-fault divorce law for grounds, property, or alimony, or, whether there were divorce rate changes after a change in case law that made a state effectively no-fault for property and alimony.” (p. 349) After divorce rates for different states were plotted over time, they used an “intervention analysis” where “an ARIMA model is fit to a time series (the divorce rate for a state from 1960–1992), with additional terms included to measure the possible effect(s) of an intervention (changes in divorce law).” (p. 353) Each state was analyzed separately: “This allowed us to estimate and to remove the general trend in divorce rates for a region from each time series, with only a small loss in efficiency.” (pg. 353) There were four regions (west, north central, south, and northeast); each was treated separately. “We then weighted the data points for the other states so that neighboring states that changed their divorce laws would not exert undue influence on the analysis. Using the weighted data, we employed the Super Smoother to estimate the regional trend in divorce rates. The smoothed trend line nonparametrically accounts for other factors such as unemployment, religious affiliations, or female participation in the work force, that might be thought to influence divorce rates.” (p. 353-354)

Results: Regarding the two papers the current study examines (Nakonezny et al. (1995) and Brinig and Buckley (1998)), the study shows that “the conclusions of both papers rely on flawed statistical analysis,” (p. 345) and Ellman and Lohr urge that the empirical

results of these two papers be “disregarded.” (p. 345) “The analysis of Nakonezny et al. is flawed because they ignored the fact that over 60% of the states adopted no-fault divorce grounds between 1970 and 1973—years of increasing divorce rates nationwide... Thus, a simple before and after comparison does not work.” (p. 345-346) The Brinig and Buckley (1998) analysis is flawed because “their NO-FAULT variable cannot estimate the effect of no-fault laws or practice.” (p. 347) Regarding its own empirical analysis, the authors conclude that “there is no evidence that divorce laws affect trends in divorce rates.” (p. 343) “Our analyses indicate that (1) for states changing their divorce laws in the early 1970s, the divorce rates began rising *before* changes in law, and (2) for states changing their laws after 1975, there is no evidence that the effect of the divorce law change was anything other than transitory.” (p. 358). In fact, “[w]e find it far more plausible to conclude that divorce rates and divorce laws share causal influences.” (p. 358)

2. Glenn, Norval D. (1997). A Reconsideration of the Effect of No-Fault Divorce on Divorce Rates. *Journal of Marriage the Family*, 59(4): 1023-1025.¹⁸

Background: This study compares mean divorce rates for states classified by timing of no-fault adoption (pre-boom, early boom, late boom, post-boom); comparing mean crude divorce rates three years before and three years after adoption of no-fault divorce; regressing mean divorce rate on year by when, relative to the divorce boom, states adopted no-fault divorce; and regressing mean divorce rate on year states adopted no-fault divorce during the divorce boom, with mean rate for states that had not adopted no-fault divorce controlled. (p. 1024) Divorce rates for all states from 1962-1980, excluding Arizona, Indiana, Louisiana, Massachusetts, Nevada, New Mexico, and Vermont due to missing data, taken from *Vital Statistics of the United States*.

Results: The current study begins by examining the results of Nakonezny et al. (1995), claiming that study’s analysis “confounds the effects of other influences on divorce with any effects of the change to no-fault divorce.” (p. 1023) Glenn concludes that all states display a similar increase in divorce rate regardless of when they adopted no-fault laws, and the legal change had very little effect on divorce rates. The study shows that although states that adopted no-fault before the divorce boom did have the highest divorce rates, they also had the highest initial rates and the lowest percentage increase, leading the author to surmise that higher divorce rates led to an earlier move to no-fault, instead of the opposite. Similarly, states that adopted no-fault after the divorce boom had the lowest divorce rates but also had the lowest initial rates, which may have resulted in the late adoption. Furthermore, in the states that adopted no-fault provisions at times other than during the divorce boom, the mean divorce rate was no higher in the 3 years after adoption than in the 3 years before adoption. (p. 1023) “[S]tates that had not yet adopted no-fault divorce and that did not do so during the subsequent 3 years can be used as a control group for each state that adopted no-fault divorce during the divorce boom,” (p. 1024) with the following results: “The percentage changes of the means for the adopter states and the control group states are so similar that they are essentially the same.” (p. 1025) These findings indicate that “the adoption of no-fault divorce had little direct, immediate effect on divorce rates.” (p. 1025)

3. Glenn, Norval D. (1999). Further Discussion of the Effects of No-Fault Divorce on Divorce Rates. *Journal of Marriage and the Family*, 61: 800-802.¹⁹

Background: In this response to Rodgers, Joseph Lee, et al. (1997), Glenn compared the mean divorce rate from 1961-1974 with the projected mean rate from 1972-74 in the 7 states that implemented no-fault divorce in 1971 (which had the highest mean positive

effect on divorce rates in Rodgers-Shull-Nakonezny analysis) and the 13 states that implemented no-fault divorce after 1974.

This study finds that during the divorce boom, states without no-fault had similar rates of increase to those with no-fault, and states that adopted no-fault after 1975 saw decreases in divorce rate. Furthermore, “there is scant unambiguous evidence for any effect of no-fault divorce in 1972–1974 in the states that implemented no-fault divorce in 1971. It seems clear that the Rodgers-Nakonezny-Shull method greatly overestimates the positive effects on divorce rates of the implementation of no-fault divorce in the seven states that made the change in 1971.” (p. 802) Ultimately, the current study shows that the method used in Rodgers, Joseph Lee, et al. (1997) “made linear projections from nonlinear trends,” (p. 800) and “confounds any effects of implementation of no-fault divorce with the effects of other influences that brought about the divorce boom of the 1960s and 1970s and that led to a leveling off of divorce rates after the late 1970s.” (p. 800)

4. Gray, Jeffrey S. (1998). Divorce-Law Changes, Household Bargaining, and Married Women’s Labor Supply. *The American Economic Review*, 88(3): 628-642.

Background: State laws were classified on whether they had adopted unilateral divorce (with separation requirements if any of less than one year) between 1970 and 1974, and also classified based on the marital property distribution regime: equitable distribution, common law, or community property. Census data from 1960, 1970, and 1980 were used to create a primary sample including married women ages 18 to 55 with husbands present. Because Census data does not include hours worked, a second sample was constructed from the Current Population Survey (CPS).

Results: The study finds that, controlling for socioeconomic variables, “unilateral divorce laws have little impact on state divorce rates.” (pg. 634) Furthermore, “unilateral divorce has no significant impact on married women’s labor-force participation unless the underlying marital-property laws in each state are considered...Once these property laws are controlled for...the labor-supply behavior of wives does appear to respond to their states adopting unilateral-divorce statutes.” (p. 629)

5. Olah, Livia Sz (2001). Policy Changes and Family Stability: The Swedish Case. *International Journal of Law, Policy and the Family* 15: 118-134.

Background: This study investigates Swedish trends in family disruption for both consensual unions and legal marriages, investigating whether there is increased individual risk of family disruption in three time periods associated with three separate legal changes: (1) 1964-1973, when divorce was possible on both fault and no-fault grounds; (2) 1974 to mid-1983, when all fault grounds were eliminated and waiting periods were shortened and simplified; and (3) mid-1983–1993, when joint custody was introduced as the general rule when unions dissolved. Data on the likelihood of union dissolution from 1,869 women (of whom 20.5 percent experienced the disruption of their union before the sixteenth birthday of their first child), was taken from the *Swedish Family and Working Life Survey* of 1992/93, conducted by Statistics Sweden. The working sample for the present study comprises women who have reported one or more coresidential unions and have given birth to at least one child in such a union. Individuals excluded include: those of a non-Nordic origin, those whose first child was an adopted child, or whose partner had a child from a previous relationship, those whose union ended in the same month when they had their first child, or those whose first child died. Controls include religiosity, age at first birth of the respondent, age at union formation, educational attainment, and employment status.

Results: The study found neither divorce law change appeared to increase family disruption risk: “[T]he introduction of one of the most liberal divorce laws of the world had relatively little effect on union disruption among families with children as the risks of family dissolution were very similar in the first and second policy periods (ie [sic] 1964–73, and 1974–mid-1983). This suggests the lack of long-term effects of the no-fault divorce law on family dissolution behavior...” (p. 124) However, the study did find that the introduction of joint custody for children after family breakup as a main rule seems to increase family disruption, primarily among consensual (i.e. unmarried cohabiting) unions. “Although the no-fault divorce law had hardly any long-term effect on family stability in Sweden, joint custody and fathers’ use of parental leave seem to be important.” (p. 118) In the third policy period (mid-1983–1993) the risk of union dissolution was 30% higher than in previous decades. (p. 124)

6. Smith, Ian (1997). Explaining the Growth of Divorce in Great Britain. *Scottish Journal of Political Economy* 44(5): 519-544.

Background: Between 1964 and 1985, ten important changes in divorce law and procedures took place in England (and Wales) and/or Scotland. This study uses this difference in timing to investigate the consequences of seven of these divorce law changes on the divorce rate. For example: The 1969 Divorce Reform Act in England and Wales introduced irrevocable breakdown of the marriage as the sole grounds for divorce, although the breakdown had to be proved by showing one of five possible facts: adultery, unreasonable behavior, desertion, living separately for two years with mutual consent to the divorce, living separately for five years without mutual consent. (The authors note the long waiting period for unilateral no-fault divorce means “the British data do not provide a good testbed for addressing the no-fault controversy and little weight can be placed on them as input to that specific American debate.” (p. 523)) A similar law was not adopted in Scotland until 1976.²⁰ In 1983, the Scots introduced two procedural innovations, (1) so-called “do it yourself” divorces for couples separated at least two years and where both parties consent to the application and there are no children of the marriage under age 16 and no alimony claims are being made upon one another (simplified divorces now account for one-third of all Scottish divorces), and (2) Scottish law also began permitting divorce cases to be heard in local courts, rather than exclusively in Edinburgh.²¹

Important legal changes regarding property division upon divorce include The Succession Act of 1964, which permitted Scottish judges to award a maintenance allowance to a wife on divorce. In 1970, in England and Wales, courts were given the power to dispose of matrimonial property, especially the family home. Scottish courts did not receive this power until the Family Law (Scotland) Act of 1985, which introduced a principle of equal sharing of all marital property, including the marital home. In 1984, the English Matrimonial and Family Proceedings Act limited maintenance (alimony) to a temporary and transitional period. The 1985 Scottish law similarly limited maintenance to a limited transitional period.

The study also looked at changes in real and relative wages, fertility control (defined as diffusion of knowledge about the contraceptive pill), and value of welfare benefits, as possible confounding factors in the rise in divorce.

Results: “For neither England & Wales nor Scotland can any long run legal effects [of permissive legal reform] be detected...In contrast to the absence of significant long run effects, the strictly short run impacts of legal and procedural innovations are powerful and statistically significant.” (p. 540) “[T]he analysis failed to detect any increase in the

number of divorces arising from the introduction of no-fault separation grounds. If anything, it is not extensions to the judicial grounds for divorce which have contributed to rising divorce rates but rather diminishing transactions costs and court settlement rules that improve the post-divorce financial position of women...In particular, it was found that the introduction of a relatively low cost Simplified Procedure in Scotland in 1983 appears to have permanently narrowed the differential between Scottish and English divorce rates.” (p. 541)

7. Sweezy, Kate & Jill Tiefenthaler (1996). Do State-Level Variables Affect Divorce Rates? *Review of Social Economy* 54: 47-65.

Background: Using data on 32,369 women over age 15 who are or have been married from the Fertility, Birth Expectations, and Marital History supplement to the 1990 Current Population Survey, this study looked at the effects of two legal variables on divorce risk: whether states have an equitable distribution versus community property law and whether states have a waiting period before divorce. A multivariate hazard model is used for an event history analysis. State-level controls include AFDC payments, proportion of population who attends church, and the percent of population who are Christian fundamentalist. Controls for personal variables include age at marriage, premarital pregnancy, previous divorce, earnings, region of country, urban residency, and race.

Results: “[T]he length of the waiting period and the property distribution laws of a state have no effect on the incidence of divorce.” (pg. 62) “These results reject notions that liberal divorce laws and generous AFDC payments encourage the breakup of families but support the hypothesis that social norms do influence individual behavior.” (p. 47)

APPENDIX B: DIVORCE LAW REFORM AND OTHER FAMILY OUTCOMES

A. Wives’ Labor Force Participation

Chiappori et al. (2002). Marriage Market, Divorce Legislation, and Household Labor Supply. *Journal of Political Economy* 110: 37-72.

Background: This study examines how divorce law affects husbands and wives’ labor force participation, analyzing 1,618 households in which both spouses work and are between 30 and 60 years of age, data taken from wave 23 (1988) of the University of Michigan Panel Study of Income Dynamics (PSID), a nationally representative longitudinal study of nearly 8,000 U.S. families. A composite measure of divorce law regimes most favorable to women is constructed out of four features: mutual consent versus unilateral divorce, community property versus common-law property division, enforcement of support orders, and spousal rights in professional degrees and licenses. “As of 1989, most states (42) had adopted unilateral-divorce laws. Among these states, as many as 24 allowed unilateral divorce only after a lengthy separation that lasted between six months and five years. We follow Peters (1986)²² and Gray (1998) and define them as mutual-consent states. Property division refers to state marital property systems, which can be either community property or common law.”²³ (p. 58) Mutual consent divorce, community property, stronger support enforcement, and spousal rights in professional

degrees and licenses are treated as more favorable to wives. The “divorce law index” is created out of these four indicators. Controls include income, age, education, race, city size, religion, and number of children.

Results: “According to our estimates, a one-percentage-point increase in the index, which reflects the adoption of a divorce law deemed favorable to women, reduces wives’ labor supply by approximately 46 hours, whereas it increases husbands’ labor supply by 81 hours over a year.” (p. 62)

Gray, Jeffrey S. (1998). Divorce-Law Changes, Household Bargaining, and Married Women’s Labor Supply. *The American Economic Review*, 88(3): 628-642.

Background: State laws were classified on whether they had adopted unilateral divorce (with separation requirements if any of less than one year) between 1970 and 1974, and also classified based on the marital property distribution regime: equitable distribution, common law, or community property. Census data from 1960, 1970, and 1980 were used to create a primary sample including married women ages 18 to 55 with husbands present. Because Census data does not include hours worked, a second sample was constructed from the Current Population Survey (CPS).

Results: The study finds that, controlling for socioeconomic variables, “unilateral divorce laws have little impact on state divorce rates.” (pg. 634) Furthermore, “unilateral divorce has no significant impact on married women’s labor-force participation unless the underlying marital-property laws in each state are considered...Once these property laws are controlled for...the labor-supply behavior of wives does appear to respond to their states adopting unilateral-divorce statutes.” (p. 629)

Parkman, Allen M. (1998). Why Are Married Women Working So Hard? *International Review of Law and Economics*, 18: 41-49.

Background: 172 married women and 159 married men, data from the *Time Use Longitudinal Panel Study, 1975–1981*. The sample was restricted to fault divorce states and the no-fault divorce states that had adopted no-fault divorce grounds by 1978. Observations from the states that switched from fault to no-fault divorce between 1978 and 1981 were eliminated from the sample.

Regression analyses were conducted to determine the causes of changes in number of hours worked by married men and women. Dependent variables used in these regressions were the minutes per week spent in four activities: regular work, housework, child care, and leisure, plus total work, that is the sum of regular work and housework. The independent variables consisted of variables associated with labor force participation: age, family assets, religion, number and age of children, race, education, spouse’s earnings, whether the family lived in a Standard Metropolitan Statistical Area (SMSA), and regional variables for the western, north, central, and southern United States. The influence of no-fault divorce was introduced by a dummy variable for states that in 1978 permitted unilateral divorce within 2 years. (pg. 47-48)

Results: The study finds that “living in a no-fault divorce state tends to increase the employment of married women.” (p. 48) Furthermore, the decrease in housework was not statistically significant, and the sum of any decrease in housework and childcare did not equal the increase in regular work, so that “the introduction of no-fault divorce has increased the [total] hours worked by married women.” (p. 41) “[L]iving in a no-fault divorce state results in married women having 4.5 hours less leisure time [per week] and approximately the same amount of additional time devoted to work. These results support

the hypothesis that married women in no-fault divorce states have been forced to take steps to protect themselves from the potentially adverse effects of no-fault divorce.” (p. 48) (The study also found that living in a no-fault divorce state did not affect the number of hours worked by married men.) The study concludes that the increase in employment by married women under no-fault divorce laws is motivated by a desire for personal insurance against the potential costs of divorce rather than by an increase in their family’s welfare. However, “to continue to make their marriage attractive to their husband, they have to continue to provide a substantial number of hours of domestic work. The result has been an increase in the total number of hours worked by married women.” (p. 49)

Stevenson, Betsey (2007). The Impact of Divorce Laws on Marriage-Specific Capital. *Journal of Labor Economics* 25(1): 75-94.

Background: This study investigates how changes in divorce laws affect marital behavior through altering couples’ incentives to make investments in their marriage. To reduce selection effects out of marriage as a result of legal change, the study looks at newlyweds in the first two years of marriage, taken from the 1970 and 1980 Census. Spousal behaviors investigated include female labor force participation, full-time labor market work by both spouses, one spouse supporting the other’s education, children born during the marriage, and home ownership. This study uses Gruber (2004) coding of states having unilateral divorce (although the author notes “Results presented are robust to following the coding for unilateral divorce used in Friedberg (1998).” (p. 82) States are coded as having adopted no-fault divorce following Ellman and Lohr (1998), and the property regimes upon divorce follow Gray (1998). The study includes controls for gender, state and year fixed effects, own age, race, education, metropolitan status, spouse’s age, spouse’s race, and spouse’s education.

Results: “[N]ewlywed couples in states that allow unilateral divorce are about 10% less likely to be supporting a spouse through school. They are 8% more likely to have both spouses employed in the labor force full time and are 5% more likely to have a wife in the labor force. Finally, they are about 6% less likely to have a child.” (p. 77)

“The empirical evidence demonstrates that a switch to unilateral divorce reduces couples’ willingness to make substantial investments early in their marriage. Couples are less likely to have children in the first 2 years, are less likely to support each other sequentially through school, and are more likely to have two full-time workers in the labor force and greater female labor force participation. Some of these investments may simply be being postponed, while others may never be made. Furthermore, these results are largely invariant to the laws governing property division. The exception is home ownership, where the removal of fault in property settlements appears to encourage home ownership in the early years of a marriage.” (p. 92-93)

B. Divorce Law and Family Violence

Dee, Thomas (2003). Until Death Do You Part: The Effects of Unilateral Divorce on Spousal Homicides. *Economic Inquiry* 41(1): 163-82.

Background: This study investigates how unilateral divorce laws affect spousal homicide rates. State legal regimes are divided into six categories: unilateral divorce, unilateral divorce with separation requirements (waiting periods), unilateral divorce with one of three forms of marital property distribution (equitable distribution, community property, and common law), and states without unilateral divorce. Spousal homicide

counts for husbands and wives are taken from FBI Uniform Crime Reports for all 50 states and the District of Columbia between 1968 and 1978. Results are run both with and without controls for state fixed effects. Other controls include state unemployment and real personal income per capita, AFDC expenditures per recipient, intensity of crime enforcement (as measured by per person number of state and local law enforcement officers and presence of the death penalty), the numbers of stranger homicides, and state gun control laws.

Results: “[T]he widespread adoption of unilateral divorce laws had relatively small and statistically insignificant [sic] on the number of wives murdered by their husbands...[T]he introduction of unilateral divorce laws led to a statistically significant increase of roughly 21% in the number of husbands killed by their wives. Notably, the increases in spousal homicides of husbands were concentrated in the states with marital property laws that favored husbands.” (p. 181). The author notes his study results are “quite different” from those of Stevenson and Wolfers (2000)²⁴ (p. 177) and suggests these possible reasons: Stevenson and Wolfers use a much longer time period, use homicide rates instead of homicides numbers, and do not distinguish unilateral divorce regimes with separation requirements from pure unilateral divorce regimes. “I replicated their data set...[and] found that their results were sensitive to the use of homicide rates instead of counts as well as to their representation of the state laws.” (p. 177)

Ellman, Ira Mark & Sharon Lohr (1997). Marriage as Contract, Opportunistic Violence, and Other Bad Arguments for Fault Divorce. *University of Illinois Law Review*, 1997(3): 719-72.

Background: State divorce regimes are divided into three categories, no-fault (22 states), limited fault (6 states), and fault (22 states), based on the ease with which trial courts may consider marital misconduct in awarding alimony. Two measures of spousal homicide rates for all 50 states for the years 1987 through 1992 were taken from the FBI’s Uniform Crime Reporting Program (average number of spousal homicides per 100,000 married couples per year from 1985-92, and the average number of homicides of wives by their husbands per 100,000 married couples per year from 1985-92). A measure of wife assault rate (calculated as the percentage of couples in a state in which at least one physical assault of the wife by her partner had been reported as occurring in the previous 12 months) was taken from Murray Straus (1994) “State-to-State Differences in Social Inequality and Social Bonds in Relation to Assaults on Wives in the United States,” *Journal of Comparative Family Studies*, 25(1): 7-24, which computed the rate of wife assault for each state from the 1985 National Family Violence Survey, a national probability sample of 6002 households. Controls included region, income per capita, the violent crime rate, and the proportion of state population that is black.

Results: “There is...no statistically significant relation between fault/no-fault category and spousal homicide.” (pg. 766) The study found no statistically significant association for wife assaults.

Stevenson, Betsey & Justin Wolfers (2006). Bargaining in the Shadow of the Law: Divorce Laws and Family Distress. *Quarterly Journal of Economics* 121(1): 267-288.

Background: “This paper exploits the variation occurring from the different timing of divorce law reforms across the United States to evaluate how unilateral divorce changed family violence and whether the option provided by unilateral divorce reduced suicide and spousal homicide.” (pg. 269) Data are drawn from state panel data on suicide rates (constructed from the National Center for Health Statistics), reports of domestic violence (data from Straus and Gelles’ Family Violence Surveys in 1976 and again in 1985), and

spousal homicides (data from the FBI Uniform Crime Reports) from 1964 through to 1996 in 37 states that adopted some form of “unilateral divorce” (using Leora Friedberg’s coding) during this time period. The other 14 states—who had either not yet adopted unilateral divorce at the time of the study or had adopted some variant of unilateral divorce earlier—are included as controls.

Results: “Examining state panel data on suicide, domestic violence, and murder, we find a striking decline in female suicide and domestic violence rates arising from the advent of unilateral divorce. Total female suicide declined by around 20 percent in the long run in states that adopted unilateral divorce...There is no discernable effect on male suicide...Data on conflict resolution reveal large declines in domestic violence committed by, and against, both men and women in states that adopted unilateral divorce. Furthermore, we find suggestive evidence of a decline in females murdered by intimates, although these results are not as convincing. As with suicide, there is no discernable effect on males murdered, although this reflects the imprecision and volatility of our estimates.” (pg. 286-287)

Regarding suicides, after controlling for the ratio of male-to-female employment rates, state income per capita and unemployment, the maximum AFDC payment for a family of four, the share of the state population on the welfare rolls, the availability of abortion, and the racial and age composition of the state, the study shows that “there is a large and statistically significant reduction in the female suicide rate following the change to unilateral divorce. Further, this effect grows over time with the full effects of unilateral divorce on female suicide occurring fifteen to twenty years following the adoption of unilateral divorce. Averaging the effects over the twenty years following reform suggests an aggregate decline of 8 percent–10 percent in female suicide and a long-run decline that is much larger. For male suicides [the study] reveals no discernible effect.” (pg. 276)

Regarding domestic violence, after controlling for state fixed effects; respondent’s age, race and gender; the educational attainment and current labor force status of both husband and wife; the maximum AFDC rate for a family of four; the natural log of state personal income per capita; the unemployment rate; the female-to-male employment rate; age composition variables indicating the share of states’ populations aged 14-19 and then ten-year cohorts beginning with age 20 up to a variable for 90+; and the share of the state’s population that is black, white and other, the study shows that “[c]omparing these declines in violence rates with their base rates, domestic violence appears to have declined by somewhere between a quarter and a half between 1976 and 1985 in those states that reformed their divorce laws.” (pg. 282-283)

Regarding intimate homicide of women by men, the study shows “a large and significant decline in intimate femicide following the adoption of unilateral divorce for all three definitions of intimate homicide,” with results suggesting “declines on the order of around 10 percent.” (pg. 283) This estimate is robust to adding a rich set of controls, including a death penalty indicator; the Donahue and Levitt Effective Abortion Rate; the state incarceration rate, once lagged; the AFDC rate for a family of four; the natural log of state personal income per capita; the unemployment rate; the female-to-male employment rate; age composition variables indicating the share of states’ populations aged 14-19, and then ten-year cohorts beginning with age 20 up to a variable for 90+; and the share of the state’s population that is black, white, and other. The study adds, however, that “the timing evidence is somewhat worrying, and the reader is left to judge whether the decline in homicide predated the law change to an extent that undermines our results.” (pg. 285)

C. Divorce Law and Other Family Formation Behavior

Alesina, Alberto & Paola Giuliano (July 2006). Divorce, Fertility and the Value of Marriage. available at http://www.economics.harvard.edu/faculty/giuliano/papers/AGdivorce_April07_final.pdf (previously “Divorce, Fertility and the Shot Gun Marriage,” National Bureau of Economic Research, NBER Working Paper 12375).

Background: This study analyzes marriage and birth certificate data from the National Vital Statistics System of the National Center for Health Statistics to determine the impact of unilateral no-fault divorce laws on marriage and fertility behavior. For birth certificates, the study uses public use micro data on every birth certificate in the United States from 1968 through 1999 to mothers aged 10 and older, and marriage data covers the years 1956 through 1995. Additional data is collected from the Current Population Survey (labor market, education levels) and Census 1980 5% state sample (fertility rates in first 2 years of marriage). Specifically, the authors test whether changes in state divorce laws (using state law classifications from Gruber (2004)) impact marital and nonmarital fertility rates, as well as marriage rates, while controlling for various factors including income, unemployment rates, female labor participation, education, and abortion. The authors also consider data (where available) from prior years to determine whether the fertility changes preceded the legal change.

Results: Both with and without controls for a variety of state-specific variables, this study finds that the adoption of unilateral no-fault divorce laws “is associated with a decline in the fertility rates in adopting states. The effect is significant at the 1 percent level and the implied decline in fertility is about 3 percentage points.” (p. 6)

Based on the research of Wolfers (2006), the study also considers the effect of time, finding that “[t]here is a large and significant reduction in fertility rate following the introduction of [unilateral] divorce and the effect is constant over time and does not disappear until 15 years after the introduction of [unilateral] divorce.” (p. 8-9)

More specifically, the decline in overall fertility rates reflects a drop in out-of-wedlock births, while marital fertility remains roughly constant. “All our specifications show a significant decline in out-of-wedlock ratio following the adoption of unilateral divorce, with an elasticity of the order of 6%. . . . The impact of unilateral divorce laws on the out-of-wedlock rate is always significant at the 1% level, with or without the inclusion of state-specific trends, whereas the impact on the marital rate is always insignificant.” (p. 10) “In summary: out of wed lock fertility goes down significantly when divorce becomes easier. Marital fertility is unaffected.” (p. 11)

To test the hypothesis that women are more likely to choose marriage to have children when the exit options are more readily available, the study considered 5% sample data from the 1980 Census, finding that “fertility is higher in the first two years of marriage for women living in states with unilateral divorce, although the coefficient is significant only at the 10 percent level.” (p.13) The study also finds that, controlling for education and labor market status, “the number of never married women declines with the introduction of unilateral divorce. Our estimates imply an elasticity of around 4%.” (p. 12) Explaining their findings, the authors conclude:

The theory and empirics on the effect of divorce laws on marital stability and fertility typically emphasized what we have labeled a “dilution”

effect, namely a reduction in the value of marriage that should imply fewer marriages and lower marital fertility, and by implication potentially higher out-of-wedlock fertility. We emphasized another effect which we labeled a “commitment effect”. As divorce becomes easier, people feel less locked in when they marry. So when women consider having children (or are already pregnant) they are more willing to “try” marriage. Therefore out of wedlock fertility declines and marriage rates go up.

The welfare implications of our results are of course very hard to evaluate. Reduction of out of wedlock fertility may be a social good, but society may “pay” for it with an increase in bad marriages and more divorces. (p. 13)

Ekert-Jaffe, Olivia & Shoshana Grossbard (2006). Does Community Property Discourage Unpartnered Births? July 24, 2006 draft was presented at a seminar at the Department of Economics, Aarhus School of Business, University of Aarhus, Denmark, on September 27, 2006. (July 24, 2006 draft at: <http://www.hha.dk/nat/workshop/2006/sg2709.pdf>. A previous draft was presented at the European Society for Population Economics, Verona, June 2006.)

Background: This study analyzes retrospective data from 31,449 women who gave birth to their first child between 1963 and 1992 in 12 countries (Western European countries plus Canada, U.S. and New Zealand) in order to test whether rules of property division at dissolution increase or decrease the likelihood of unpartnered births. Mothers who have “partnered births” in this study may be either married or cohabiting. Legal regimes were divided into three categories according to the degree of protection offered to women who earn less than their partner: low degree of community in property (New Zealand before 1977, Canada’s Common Law provinces, the U.S.A., and Austria); medium degree of community in property (France and Belgium (Flanders only), the former West Germany, Finland, Quebec, the Canadian province of Ontario since 1985, Italy and Spain after they legalized divorce); and high degree of community in property (Norway and Sweden). The data is drawn from the Family Fertility Surveys, conducted for the U.N. Economic Commission for Europe.

Results: After taking into account the child’s year of birth, the mother’s age, the mother’s age at birth, whether the mother’s parents had divorced, the mother’s religiosity, family size, and the mother’s work and study status, this study concludes the likelihood of an unpartnered birth was higher in countries that offer women who depend on male earnings less access to joint property upon relationship dissolution. “[T]he lower the degree of community in a country’s divorce laws, the higher women’s likelihood of having an unpartnered birth.” (p. 28) Women in countries with low levels of community property are more likely to have unpartnered births than women in countries with medium levels of community property. Women in countries with medium levels of community property are more likely to have unpartnered births than women in countries with high levels of community property. “Most unlikely to give birth without a partner were women in countries where divorce was illegal, a finding significant at the highest level.” (p. 28)

Legal regime had less of an impact on unpartnered births among teenagers, women past age 29 and children of divorce (all of whom were more likely to have unpartnered births); Legal regime had a greater impact on women who attend religious services at least once a week.

Allen, Douglas W., Krishna Pendakur & Wing Suen (2006). No-Fault Divorce and the Compression of Marriage Ages. *Economic Inquiry* 44:3 (July): 547 ff.

Background: This study uses marriage records collected by the National Center for Health Statistics, accounting for all first marriages of men and women between 1970 and 1995. States which switched to no-fault divorce during this period are compared to states whose laws did not change in this period. States' divorce laws are classified using Friedberg's (1998) definitions of no-fault and "strong no-fault" states and also Brinig and Buckley's (1998) alternative classification of "strong no-fault" states. (The main difference being: Friedberg classifies a state as having a strong no-fault divorce system if fault is ignored in both grounds and property distribution, while Brinig and Buckley's classification as "strong no-fault" requires that the state also excludes fault in consideration of alimony.)

Results: "Our main prediction, that the spread of the marriage age distribution should decline with the introduction of no-fault divorce, is broadly corroborated by the data. Controlling for state-specific effects on the age at first-marriage distribution and for national-level trends over time, we find that the introduction of no-fault divorce is associated with a 1% to 5% decrease in the standard deviation of the log at first marriage....Controlling for state-specific effects and for national-level trends, we find a small increase of about 0.3% to 0.7% in the age at first marriage. Given average ages at first marriage of 25, this suggests that no-fault divorce is associated with 1 to 2 months more marital search with an associated small loss in welfare." (p. 548)

Rasul, Imran (2003). The Impact of Divorce Laws on Marriage, working paper, University of Chicago.

Background: In theory, unilateral divorce laws might affect unmarried people's likelihood of entering legal marriages in either direction: either by making marriage more attractive (by lowering its cost of exit) or by reducing its usefulness as a commitment device, compared to cohabitation. This study uses state-level panel data from 1960 to 2000 to investigate the impact of unilateral divorce laws and more equal distribution of property laws on marriage rates. Crude marriage rates (the number of marriages per 1000 adults age 15 to 65) were constructed from Vital Statistics data. Vital Statistics data and data from the March CPS were combined to derive rates of marriage per 1000 single adults (age 15 to 65). Thirdly, marriage certificates and March CPS data are used to construct cohort specific marriage propensities, calculated by age, gender, race, and marriage number.

This study uses Friedberg's (1998) coding of unilateral divorce law states (and also in the appendix experiments with using alternate definitions of unilateral divorce, including codings used by Gruber (2000), Johnson and Mazingo (2000), and Ellman and Lohr (1998), which the author states produced similar results). "Equitable" property law is an umbrella term the author uses to describe states that moved to more equal distribution of property following divorce through one or more of a number of distinct legal steps including moving from title-based common law marital property regimes to equitable property and/or the ending of the use of marital fault in the distribution of assets. (The author thanks Saku Aura and Jonathan Gruber for providing the coding of property laws but provides little further detail.)

Results: On the effect of unilateral divorce laws: "After the adoption of unilateral divorce, marriage rates declined significantly and permanently in adopting states. The effect of unilateral divorce...accounts for 10% of the overall decline in the marriage rate.

The impact of unilateral divorce in reducing the rate of marriages per 1000 singles—a closer measure of the propensity to marry—is twice as large...The greatest quantitative impact is among whites, and those marrying for a second time.” (p. 26-27) On property division laws, “States which also introduced an equitable distribution of property in divorce have further significant reductions in marriage rates.” (p. 27)

¹⁵ A critique of this study’s methodology by Norval Glenn in the pages of *The Journal of Marriage and the Family* (Glenn, Norval D. (1997). A Reconsideration of the Effect of No-Fault Divorce on Divorce Rates [paper #2 under Studies Showing No Effect from Change in Divorce Law) lead to a series of exchanges between Glenn and Joseph Lee Rodgers, Paul A. Nakonezny and Robert D. Schull in that same journal, consisting of Rodgers, Joseph Lee., et al. (1997). The Effect of No-Fault Divorce Legislation on Divorce Rates: A Response to a Reconsideration [paper #16 under Studies Showing No-Fault Divorce Affects the Divorce Rate]; Glenn, Norval D. (1999). Further Discussion of the Effects of No-Fault Divorce on Divorce Rates [paper #3 under Studies Showing No Effect]; and Rodgers, Joseph Lee, et al. (1999) Did No-Fault Divorce Legislation Matter? Definitely Yes and Sometimes No.

¹⁶ Peters, H. Elizabeth. “Marriage and Divorce: Informational Constraints and Private Contracting” *American Economic Review* 76 (June 1986): 437-54.

¹⁷ See footnote 15.

¹⁸ See footnote 15.

¹⁹ See footnote 15.

²⁰ Other potentially important legal changes include the adoption in England and Wales of a special procedure at the end of 1973 for quickly processing divorce petitions of married couples without children who sought divorce by mutual consent by signed affidavit (without a court hearing). In 1975, this easier procedural option was extended to all uncontested divorces by childless married couples (except those who alleged “unreasonable behavior”), and in 1977 divorce by affidavit was extended to all uncontested divorces, including those with children. Similar procedural changes permitting divorce without court hearing were adopted in Scotland in April 1978 (and by 1980, 92 percent of Scottish Divorces used this procedure).

²¹ In 1984, England lowered the time from marriage at which a divorce petition may be heard from three years to one year from the date of the marriage. Scotland has no such time bar.

²² See footnote 16.

²³ Arizona, Mississippi, and Nevada are community property states which require “equitable” rather than equal distribution of property upon dissolution and the authors code these states as “common-law” regimes. (See footnote 24, page 58)

²⁴ Stevenson, B., and J. Wolfers. “Til Death Do Us Part: Effects of Divorce Laws on Suicide, Domestic Violence and Spousal Murder.” Manuscript, October 2000. (p. 182) [This is an earlier draft of Stevenson & Wolfers (2006)]

EXHIBIT 62

Good Intentions Gone Awry

No-Fault Divorce
and the
American Family

ALLEN M. PARKMAN

ROWMAN & LITTLEFIELD PUBLISHERS, INC.

Published in the United States of America
by Rowman & Littlefield Publishers, Inc.
4720 Boston Way, Lanham, Maryland 20706
<http://www.rowmanlittlefield.com>

12 Hid's Copse Road
Cumnor Hill, Oxford OX2 9JJ, England

Copyright © 2000 by Rowman & Littlefield Publishers, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

British Library Cataloguing in Publication Information Available

Library of Congress Cataloging-in-Publication Data

Parkman, Allen M.

Good intentions gone awry : no-fault divorce and the American family / Allen M. Parkman.

p. cm.

Includes bibliographical references and index.

ISBN 0-8476-9868-8 (cl. : alk. paper) — ISBN 0-8476-9869-6 (pbk. : alk. paper)


1. No-fault divorce—United States. 2. No-fault divorce—Economic aspects—United States. 3. Divorce—United States. 4. Family—United States. I. Title.

HQ834.P37 2000

306.89'0973 21—dc 21

99-045669

Printed in the United States of America

™ The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48—1992.

5

The Impact of No-Fault Divorce

In the period since World War II, U.S. society has undergone dramatic changes. The introduction of no-fault grounds for divorce has played a significant, and often unrecognized, role in those changes. Of particular importance has been the reduction in the stability of marriage. The rising divorce rate and pressure for simpler procedures for dissolving marriages led to no-fault divorce. The introduction of no-fault divorce, in turn, has had feedback effects that have made a major contribution to the changes.

The role of no-fault divorce in the changes that we have observed since World War II is the subject of this chapter. Individuals alter their prior decisions when their tastes and preferences shift or when the costs or the benefits associated with activities change. Tastes and preferences tend to change only slowly, and the following discussion focuses on the more rapid shift in incentives due to changes in the costs and the benefits of activities. Because no-fault divorce reduced the net benefits of making a long-term commitment to a spouse, it influenced many of the trends in U.S. society since 1970. People have done things that they would not have done if the divorce laws had not changed. Many of these effects are subtle. The discussion will include changes in the divorce rate, the condition of divorced spouses and their children, the incentive to marry, the incentive for married women to work outside the home and to continue their education, the quality of life for intact families, and the definition of property subject to division at divorce. We will see that not only did people change their behavior, but often they found themselves worse off than under fault divorce. An inescapable con-

clusion is that no-fault divorce has reduced the quality of family life for many people relative to the position they would be in if the divorce laws encouraged a long-term commitment to marriage.

THE DIVORCE RATE

The stability of marriage in the United States has declined dramatically since World War II. The annual divorce rate for married women (see table 5.1¹) rose from 10.3 per 1,000 in 1950 to 19.8 per 1,000 in 1995 after peaking at 22.8 per 1,000 in 1979.¹ The divorce rate doubled between 1965 and 1975. Whether the increase in the divorce rate caused no-fault divorce or whether the causation ran in the opposite direction has been the source of some debate. Certainly, new laws can alter human behavior, but the laws themselves often reflect legislators' attempts to respond to changes in basic socioeconomic forces. Both effects may have been present with no-fault divorce.² Because the divorce rate was increasing before the introduction of no-fault divorce, it is difficult to escape the conclusion that some

Table 5.1 Divorce Rates and Related Data

Year	Divorce Rate (per thousand) for Married Women	Average Hourly Earnings ^a	Ratio Women's/ Men's Earnings ^b	Births (per thousand population)
1950	10.3	\$5.34		24.1
1955	9.3	6.15	.639	25.0
1960	9.2	6.79	.603	23.7
1965	10.6	7.52	.599	19.4
1970	14.9	8.03	.600	18.4
1975	20.3	8.12	.588	14.6
1980	22.6	7.78	.594	15.9
1985	21.7	7.77	.646	15.8
1990	20.9	7.52	.682	16.7
1995	19.8	7.39	.717	14.9
1998		7.75		14.6

^a1982 dollars.

^bWeekly wage ratios, full-time workers.

Sources: Divorce rate, average earnings, and births from *Statistical Abstract of the United States* (Washington, DC: U.S. Government Printing Office, various years), and National Center for Health Statistics, "Births, Marriages, Divorces, and Deaths for November 1998," *National Vital Statistics Report* 47, no. 17 (March 17, 1999). Men's and women's earnings for 1995-1985 are from Claudia Goldin, *Understanding the Gender Gap* (New York: Oxford University Press, 1990), 60-61, and those for 1990 and 1995 are from Francine D. Blau, "Trends in the Well-Being of American Women, 1970-95," *Journal of Economic Literature* 36, no. 1 (March 1998): 129.

causation went from the increase in the divorce rate to the introduction of no-fault divorce laws.³ That is not to say that the introduction of no-fault divorce laws had no feedback effect.

The increase in the demand for simpler divorce procedures was caused by marriage becoming a less attractive institution for some adults. People marry because they expect to be better off in that state than in the single state. They divorce if this expectation turns out to be false. This can occur when there is either an unexpected reduction in the gains from marriage or an unexpected decline in the predictability of outcomes during marriage—both of which happened after World War II. The effect of these changes on divorce was not broadly recognized at the time.

The Reduction in the Gains from Marriage

Marriage is an attractive institution for both spouses as long as both expect to be better off married than single. A significant share of the benefits of marriage, in contrast to the benefits of dating or living together, flows from an increase in the specialization of labor during marriage that is often associated with children. People become more efficient by focusing their energies on one or on a limited range of activities. This specialization results in people having too much of some goods and too little of others and, therefore, becomes more attractive when there are opportunities for trade. During marriage, the husband traditionally increased his specialization in the production of earnings, whereas the wife increased her specialization in activities in the home. Through an exchange of their outputs during marriage, both spouses were better off.

When women were confronted with low wages and limited employment opportunities, marriage with increased specialization in household production was a rational choice for essentially all adult women. Conditions changed when wages and opportunities available to women increased. After adjustment for inflation, in 1982 dollars, the average hourly real wage rose from \$5.34 in 1950 to \$8.12 in 1975 and then fell gradually over the next 20 years, before recently recovering slightly⁴ (see table 5.1.). The real wage can be used to convert the time spent working at home into purchasing power—the ability to buy a larger house or more restaurant meals. Higher wages therefore create an incentive for families to decide that the value of the goods that the people who would otherwise work at home can generate through outside employment exceeds the value of at least some commodities that these people can produce in the home. In fact, the labor-force-participation rate (LFPR) of white women twenty years and older rose from 32.7 percent in 1954 to 42.2 percent in 1970, when California introduced no-fault divorce.⁵ It continued to increase to 60 percent in 1998. This trend is even more dramatic for married women for which the LFPR rose from 24 percent in 1950 to

62 percent in 1997.⁶ Particularly noteworthy has been the increase in the labor force participation of married women with young children. The rate for married women with children under six years of age rose from 18.6 percent in 1960 to 62.6 percent in 1997.

When both spouses increase the amount of time during which they work outside the home, the specialization of labor during marriage is usually reduced. Based on data from 1975 and 1976, Janice Peskin reported that women not otherwise employed provided 42.6 hours per week of household services; women who were employed full time outside the home provided 20.1 hours.⁷ Women working full time outside the home worked less in the home than women not otherwise employed, but the hours worked outside the home by these women did not result in a corresponding reduction in their work at home. Victor Fuchs observed the work habits of women in 1960 and 1986 and noted a similar pattern over time. He found that women worked less at home as they increased the hours they worked outside the home,⁸ but overall they ended up working 7 percent more hours in 1986 than in 1960. Between 1960 and 1986, married women reduced their annual hours of housework by 200 hours, but men only increased their annual hours of housework by 3 hours. Although the specialization between men and women during marriage has decreased, there has been an increase in the specialization among women. Some of the responsibility for household services has shifted to other women, who have increased their specialization by being employed in traditionally domestic activities such as day care or cleaning services.⁹

An unexpected result of this decrease in the specialization between husbands and wives can be a decline in the gains from marriage. This is especially true because higher wages for women reduce the incentive for couples to have children. A rise in the wages available to women increases the cost of children because the mother has to leave the labor force to deliver the child. In addition, at least one parent usually has to limit his or her employment to help in the raising of the child. This has traditionally been the mother because the wages available to women tend to be less than those available to men. For example, during the period before the introduction of no-fault divorce laws, the average wage of women was approximately 60 percent of the average wage of men.¹⁰ Still, as illustrated in table 5.1, as women's wages rose, the fertility rate fell. Between 1950 and 1970, the number of births per thousand population fell from 24.1 to 18.4¹¹ and continued to fall to 14.6 in 1975, when the maturation of the baby boom generation started to reverse the trend. In the 1990s, the birth rate started to decline again. The desire for children historically has been a primary reason that people marry; as the demand for children fell, so did the gains from marriage.

The higher wages and broader employment opportunities available to women had both a direct and an indirect effect on gains from marriage. The direct effect came from higher wages raising the opportunity cost of either spouse working at

home. The upshot was an increase in the percentage of married women working outside the home and a corresponding decrease in their specialization in domestic activities. There is also an indirect effect on the incentive to specialize in domestic production from higher wages decreasing the demand for children. With fewer children, there is less to be gained from either spouse working in the home.

A reduction in the gains from marriage should not necessarily affect the divorce rate. If the reduction is anticipated, it should lead to fewer but equally stable marriages. The divorce rate increases when the change in the gains from marriage is unexpected. Marriage traditionally has been a long-term arrangement, and the higher wages and broader range of employment opportunities that became available to women after World War II were not contemplated at the time of many marriages. As married women entered the labor force in response to the unexpected employment opportunities, they reduced their specialization in household production. Because many couples had not anticipated this change when they married, their marriages became vulnerable, with a resulting increase in the number of married people who wanted a divorce.

The Predictability of Outcomes during Marriage

Rapid changes in society in the postwar period also affected the predictability of the outcomes that people experienced during marriage. Higher wages and the growth of the service sector after World War II led to more women being employed and to wives becoming less financially dependant on their husbands. The increased availability of contraceptives changed sexual habits. At the same time, the fertility rate continued to fall. Few of these changes were anticipated.

People enter marriage with a set of expectations that are the basis of the decision to marry. If the expectations are realized, the marriage is likely to continue; but when actual events during marriage differ from the expectations, the marriage becomes vulnerable. For example, a woman may marry because she feels that her employment possibilities are limited and a marriage proposal has come from an acceptable man. If she later discovers that attractive jobs are available for women, she may decide that she is better off divorced and employed than married to this person. This is especially likely to occur if her husband married with the expectation that his wife would be a homemaker and a mother.

The reduction in the gains from marriage and the predictability of outcomes during marriage made marriage a less-attractive institution for many people—some of whom were already married. In some cases, the reaction to these changes was a desire for a divorce. The fault grounds for divorce made divorce difficult, though not impossible; the increased desire for divorce was accompanied by an increase in the demand for simpler procedures for dissolving marriages.

EXHIBIT 63

Homos exualities

*A Study of Diversity
Among Men And Women*

Alan P. Bell / Martin S. Weinberg



Simon and Schuster
New York

Contents

Copyright © 1978 by Alan P. Bell and Martin S. Weinberg
 including the right of reproduction
 in whole or in part in any form
 Published by Simon and Schuster
 A Division of Gull & Western Corporation
 Simon & Schuster Building
 Rockefeller Center
 1230 Avenue of the Americas
 New York, New York 10020

Designed by Irving Perkins
 Manufactured in the United States of America
 1 2 3 4 5 6 7 8 9 10

Published in association with Mitchell Benzley Publishers Ltd.
 Library of Congress Cataloging in Publication Data
 Bell, Alan P., 1932-
 Homosexualities.
 Report of a study made by the Institute for Sex Research.
 Bibliography: p.
 Includes index.
 I. Homosexuality—United States. I. Weinberg,
 Martin S., joint author. II. Indiana. University.
 Institute for Sex Research. III. Title.
 HQ76.Z. U5B45 301.41:57.0973 78-7298
 ISBN 0-671-24213-1

Preface 9

Background and Acknowledgments 13

Part I / Introduction 19

Rationale 21

Methods of Investigation 26

Study Site 27 / Sampling Procedures: Recruiting Homosexual Respondents 29 / Recruitment Sources 30 / Recruitment Pool 33 / Characteristics 35 / The Selection of Heterosexual Respondents 37 / Interview Schedule Development 40 / Interviewing Procedures 42 / Interviewers 42 / Postinterview Contacts 44 / Ethnographic Procedures 45 / Reliability and Validity 45 / Statistical Procedures 46

Part II / Dimensions of Sexual Experience 49

The Homosexual-Heterosexual Continuum 49

Findings: Men: Kinsey Ratings: Behaviors 54 / Kinsey Ratings: Feelings 56 / Kinsey Ratings: Behaviors and Feelings 56 / Summary 57 / Findings: Women: Kinsey Ratings: Behaviors 57 / Kinsey Ratings: Feelings 59 / Kinsey Ratings: Behaviors and Feelings 59 / Summary 60 / Overview 60

TABLE 5 / Level of Sexual Activity

	WHM	BHM	WHF	BHF	Pilot Study
Frequency of H Sexual Activity in Past Year					
0: Not at all	(N=574) 3%	(N=111) 0%	(N=229) 8%	(N=64) 3%	(N=64) 0%
1: Once or a few times	3	1	6	9	4
2: Every other month	7	3	5	0	3
3: Once a month	7	3	10	8	8
4: 2-3 times a month	17	13	20	14	15
5: Once a week	22	17	20	9	20
6: 2-3 times a week	30	42	19	39	33
7: 4-6 times a week	13	16	9	11	11
8: 7 times a week or more	4	7	4	6	6
<i>R</i> ²	.07	<i>b</i>	.21*	<i>R</i> ²	<i>b</i>
Demographics				.14	.23
BHM-WHM	.08			.14	

* p < .05

TABLE 6 / Cruising

	WHM	BHM	WHF	BHF	Pilot Study
Cruising in Past Year					
0: Not at all	(N=573) 16%	(N=111) 14%	(N=229) 83%	(N=64) 83%	
1: Once a month or less	21	22	12	8	
2: A few times a month	20	27	3	5	
3: Once or twice a week	28	15	1	5	
4: More than twice a week	15	23	1	0	
<i>R</i> ²	<i>b</i>	<i>R</i> ²	<i>b</i>	<i>R</i> ²	<i>b</i>
Demographics	.04		.04	.04	.02
BHM-WHM	.04		.04	.04	

Incidence of Cruising at Specific Locales in Past Year

Ever Cruised at Bars?	(N=574) 34%	(N=111) 24%	(N=229) 83%	(N=64) 84%
0: No	66	76	17	16
1: Yes				
<i>R</i> ²	<i>b</i>	<i>R</i> ²	<i>b</i>	<i>b</i>
Demographics	.07		.04	.04
BHM-WHM	.07		.04	.04
BHF-WHF			.04	.04

Ever Cruised at Baths?

0: No	(N=574) 46%	(N=111) 52%
1: Yes	54	47
<i>R</i> ²	<i>b</i>	<i>b</i>
Demographics	.01	
BHM-WHM	.01	

Ever Cruised on the Street?

0: No	(N=573) 51%	(N=111) 36%	(N=229) 100%	(N=64) 92%
1: Yes	48	63	0	9
<i>R</i> ²	<i>b</i>	<i>R</i> ²	<i>b</i>	<i>b</i>
Demographics	.08		.02	.02
BHM-WHM	.08		.02	.02
BHF-WHF			.06	.06

Ever Cruised at Private Parties?

0: No	(N=574) 56%	(N=111) 47%	(N=229) 92%	(N=64) 84%
1: Yes	44	53	8	16
<i>R</i> ²	<i>b</i>	<i>R</i> ²	<i>b</i>	<i>b</i>
Demographics	.05		.02	.02
BHM-WHM	.05		.02	.02
BHF-WHF			.03	.04

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
Ever Cruised in Parks?					
0: No	(N=573)	(N=111)	(N=229)	(N=64)	
1: Yes	70%	64%	100%	97%	
	30	36	0	3	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.03		BHF-WHF	.03	.01
Ever Cruised on Beaches?					
0: No	(N=573)	(N=111)	(N=229)	(N=64)	
1: Yes	70%	74%	99%	97%	
	30	26	1	3	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.09		BHF-WHF	.02	.01
Ever Cruised in Public Rest Rooms?					
0: No	(N=574)	(N=111)	(N=229)	(N=64)	
1: Yes	78%	81%	100%	100%	
	22	19	0	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.00		BHF-WHF	.03	.02
Ever Cruised in Movie Theaters?					
0: No	(N=574)	(N=111)	(N=229)	(N=64)	
1: Yes	85%	82%	100%	97%	
	15	18	0	3	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.01		BHF-WHF	.03	.02
II Cruised in Past Year:					
Frequency of Cruising					
0: Once a month or less	(N=484)	(N=96)	(N=40)	(N=11)	
1: A few times a month	23%	25%	68%	45%	
2: Once or twice a week	23	31	20	27	
3: More than twice a week	34	18	7	27	
	18	26	5	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.01		BHF-WHF	.10	.15

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
If Cruised in a Specific Locale in Past Year: Frequency of Cruising There					
How Often Cruised at Bars?					
1-2: Once a month or less	(N=378)	(N=84)	(N=39)	(N=10)	
3: A few times a month	32%	21%	61%	50%	
4: Once or twice a week	15	18	13	10	
5: More than twice a week	42	39	26	40	
	11	21	0	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.06		BHF-WHF	.07	.18
How Often Cruised at Baths?					
1-2: Once a month or less	(N=309)	(N=53)			
3: A few times a month	64%	74%			
4: Once or twice a week	21	15			
5: More than twice a week	14	11			
	1	0			
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.00		BHF-WHF	.72	.13
How Often Cruised on the Street?					
1-2: Once a month or less	(N=281)	(N=71)	(N=1)	(N=5)	
3: A few times a month	45%	37%	0%	20%	
4: Once or twice a week	16	11	0	20	
5: More than twice a week	19	22	0	40	
	20	30	100	20	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.03		BHF-WHF	.74	.22
How Often Cruised at Private Parties?					
1-2: Once a month or less	(N=250)	(N=59)	(N=19)	(N=10)	
3: A few times a month	78%	71%	90%	60%	
4: Once or twice a week	16	19	5	20	
5: More than twice a week	6	8	5	20	
	0	2	0	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.00		BHF-WHF	.33	.4

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
How Often Cruised in Parks?					
1-2: Once a month or less	(N=170)	(N=40)	(N=1)	(N=2)	
3: A few times a month	57%	57%	0%	100%	
4: Once or twice a week	16	13	0	0	
5: More than twice a week	18	23	100	0	
	9	7	0	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.02		BHF-WHF	1.00	— ^a
	.01				
How Often Cruised on Beaches?					
Once a month or less	(N=169)	(N=29)	(N=2)	(N=2)	
A few times a month	70%	79%	50%	100%	
Once or twice a week	10	14	50	0	
More than twice a week	18	3	0	0	
	3	3	0	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.04		BHF-WHF	1.00	— ^a
	-.14				
How Often Cruised in Public Rest Rooms?					
1-2: Once a month or less	(N=128)	(N=21)			
3: A few times a month	49%	52%			
4: Once or twice a week	16	9			
5: More than twice a week	23	29			
	12	10			
Demographics	R^2				
BHM-WHM	.00				
	.13				
How Often Cruised in Movie Theaters?					
1-2: Once a month or less	(N=83)	(N=20)	(N=10)	(N=2)	
3: A few times a month	69%	70%	0%	50%	
4: Once or twice a week	14	5	100	50	
5: More than twice a week	16	25	0	0	
	1	0	0	0	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.03		BHF-WHF	1.00	— ^a
	.01				

302 / Homosexualities

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
If Cruised in Past Year: Proportion of Cruising Time Spent in Specific Locales					
Cruising Time at Bars					
0: None of the time	(N=485)	(N=96)	(N=40)	(N=11)	
1-32: Less than one-third of the time	22%	12%	2%	9%	
33-100: One-third of the time or more	45	52	2	45	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.01		BHF-WHF	.35	-20.83 ^{***}
	1.25				
Cruising Time at Baths					
0: None of the time	(N=485)	(N=96)			
1-32: Less than one-third of the time	36%	45%			
33-100: One-third of the time or more	49	49			
Demographics	R^2				
BHM-WHM	.09				
	-1.43				
Cruising Time on the Street					
0: None of the time	(N=484)	(N=96)	(N=40)	(N=11)	
1-32: Less than one-third of the time	42%	26%	98%	55%	
33-100: One-third of the time or more	45	55	2	36	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.06		BHF-WHF	.31	6.26 ^{**}
	1.87				
Cruising Time at Private Parties					
0: None of the time	(N=485)	(N=96)	(N=40)	(N=11)	
1-32: Less than one-third of the time	48%	39%	52%	9%	
33-100: One-third of the time or more	48	55	23	45	
Demographics	R^2		Demographics	R^2	b
BHM-WHM	.01		BHF-WHF	.03	1.73 ^{ns}
	1.58 ^c				

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
Cruising Time in Parks	(N=484)	(N=96)	(N=40)	(N=11)	
0: None of the time	65%	58%	97%	82%	
1-32: Less than one-third of the time	31	42	3	18	
33-100: One-third of the time or more	4	0	0	0	
	R^2	b	R^2	b	
Demographics	.01		Demographics	.05	
BHM-WHM	.01	- .74	BHF-WHF	.07	.69
Cruising Time on Beaches	(N=484)	(N=96)	(N=40)	(N=11)	
0: None of the time	65%	70%	95%	82%	
1-32: Less than one-third of the time	32	30	5	18	
33-100: One-third of the time or more	3	0	0	0	
	R^2	b	R^2	b	
Demographics	.06		Demographics	.09	
BHM-WHM	.08	-2.09***	BHF-WHF	.11	.71
Cruising Time in Public Rest Rooms	(N=485)	(N=96)			
0: None of the time	74%	78%			
1-32: Less than one-third of the time	22	22			
33-100: One-third of the time or more	4	0			
	R^2	b	R^2	b	
Demographics	.02		Demographics	.02	
BHM-WHM	.02	-.64	BHF-WHF	.07	.69
Cruising Time in Movie Theaters	(N=485)	(N=96)	(N=40)	(N=11)	
0: None of the time	83%	79%	97%	82%	
1-32: Less than one-third of the time	16	21	0	18	
33-100: One-third of the time or more	1	0	2	0	
	R^2	b	R^2	b	
Demographics	.01		Demographics	.03	
BHM-WHM	.01		BHF-WHF	.15	1.45*

304 / Homosexualities

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
When Cruising, Does R More Often Approach or Wait for the Other to Approach?	(N=484)	(N=96)	(N=40)	(N=11)	
0: R usually approaches	28%	19%	43%	27%	
1: R sometimes approaches, sometimes waits	31	32	23	46	
2: R usually waits to be approached	41	49	35	27	
	R^2	b	R^2	b	
Demographics	.01		Demographics	.07	
BHM-WHM	.01	.07	BHF-WHF	.07	.04
Why Use This Cruising Style?* (N=329)	(N=64)	(N=28)	(N=6)		
1: I tend to be aggressive	8%	11%	14%	17%	
Partner might not approach me	12	5	7	17	
It just works best	5	14	25	50	
I am too shy to approach	21	17	25	17	
They might turn me down	20	27	14	0	
Safer to wait for approach	14	25	7	0	
Want to be sure it's mutual	5	2	0	17	
Other reasons	17	27	14	17	
	R^2	b	R^2	b	
Demographics	.11		Demographics	.10	
BHM-WHM	.12	.10	BHF-WHF	.10	-.03
Where Does Sex Usually Take Place?	(N=481)	(N=96)	(N=35)	(N=11)	
Respondent's residence	49%	48%	54%	27%	
Partner's residence	29	40	29	36	
Somewhere else	22	12	17	36	
	R^2	b	R^2	b	
Demographics	.11		Demographics	.10	
BHM-WHM	.12	.10	BHF-WHF	.10	-.03
How Much Time Is Usually Spent with Partner?	(N=481)	(N=96)	(N=33)	(N=11)	
0-2: An hour or less	21%	7%	3%	0%	
3: One or two hours	15	16	9	0	
4: Several hours	20	12	3	9	
5: All night	41	62	62	91	
6: All weekend	2	4	24	0	
	R^2	b	R^2	b	
Demographics	.11		Demographics	.10	
BHM-WHM	.12	.10	BHF-WHF	.10	-.03

Appendix C / 305

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
Frequency of Specific Worries					
While Cruising					
Being Relused by Prospective Partner					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	
1: Rarely worry	17%	21%	21%	18%	
2: Sometimes worry	24	26	18	18	
3: Often worry	29	35	26	27	
	R^2	b	R^2	b	
Demographics	.01		.01		
BHM-WHM	.02		BHF-WHF	.08	.32
Having Partner Want to Do Sexual Things R Doesn't Want to Do					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	
1: Rarely worry	24%	25%	61%	54%	
2: Sometimes worry	48	42	26	27	
3: Often worry	23	26	13	18	
	R^2	b	R^2	b	
Demographics	.00		.10		
BHM-WHM	.00		BHF-WHF	.10	
Having Difficulty Conversing					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	
1: Rarely worry	25%	34%	36%	27%	
2: Sometimes worry	32	44	26	18	
3: Often worry	28	15	26	45	
	R^2	b	R^2	b	
Demographics	.01		.05		
BHM-WHM	.03		BHF-WHF	.05	.65
Catching Venereal Disease					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	(N=438)
1: Rarely worry	34%	25%	74%	54%	19%
2: Sometimes worry	34	36	27	27	26
3: Often worry	22	21	10	18	32
	R^2	b	R^2	b	
Demographics	.01		.04		.98
BHM-WHM	.01		BHF-WHF	.05	

TABLE 6—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
Performing Inadequately Sexually					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	
1: Rarely worry	35%	45%	46%	27%	
2: Sometimes worry	41	44	26	64	
3: Often worry	20	10	15	9	
	R^2	b	R^2	b	
Demographics	.01		.11		
BHM-WHM	.02		BHF-WHF	.13	-.15
Being Robbed or Rolled					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	(N=438)
1: Rarely worry	39%	52%	92%	64%	9%
2: Sometimes worry	42	31	5	27	22
3: Often worry	15	8	3	9	34
	R^2	b	R^2	b	
Demographics	.04		.06		
BHM-WHM	.04		BHF-WHF	.13	.16
Being Caught by the Police					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	(N=438)
1: Rarely worry	44%	67%	82%	73%	25%
2: Sometimes worry	32	18	13	27	25
3: Often worry	13	9	3	0	26
	R^2	b	R^2	b	
Demographics	.08		.03		
BHM-WHM	.08		BHF-WHF	.04	.05
Having One's Homosexuality Publicly Exposed					
0: Never worry	(N=486)	(N=96)	(N=39)	(N=11)	(N=438)
1: Rarely worry	51%	71%	67%	54%	10%
2: Sometimes worry	36	22	20	18	19
3: Often worry	8	6	10	18	27
	R^2	b	R^2	b	
Demographics	.05		.02		
BHM-WHM	.06		BHF-WHF	.06	.19

* $p < .05$
 ** $p < .01$
 *** $p < .001$

^a F is too small for program to compute; difference is not significant.
^b Respondents could give more than one answer to this question, so column percents may add up to more than 100%; this indicates the chi-square, but not substantially.

^c For the females, the conventional expected frequency rule for chi-square is not met; collapsing categories would obscure our analytic focus.

TABLE 7 / Sexual Partnerships

Number of Homosexual Partners Ever	WHM				BHM	WHF	BHF	Pilot Study
	(N=574)	(N=111)	(N=227)	(N=64)				
0: 1	0%	0%	3%	5%				
1: 2	0	0	9	5				
2: 3-4	0	0	9	5				
3: 5-9	1	2	15	14				
4: 10-14	2	4	31	30				1%
5: 15-24	3	5	16	9				3
6: 25-49	3	6	10	16				4
7: 50-99	8	6	8	11				5
8: 100-249	9	18	5	8				8
9: 250-499	15	15	1	2				12
10: 500-999	17	11	1	2				20
11: 1000 or more	15	14	0	0				13
	28	19	0	0				14
Demographics	R^2	b	Demographics	R^2	b			
BHM-WHM	.09	-.11	DHF-WHF	.04	.17			

Proportion of Opposite Race Partners	WHM				BHM	WHF	BHF	Pilot Study
	(N=574)	(N=111)	(N=227)	(N=64)				
0: None	22%	2%	72%	22%				
1-3: Half or less	78	31	27	48				
4-6: More than half	0	67	1	30				
Demographics	R^2	b	Demographics	R^2	b			
BHM-WHM	.04	1.47***	DHF-WHF	.01	.89***			

Proportion of Partners Who Were Strangers	WHM				BHM	WHF	BHF	Pilot Study
	(N=574)	(N=111)	(N=227)	(N=64)				
0: None	1%	5%	62%	56%				
1-3: Half or less	20	43	32	38				6%
4-6: More than half	79	51	6	6				26
Demographics	R^2	b	Demographics	R^2	b			
DHM-WHM	.05	-.42***	BHF-WHF	.02	-.13			

TABLE 7—(Continued)

Proportion of Partners for Whom R Had Some Affection	WHM				BHM	WHF	BHF	Pilot Study
	(N=573)	(N=111)	(N=226)	(N=64)				
0: None	2%	2%	1%	3%				
1-3: Half or less	71	66	18	36				2%
4-6: More than half	27	32	81	61				78
Demographics	R^2	b	Demographics	R^2	b			
BHM-WHM	.02	.90	DHF-WHF	.04	-.36***			

Proportion of Partners with Whom R Had Sex Only Once	WHM				BHM	WHF	BHF	Pilot Study
	(N=572)	(N=111)	(N=225)	(N=64)				
0: None	1%	4%	38%	41%				
1-3: Half or less	29	59	51	55				40
4-6: More than half	70	38	12	5				57
Demographics	R^2	b	Demographics	R^2	b			
BHM-WHM	.09	-.46***	DHF-WHF	.02	-.14			

Proportion of Partners Whom R Did Not See Socially Again	WHM				BHM	WHF	BHF	Pilot Study
	(N=572)	(N=111)	(N=226)	(N=64)				
0: None	2%	6%	54%	45%				
1-3: Half or less	37	48	31	41				
4-6: More than half	61	46	15	14				
Demographics	R^2	b	Demographics	R^2	b			
BHM-WHM	.04	-.19	DHF-WHF	.01	.78			

Proportion of Partners with Whom R Would Associate Socially	WHM				BHM	WHF	BHF	Pilot Study
	(N=574)	(N=111)	(N=225)	(N=64)				
0: None	1%	2%	17%	0%				
1-3: Half or less	23	12	4	3				2%
4-6: More than half	76	86	95	97				34
Demographics	R^2	b	Demographics	R^2	b			
DHM-WHM	.04	.15	BHF-WHF	.00	.03			

TABLE 7—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
Proportion of Partners Who Were Willing to Give Their Addresses and/or Phone Numbers					
0: None	(N=574)	(N=111)	(N=226)	(N=64)	
1-3: Half or less	2%	0%	3%	6%	
4-6: More than half	35	30	5	6	
	63	70	92	88	
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.15	-.06	BHF-WHF	.01	-.17
Proportion of Partners Who Told a Fair Amount About Themselves					
0: None	(N=574)	(N=111)	(N=225)	(N=64)	
1-3: Half or less	1%	0%	0%	5%	
4-6: More than half	48	48	9	9	
	51	52	90	86	
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.09	-.20	BHF-WHF	.02	-.19
Proportion of Partners Who Told a Fair Amount About Self					
0: None	(N=574)	(N=111)	(N=226)	(N=64)	
1-3: Half or less	2%	3%	1%	5%	
4-6: More than half	63	63	25	41	
	35	34	74	55	
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.06	-.11	BHF-WHF	.06	-.48***
Proportion of Partners Who Were Older Than R					
0: None	(N=572)	(N=111)	(N=226)	(N=64)	(N=456)
1-3: Half or less	6%	3%	13%	9%	4%
4-6: More than half	65	43	53	47	54
	29	54	34	44	42
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.18	.23***	BHF-WHF	.12	-.97

TABLE 7—(Continued)

	WHM	BHM	WHF	BHF	Pilot Study
Proportion of Partners Who Were Younger Than R					
0: None	(N=573)	(N=111)	(N=225)	(N=64)	(N=455)
1-3: Half or less	5%	15%	19%	15%	8%
4-6: More than half	55	62	51	59	71
	39	23	30	25	20
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.19	-.11	BHF-WHF	.10	-.66
Proportion of Partners Who Were 16 or Younger (When R was 21 or Older)					
0: None	(N=565)	(N=106)	(N=224)	(N=64)	
1-3: Half or less	75%	86%	97%	94%	
4-6: More than half	25	14	3	6	
	0	0	0	0	
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.01	-.36	BHF-WHF	.00	.26
Proportion of Partners Who Paid R for Sex					
0: None	(N=574)	(N=111)	(N=225)	(N=64)	(N=458)
1-3: Half or less	75%	62%	100%	88%	79%
4-6: More than half	25	37	0	12	20
	0	1	0	0	1
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.04	.08**	BHF-WHF	.10	.03***
Proportion of Partners Who R Paid for Sex					
0: None	(N=574)	(N=111)	(N=225)	(N=64)	(N=458)
1-3: Half or less	72%	84%	100%	94%	81%
4-6: More than half	27	15	0	6	18
	1	1	0	0	1
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.07	-.00	BHF-WHF	.04	.03***

TABLE 7—(Continued)

Number of Homosexual Partners in Past Year	WHM				Pilot Study
	BHM	WHF	BHF	Study	
0: None	(N=572)	(N=110)	(N=228)	(N=64)	(N=458)
1: 1-2	3%	0%	8%	6%	0%
2: 3-5	8	10	63	53	7
3: 6-10	10	12	16	23	13
4: 11-19	12	14	7	11	15
5: 20-50	12	5	3	2	12
6-7: 51 or more	27	28	3	3	28
	28	32	0	2	25
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.03	-.03	BHF-WHF	.10	.07

Physical Characteristics Preferred in Sexual Partners ^a		WHM (N=553)		BHM (N=99)		WHF (N=194)		BHF (N=56)	
	%	%	%	%	%	%	%	%	%
Masculine	27%	26%	6	2%					
Genitalia	1	1	13	4					
Buttocks	29	18	8	0	0				
Face, hair, eyes	6	8	3	11					
Age	35	46	42	45					
Body hair	15	9	5	0					
Musculature	21	10	3	7					
Dressis	24	9	9	4					
Chest	0	0	29	45					
Hips	3	1	0	0					
Height	1	0	3	13					
Body type, frame	26	37	23	25					
	69	72	68	52					
	χ^2		χ^2						
BHM-WHM	32.81***		BHF-WHF	27.02***					

Number of Affairs Ever	WHM (N=572)				BHM (N=111)				WHF (N=229)				BHF (N=64)				(N=458)				
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%			
0: 0	17	23	10	17	17	17	15	15	15	15	15	15	15	15	15	15	15	15	15		
1: 1	16	18	21	23	23	23	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
2: 2	20	22	23	19	19	19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
3: 3	13	10	12	14	14	14	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
4: 4	8	6	11	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
5: 5	16	13	29	16	16	16	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
6-87: 6																					
Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	
BHM-WHM	.02	-.05	BHF-WHF	.08	.19																

312 / Homosexualities

TABLE 7—(Continued)

R's Age at Beginning of First Affair	WHM				Pilot Study
	BHM	WHF	BHF	Study	
0: 19 or younger	(N=521)	(N=102)	(N=220)	(N=63)	(N=521)
1: 20-23	31%	43%	40%	43%	31%
2: 24 or older	33	40	36	32	33
(Mean age)	36	17	24	25	36
	(23)	(21)	(22)	(22)	(23)
Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.14	-.02	BHF-WHF	.07	.01

R's Age Compared with Partner's at Beginning of First Affair		WHM (N=520)		BHM (N=102)		WHF (N=220)		BHF (N=63)			
	%	%	%	%	%	%	%	%	%		
0: R was younger	60%	74%	60%	59%							
1: Same age	15	9	17	17							
2: R was older	25	17	23	24							
Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.08	.01	BHF-WHF	.03	-.01						

Discrepancy Between Ages of Rand Partner at Beginning of First Affair		WHM (N=520)		BHM (N=103)		WHF (N=220)		BHF (N=63)			
	%	%	%	%	%	%	%	%	%		
0: No discrepancy	15%	21	17%	17%							
1: 1-2 years	22	21	35	21							
2: 3-5 years	24	20	20	22							
3: 6-10 years	22	22	26	15							
4: More than 10 years	16	16	23	13							
Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.01	.73**	BHF-WHF	.02	.30						

Did R and Partner Live Together (First Affair)?		WHM (N=521)		BHM (N=103)		WHF (N=220)		BHF (N=63)			
	%	%	%	%	%	%	%	%	%		
0: No	47%	42%	35%	59%							
1: Yes	52	58	65	41							
Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b	Demographics	R^2	b
BHM-WHM	.00	-.02	BHF-WHF	.05	.10**						

EXHIBIT 64



Contents lists available at SciVerse ScienceDirect

Social Science Research

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

How different are the adult children of parents who have same-sex relationships? Findings from the New Family Structures Study

Mark Regnerus

Department of Sociology and Population Research Center, University of Texas at Austin, 1 University Station A1700, Austin, TX 78712-0118, United States

ARTICLE INFO

Article history:

Received 1 February 2012

Revised 29 February 2012

Accepted 12 March 2012

Keywords:

Same-sex parenting

Family structure

Young adulthood

Sampling concerns

ABSTRACT

The New Family Structures Study (NFSS) is a social-science data-collection project that fielded a survey to a large, random sample of American young adults (ages 18–39) who were raised in different types of family arrangements. In this debut article of the NFSS, I compare how the young-adult children of a parent who has had a same-sex romantic relationship fare on 40 different social, emotional, and relational outcome variables when compared with six other family-of-origin types. The results reveal numerous, consistent differences, especially between the children of women who have had a lesbian relationship and those with still-married (heterosexual) biological parents. The results are typically robust in multivariate contexts as well, suggesting far greater diversity in lesbian-parent household experiences than convenience-sample studies of lesbian families have revealed. The NFSS proves to be an illuminating, versatile dataset that can assist family scholars in understanding the long reach of family structure and transitions.

© 2012 Elsevier Inc. All rights reserved.

1. Introduction

The well-being of children has long been in the center of public policy debates about marriage and family matters in the United States. That trend continues as state legislatures, voters, and the judiciary considers the legal boundaries of marriage. Social science data remains one of the few sources of information useful in legal debates surrounding marriage and adoption rights, and has been valued both by same-sex marriage supporters and opponents. Underneath the politics about marriage and child development are concerns about family structures' possible effects on children: the number of parents present and active in children's lives, their genetic relationship to the children, parents' marital status, their gender distinctions or similarities, and the number of transitions in household composition. In this introduction to the New Family Structures Study (NFSS), I compare how young adults from a variety of different family backgrounds fare on 40 different social, emotional, and relational outcomes. In particular, I focus on how respondents who said their mother had a same-sex relationship with another woman—or their father did so with another man—compare with still-intact, two-parent heterosexual married families using nationally-representative data collected from a large probability sample of American young adults.

Social scientists of family transitions have until recently commonly noted the elevated stability and social benefits of the two-parent (heterosexual) married household, when contrasted to single mothers, cohabiting couples, adoptive parents, and ex-spouses sharing custody (Brown, 2004; Manning et al., 2004; McLanahan and Sandefur, 1994). In 2002, Child Trends—a well-regarded nonpartisan research organization—detailed the importance for children's development of growing up in “the presence of *two biological parents*” (their emphasis; Moore et al., 2002, p. 2). Unmarried motherhood, divorce, cohabitation, and step-parenting were widely perceived to fall short in significant developmental domains (like education, behavior problems, and emotional well-being), due in no small part to the comparative fragility and instability of such relationships.

E-mail address: regnerus@prc.utexas.edu

0049-089X/\$ - see front matter © 2012 Elsevier Inc. All rights reserved.

<http://dx.doi.org/10.1016/j.ssresearch.2012.03.009>

In their 2001 *American Sociological Review* article reviewing findings on sexual orientation and parenting, however, sociologists Judith Stacey and Tim Biblarz began noting that while there are some differences in outcomes between children in same-sex and heterosexual unions, there were not as many as family sociologists might expect, and differences need not necessarily be perceived as *deficits*. Since that time the conventional wisdom emerging from comparative studies of same-sex parenting is that there are very few differences of note in the child outcomes of gay and lesbian parents (Tasker, 2005; Wainright and Patterson, 2006; Rosenfeld, 2010). Moreover, a variety of possible advantages of having a lesbian couple as parents have emerged in recent studies (Crowl et al., 2008; Biblarz and Stacey, 2010; Gartrell and Bos, 2010; MacCallum and Golombok, 2004). The scholarly discourse concerning gay and lesbian parenting, then, has increasingly posed a challenge to previous assumptions about the supposed benefits of being raised in biologically-intact, two-parent heterosexual households.

1.1. Sampling concerns in previous surveys

Concern has arisen, however, about the methodological quality of many studies focusing on same-sex parents. In particular, most are based on non-random, non-representative data often employing small samples that do not allow for generalization to the larger population of gay and lesbian families (Nock, 2001; Perrin and Committee on Psychosocial Aspects of Child and Family Health, 2002; Redding, 2008). For instance, many published studies on the children of same-sex parents collect data from “snowball” or convenience samples (e.g., Bos et al., 2007; Brewaeys et al., 1997; Fulcher et al., 2008; Sirota, 2009; Vanfraussen et al., 2003). One notable example of this is the National Longitudinal Lesbian Family Study, analyses of which were prominently featured in the media in 2011 (e.g., *Huffington Post*, 2011). The NLLFS employs a convenience sample, recruited entirely by self-selection from announcements posted “at lesbian events, in women’s bookstores, and in lesbian newspapers” in Boston, Washington, and San Francisco. While I do not wish to downplay the significance of such a longitudinal study—it is itself quite a feat—this sampling approach is a problem when the goal (or in this case, the practical result and conventional use of its findings) is to generalize to a population. All such samples are biased, often in unknown ways. As a formal sampling method, “snowball sampling is known to have some serious problems,” one expert asserts (Snijders, 1992, p. 59). Indeed, such samples are likely biased toward “inclusion of those who have many interrelationships with, or are coupled to, a large number of other individuals” (Berg, 1988, p. 531). But apart from the knowledge of individuals’ inclusion probability, unbiased estimation is not possible.

Further, as Nock (2001) entreated, consider the convenience sample recruited from within organizations devoted to seeking rights for gays and lesbians, like the NLLFS sampling strategy. Suppose, for example, that the respondents have higher levels of education than comparable lesbians who do not frequent such events or bookstores, or who live elsewhere. If such a sample is used for research purposes, then anything that is correlated with educational attainment—like better health, more deliberative parenting, and greater access to social capital and educational opportunities for children—will be biased. Any claims about a population based on a group that does not represent it will be distorted, since its sample of lesbian parents is less diverse (given what is known about it) than a representative sample would reveal (Baumle et al., 2009).

To compound the problem, results from nonprobability samples—from which meaningful statistics cannot be generated—are regularly compared with population-level samples of heterosexual parents, which no doubt are comprised of a blend of higher and lower quality parents. For example, Gartrell et al. (2011a,b) inquired about the sexual orientation and behavior of adolescents by comparing data from the National Survey of Family Growth (NSFG) with those in the snowball sample of youth in the NLLFS. Comparing a population-based sample (the NSFG) to a select sample of youth from same-sex parents does not provide the statistical confidence demanded of good social science. Until now, this has been a primary way in which scholars have collected and evaluated data on same-sex parents. This is not to suggest that snowball samples are *inherently* problematic as data-collection techniques, only that they are not adequate for making useful comparisons with samples that are entirely different with regard to selection characteristics. Snowball and various other types of convenience sampling are simply not widely generalizable or comparable to the population of interest as a whole. While researchers themselves commonly note this important limitation, it is often entirely lost in the translation and transmission of findings by the media to the public.

1.2. Are there notable differences?

The “no differences” paradigm suggests that children from same-sex families display no notable disadvantages when compared to children from other family forms. This suggestion has increasingly come to include even comparisons with intact biological, two-parent families, the form most associated with stability and developmental benefits for children (McLanahan and Sandefur, 1994; Moore et al., 2002).

Answering questions about notable between-group differences has nevertheless typically depended on with whom comparisons are being made, what outcomes the researchers explored, and whether the outcomes evaluated are considered substantial or superficial, or portents of future risk. Some outcomes—like sexual behavior, gender roles, and democratic parenting, for example—have come to be valued differently in American society over time.

For the sake of brevity—and to give ample space here to describing the NFSS—I will avoid spending too much time describing previous studies, many of whose methodological challenges are addressed by the NFSS. Several review articles,

and at least one book, have sought to provide a more thorough assessment of the literature (Anderssen et al., 2002; Biblarz and Stacey, 2010; Goldberg, 2010; Patterson, 2000; Stacey and Biblarz, 2001a). Suffice it to say that versions of the phrase “no differences” have been employed in a wide variety of studies, reports, depositions, books, and articles since 2000 (e.g., Crowl et al., 2008; Movement Advancement Project, 2011; Rosenfeld, 2010; Tasker, 2005; Stacey and Biblarz, 2001a,b; Veldorale-Brogan and Cooley, 2011; Wainright et al., 2004).

Much early research on gay parents typically compared the child development outcomes of divorced lesbian mothers with those of divorced heterosexual mothers (Patterson, 1997). This was also the strategy employed by psychologist Fiona Tasker (2005), who compared lesbian mothers with single, divorced heterosexual mothers and found “no systematic differences between the quality of family relationships” therein. Wainright et al. (2004), using 44 cases in the nationally-representative Add Health data, reported that teenagers living with female same-sex parents displayed comparable self-esteem, psychological adjustment, academic achievement, delinquency, substance use, and family relationship quality to 44 demographically “matched” cases of adolescents with opposite-sex parents, suggesting that here too the comparisons were not likely made with respondents from stable, biologically-intact, married families.

However, small sample sizes can contribute to “no differences” conclusions. It is not surprising that statistically-significant differences would *not* emerge in studies employing as few as 18 or 33 or 44 cases of respondents with same-sex parents, respectively (Fulcher et al., 2008; Golombok et al., 2003; Wainright and Patterson, 2006). Even analyzing matched samples, as a variety of studies have done, fails to mitigate the challenge of locating statistically-significant differences when the sample size is small. This is a concern in all of social science, but one that is doubly important when there may be motivation to confirm the null hypothesis (that is, that there are in fact no statistically-significant differences between groups). Therefore, one important issue in such studies is the simple matter of if there is enough statistical power to detect meaningful differences should they exist. Rosenfeld (2010) is the first scholar to employ a large, random sample of the population in order to compare outcomes among children of same-sex parents with those of heterosexual married parents. He concluded—after controlling for parents’ education and income and electing to limit the sample to households exhibiting at least 5 years of co-residential stability—that there were no statistically-significant differences between the two groups in a pair of measures assessing children’s progress through primary school.

Sex-related outcomes have more consistently revealed distinctions, although the tone of concern about them has diminished over time. For example, while the daughters of lesbian mothers are now widely understood to be more apt to explore same-sex sexual identity and behavior, concern about this finding has faded as scholars and the general public have become more accepting of GLB identities (Goldberg, 2010). Tasker and Golombok (1997) noted that girls raised by lesbian mothers reported a higher number of sexual partners in young adulthood than daughters of heterosexual mothers. Boys with lesbian mothers, on the other hand, appear to display the opposite trend—fewer partners than the sons of heterosexual mothers.

More recently, however, the tone about “no differences” has shifted some toward the assertion of differences, and that same-sex parents appear to be *more* competent than heterosexual parents (Biblarz and Stacey, 2010; Crowl et al., 2008). Even their romantic relationships may be better: a comparative study of Vermont gay civil unions and heterosexual marriages revealed that same-sex couples report higher relationship quality, compatibility, and intimacy, and less conflict than did married heterosexual couples (Balsam et al., 2008). Biblarz and Stacey’s (2010) review article on gender and parenting asserts that,

based strictly on the published science, one could argue that two women parent better on average than a woman and a man, or at least than a woman and man with a traditional division of labor. Lesbian coparents seem to outperform comparable married heterosexual, biological parents on several measures, even while being denied the substantial privileges of marriage (p. 17).

Even here, however, the authors note that lesbian parents face a “somewhat greater risk of splitting up,” due, they suggest, to their “asymmetrical biological and legal statuses and their high standards of equality” (2010, p. 17).

Another meta-analysis asserts that non-heterosexual parents, on average, enjoy significantly better relationships with their children than do heterosexual parents, together with no differences in the domains of cognitive development, psychological adjustment, gender identity, and sexual partner preference (Crowl et al., 2008).

However, the meta-analysis reinforces the profound importance of *who* is doing the reporting—nearly always volunteers for small studies on a group whose claims about documentable parenting successes are very relevant in recent legislative and judicial debates over rights and legal statuses. Tasker (2010, p. 36) suggests caution:

Parental self-report, of course, may be biased. It is plausible to argue that, in a prejudiced social climate, lesbian and gay parents may have more at stake in presenting a positive picture. . . . Future studies need to consider using additional sophisticated measures to rule out potential biases. . .

Suffice it to say that the pace at which the overall academic discourse surrounding gay and lesbian parents’ comparative competence has shifted—from slightly-less adept to virtually identical to more adept—is notable, and rapid. By comparison, studies of adoption—a common method by which many same-sex couples (but more heterosexual ones) become parents—have repeatedly and consistently revealed important and wide-ranging differences, on average, between adopted children and biological ones. In fact, these differences have been so pervasive and consistent that adoption experts now emphasize that “acknowledgement of difference” is critical for both parents and clinicians when working with adopted children and

teens (Miller et al., 2000). This ought to give social scientists studying gay parenting outcomes pause, especially in light of concerns noted above about small sample sizes and the absence of a comparable recent, documented improvement in outcomes from youth in adopted families and stepfamilies.

Far more, too, is known about the children of lesbian mothers than about those of gay fathers (Biblarz and Stacey, 2010; Patterson, 2006; Veldorale-Brogan and Cooley, 2011). Biblarz and Stacey (2010, p. 17) note that while gay-male families remain understudied, “their daunting routes to parenthood seem likely to select more for strengths than limitations.” Others are not so optimistic. One veteran of a study of the daughters of gay fathers warns scholars to avoid overlooking the family dynamics of “emergent” gay parents, who likely outnumber planned ones: “Children born into heterosexually organized marriages where fathers come out as gay or bisexual also face having to deal with maternal bitterness, marital conflict, possible divorce, custody issues, and father’s absence” (Sirota, 2009, p. 291).

Regardless of sampling strategy, scholars also know much less about the lives of *young-adult* children of gay and lesbian parents, or how their experiences and accomplishments as adults compare with others who experienced different sorts of household arrangements during their youth. Most contemporary studies of gay parenting processes have focused on the present—what is going on inside the household when children are still under parental care (Tasker, 2005; Bos and Sandfort, 2010; Brewaeys et al., 1997). Moreover, such research tends to emphasize *parent-reported* outcomes like parental divisions of labor, parent–child closeness, daily interaction patterns, gender roles, and disciplinary habits. While such information is important to learn, it means we know far more about the *current* experience of *parents* in households with children than we do about young adults who have already moved through their childhood and now speak for themselves. Studies on family structure, however, serve scholars and family practitioners best when they span into adulthood. Do the children of gay and lesbian parents look comparable to those of their heterosexual counterparts? The NFSS is poised to address this question about the lives of young adults between the ages of 18 and 39, but not about children or adolescents. While the NFSS is not the answer to all of this domain’s methodological challenges, it is a notable contribution in important ways.

1.3. The New Family Structures Study

Besides being brand-new data, several other aspects about the NFSS are novel and noteworthy. First, it is a study of young adults rather than children or adolescents, with particular attention paid to reaching ample numbers of respondents who were raised by parents that had a same-sex relationship. Second, it is a much larger study than nearly all of its peers. The NFSS interviewed just under 3000 respondents, including 175 who reported their mother having had a same-sex romantic relationship and 73 who said the same about their father. Third, it is a weighted probability sample, from which meaningful statistical inferences and interpretations can be drawn. While the 2000 (and presumably, the 2010) US Census Integrated Public Use Microdata Series (IPUMS) offers the largest nationally-representative sample-based information about youth in same-sex households, the Census collects much less outcome information of interest. The NFSS, however, asked numerous questions about respondents’ social behaviors, health behaviors, and relationships. This manuscript provides the first glimpse into those outcomes by offering statistical comparisons of them among eight different family structures/experiences of origin. Accordingly, there is much that the NFSS offers, and not just about the particular research questions of this study.

There are several things the NFSS is not. The NFSS is not a longitudinal study, and therefore cannot attempt to broach questions of causation. It is a cross-sectional study, and collected data from respondents at only one point in time, when they were between the ages of 18 and 39. It does not evaluate the offspring of gay marriages, since the vast majority of its respondents came of age prior to the legalization of gay marriage in several states. This study cannot answer political questions about same-sex relationships and their legal legitimacy. Nevertheless, social science is a resource that offers insight to political and legal decision-makers, and there have been enough competing claims about “what the data says” about the children of same-sex parents—including legal depositions of social scientists in important cases—that a study with the methodological strengths of this one deserves scholarly attention and scrutiny.

2. Data collection, measures, and analytic approach

The NFSS data collection project is based at the University of Texas at Austin’s Population Research Center. A survey design team consisting of several leading family researchers in sociology, demography, and human development—from Penn State University, Brigham Young University, San Diego State University, the University of Virginia, and several from the University of Texas at Austin—met over 2 days in January 2011 to discuss the project’s sampling strategy and scope, and continued to offer advice as questions arose over the course of the data collection process. The team was designed to merge scholars across disciplines and ideological lines in a spirit of civility and reasoned inquiry. Several additional external consultants also gave close scrutiny to the survey instrument, and advised on how best to measure diverse topics. Both the study protocol and the questionnaire were approved by the University of Texas at Austin’s Institutional Review Board. The NFSS data is intended to be publicly accessible and will thus be made so with minimal requirements by mid-late 2012. The NFSS was supported in part by grants from the Witherspoon Institute and the Bradley Foundation. While both of these are commonly known for their support of conservative causes—just as other private foundations are known for supporting more liberal causes—the funding sources played no role at all in the design or conduct of the study, the analyses, the interpretations of the data, or in the preparation of this manuscript.

2.1. The data collection process

The data collection was conducted by Knowledge Networks (or KN), a research firm with a very strong record of generating high-quality data for academic projects. Knowledge Networks recruited the first online research panel, dubbed the KnowledgePanel[®], that is representative of the US population. Members of the KnowledgePanel[®] are randomly recruited by telephone and mail surveys, and households are provided with access to the Internet and computer hardware if needed. Unlike other Internet research panels sampling only individuals with Internet access who volunteer for research, the KnowledgePanel[®] is based on a sampling frame which includes both listed and unlisted numbers, those without a landline telephone and is not limited to current Internet users or computer owners, and does not accept self-selected volunteers. As a result, it is a random, nationally-representative sample of the American population. At last count, over 350 working papers, conference presentations, published articles, and books have used Knowledge Networks' panels, including the 2009 National Survey of Sexual Health and Behavior, whose extensive results were featured in an entire volume of the *Journal of Sexual Medicine*—and prominently in the media—in 2010 (Herbenick et al., 2010). More information about KN and the KnowledgePanel[®], including panel recruitment, connection, retention, completion, and total response rates, are available from KN. The typical within survey response rate for a KnowledgePanel[®] survey is 65%. Appendix A presents a comparison of age-appropriate summary statistics from a variety of socio-demographic variables in the NFSS, alongside the most recent iterations of the Current Population Survey, the National Longitudinal Study of Adolescent Health (Add Health), the National Survey of Family Growth, and the National Study of Youth and Religion—all recent nationally-representative survey efforts. The estimates reported there suggest the NFSS compares very favorably with other nationally-representative datasets.

2.2. The screening process

Particularly relevant for the NFSS is the fact that key populations—gay and lesbian parents, as well as heterosexual adoptive parents—can be challenging to identify and locate. The National Center for Marriage and Family Research (2010) estimates that there are approximately 580,000 same-sex households in the United States. Among them, about 17%—or 98,600—are thought to have children present. While that may seem like a substantial number, in population-based sampling strategies it is not. Locating minority populations requires a search for a probability sample of the general population, typically by way of screening the general population to identify members of rarer groups. Thus in order to boost the number of respondents who reported being adopted or whose parent had a same-sex romantic relationship, the screener survey (which distinguished such respondents) was left in the field for several months between July 2011 and February 2012, enabling existing panelists more time to be screened and new panelists to be added. Additionally, in late Fall 2011, former members of the KnowledgePanel[®] were re-contacted by mail, phone, and email to encourage their screening. A total of 15,058 current and former members of KN's KnowledgePanel[®] were screened and asked, among several other questions, “From when you were born until age 18 (or until you left home to be on your own), did either of your parents ever have a romantic relationship with someone of the same sex?” Response choices were “Yes, my mother had a romantic relationship with another woman,” “Yes, my father had a romantic relationship with another man,” or “no.” (Respondents were also able to select both of the first two choices.) If they selected either of the first two, they were asked about whether they had ever lived with that parent while they were in a same-sex romantic relationship. The NFSS completed full surveys with 2988 Americans between the ages of 18 and 39. The screener and full survey instrument is available at the NFSS homepage, located at: www.prc.utexas.edu/nfss.

2.3. What does a representative sample of gay and lesbian parents (of young adults) look like?

The weighted screener data—a nationally-representative sample—reveal that 1.7% of all Americans between the ages of 18 and 39 report that their father or mother has had a same-sex relationship, a figure comparable to other estimates of children in gay and lesbian households (e.g., Stacey and Biblarz (2001a,b) report a plausible range from 1% to 12%). Over twice as many respondents report that their mother has had a lesbian relationship as report that their fathers have had a gay relationship. (A total of 58% of the 15,058 persons screened report spending their entire youth—up until they turned 18 or left the house—with their biological mother and father.)

While gay and lesbian Americans typically become parents today in four ways—through one partner's previous participation in a heterosexual union, through adoption, in-vitro fertilization, or by a surrogate—the NFSS is more likely to be comprised of respondents from the first two of these arrangements than from the last two. Today's children of gay men and lesbian women are more apt to be “planned” (that is, by using adoption, IVF, or surrogacy) than as little as 15–20 years ago, when such children were more typically the products of heterosexual unions. The youngest NFSS respondents turned 18 in 2011, while the oldest did so in 1990. Given that unintended pregnancy is impossible among gay men and a rarity among lesbian couples, it stands to reason that gay and lesbian parents today are far more selective about parenting than the heterosexual population, among whom unintended pregnancies remain very common, around 50% of total (Finer and Henshaw, 2006). The share of all same-sex parenting arrangements that is planned, however, remains unknown. Although the NFSS did not directly ask those respondents whose parent has had a same-sex romantic relationship about the manner of

their own birth, a failed heterosexual union is clearly the modal method: just under half of such respondents reported that their biological parents were once married. This distinguishes the NFSS from numerous studies that have been entirely concerned with “planned” gay and lesbian families, like the NLLFS.

Among those who said their mother had a same-sex relationship, 91% reported living with their mother while she was in the romantic relationship, and 57% said they had lived with their mother and her partner for at least 4 months at some point prior to age 18. A smaller share (23%) said they had spent at least 3 years living in the same household with a romantic partner of their mother’s.

Among those who said their father had a same-sex relationship, however, 42% reported living with him while he was in a same-sex romantic relationship, and 23% reported living with him and his partner for at least 4 months (but less than 2% said they had spent at least 3 years together in the same household), a trend similarly noted in Tasker’s (2005) review article on gay and lesbian parenting.

Fifty-eight (58) percent of those whose biological mothers had a same-sex relationship also reported that their biological mother exited the respondent’s household at some point during their youth, and just under 14% of them reported spending time in the foster care system, indicating greater-than-average household instability. Ancillary analyses of the NFSS suggests a likely “planned” lesbian origin of between 17% and 26% of such respondents, a range estimated from the share of such respondents who claimed that (1) their biological parents were never married or lived together, and that (2) they never lived with a parental opposite-sex partner or with their biological father. The share of respondents (whose fathers had a same-sex relationship) that likely came from “planned” gay families in the NFSS is under 1%.

These distinctions between the NFSS—a population-based sample—and small studies of planned gay and lesbian families nevertheless raise again the question of just how unrepresentative convenience samples of gay and lesbian parents actually are. The use of a probability sample reveals that the young-adult children of parents who have had same-sex relationships (in the NFSS) look less like the children of today’s stereotypic gay and lesbian couples—white, upper-middle class, well-educated, employed, and prosperous—than many studies have tacitly or explicitly portrayed. Goldberg (2010, pp. 12–13) aptly notes that existing studies of lesbian and gay couples and their families have largely included “white, middle-class persons who are relatively ‘out’ in the gay community and who are living in urban areas,” while “working-class sexual minorities, racial or ethnic sexual minorities, sexual minorities who live in rural or isolated geographical areas” have been overlooked, understudied, and difficult to reach. Rosenfeld’s (2010) analysis of Census data suggests that 37% of children in lesbian cohabiting households are Black or Hispanic. Among respondents in the NFSS who said their mother had a same-sex relationship, 43% are Black or Hispanic. In the NLLFS, by contrast, only 6% are Black or Hispanic.

This is an important oversight: demographic indicators of where gay *parents* live today point less toward stereotypic places like New York and San Francisco and increasingly toward locales where families are more numerous and overall fertility is higher, like San Antonio and Memphis. In their comprehensive demographic look at the American gay and lesbian population, Gates and Ost (2004, p. 47) report, “States and large metropolitan areas with relatively low concentrations of gay and lesbian couples in the population tend to be areas where same-sex couples are more likely to have children in the household.” A recent updated brief by Gates (2011, p. F3) reinforces this: “Geographically, same-sex couples are most likely to have children in many of the most socially conservative parts of the country.” Moreover, Gates notes that racial minorities are disproportionately more likely (among same-sex households) to report having children; whites, on the other hand, are disproportionately less likely to have children. The NFSS sample reveals the same. Gates’ Census-based assessments further raise questions about the sampling strategies of—and the popular use of conclusions from—studies based entirely on convenience samples derived from parents living in progressive metropolitan locales.

2.4. The structure and experience of respondents’ families of origin

The NFSS sought to provide as clear a vision as possible of the respondents’ household composition during their childhood and adolescence. The survey asked respondents about the marital status of their biological parents both in the past and present. The NFSS also collected “calendar” data from each respondent about their relationship to people who lived with them in their household (for more than 4 months) from birth to age 18, as well as who has lived with them from age 18—after they have left home—to the present. While the calendar data is utilized only sparingly in this study, such rich data enables researchers to document who else has lived with the respondent for virtually their entire life up to the present.

For this particular study, I compare outcomes across eight different types of family-of-origin structure and/or experience. They were constructed from the answers to several questions both in the screener survey and the full survey. It should be noted, however, that their construction reflects an unusual combination of interests—the same-sex romantic behavior of parents, and the experience of household stability or disruption. The eight groups or household settings (with an acronym or short descriptive title) evaluated here, followed by their maximum unweighted analytic sample size, are:

1. IBF: Lived in intact biological family (with mother and father) from 0 to 18, and parents are still married at present ($N = 919$).
2. LM: R reported R’s mother had a same-sex romantic (lesbian) relationship with a woman, regardless of any other household transitions ($N = 163$).
3. GF: R reported R’s father had a same-sex romantic (gay) relationship with a man, regardless of any other household transitions ($N = 73$).

4. Adopted: R was adopted by one or two strangers at birth or before age 2 ($N = 101$).
5. Divorced later or had joint custody: R reported living with biological mother and father from birth to age 18, but parents are not married at present ($N = 116$).
6. Stepfamily: Biological parents were either never married or else divorced, and R's primary custodial parent was married to someone else before R turned 18 ($N = 394$).
7. Single parent: Biological parents were either never married or else divorced, and R's primary custodial parent did *not* marry (or remarry) before R turned 18 ($N = 816$).
8. All others: Includes all other family structure/event combinations, such as respondents with a deceased parent ($N = 406$).

Together these eight groups account for the entire NFSS sample. These eight groups are largely, but not entirely, mutually exclusive in reality. That is, a small minority of respondents might fit more than one group. I have, however, forced their mutual exclusivity here for analytic purposes. For example, a respondent whose mother had a same-sex relationship might also qualify in Group 5 or Group 7, but in this case my analytical interest is in maximizing the sample size of Groups 2 and 3 so the respondent would be placed in Group 2 (LMs). Since Group 3 (GFs) is the smallest and most difficult to locate randomly in the population, its composition trumped that of others, even LMs. (There were 12 cases of respondents who reported both a mother and a father having a same-sex relationship; all are analyzed here as GFs, after ancillary analyses revealed comparable exposure to both their mother and father).

Obviously, different grouping decisions may affect the results. The NFSS, which sought to learn a great deal of information about respondents' families of origin, is well-poised to accommodate alternative grouping strategies, including distinguishing those respondents who lived with their lesbian mother's partner for several years (vs. sparingly or not at all), or early in their childhood (compared to later). Small sample sizes (and thus reduced statistical power) may nevertheless hinder some strategies.

In the results section, for maximal ease, I often make use of the acronyms IBF (child of a still-intact biological family), LM (child of a lesbian mother), and GF (child of a gay father). It is, however, very possible that the same-sex romantic relationships about which the respondents report were *not* framed by those respondents as indicating their own (or their parent's own) understanding of their parent as gay or lesbian or bisexual in sexual *orientation*. Indeed, this is more a study of the children of parents who have had (and in some cases, are still in) same-sex relationships than it is one of children whose parents have self-identified or are "out" as gay or lesbian or bisexual. The particular parental relationships the respondents were queried about are, however, gay or lesbian in content. For the sake of brevity and to avoid entanglement in interminable debates about fixed or fluid orientations, I will regularly refer to these groups as respondents with a gay father or lesbian mother.

2.5. Outcomes of interest

This study presents an overview of 40 outcome measures available in the NFSS. [Table 1](#) presents summary statistics for all variables. Why *these* outcomes? While the survey questionnaire (available online) contains several dozen outcome questions of interest, I elected to report here an overview of those outcomes, seeking to include common and oft-studied variables of interest from a variety of different domains. I include all of the particular indexes we sought to evaluate, and a broad list of outcomes from the emotional, relational, and social domains. Subsequent analyses of the NFSS will no doubt examine other outcomes, as well as examine the same outcomes in different ways.

The dichotomous outcome variables summarized in [Table 1](#) are the following: relationship status, employment status, whether they voted in the last presidential election, and use of public assistance (both currently and while growing up), the latter of which was asked as "Before you were 18 years old, did anyone in your immediate family (that is, in your household) ever receive public assistance (such as welfare payments, food stamps, Medicaid, WIC, or free lunch)?" Respondents were also asked about whether they had ever seriously thought about committing suicide in the past 12 months, and about their utilization of counseling or psychotherapy for treatment of "any problem connected with anxiety, depression, relationships, etc."

The Kinsey scale of sexual behavior was employed, but modified to allow respondents to select the best description of their sexual orientation (rather than behavior). Respondents were asked to choose the description that best fits how they think about themselves: 100% heterosexual, mostly heterosexual but somewhat attracted to people of your own sex, bisexual (that is, attracted to men and women equally), mostly homosexual but somewhat attracted to people of the opposite sex, 100% homosexual, or not sexually attracted to either males or females. For simplicity of presentation, I create a dichotomous measure indicating 100% heterosexual (vs. anything else). Additionally, unmarried respondents who are currently in a relationship were asked if their romantic partner is a man or a woman, allowing construction of a measure of "currently in a same-sex romantic relationship."

All respondents were asked if "a parent or other adult caregiver ever touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations?" Possible answers were: no, never; yes, once; yes, more than once; or not sure. A broader measure about forced sex was asked before it, and read as follows: "Have you ever been physically forced to have any type of sexual activity against your will?" It employs identical possible answers; both have been dichotomized for the analyses (respondents who were "not sure" were not included). Respondents were also asked if they

Table 1

Weighted summary statistics of measures, NFSS.

NFSS variables	Range	Mean	SD	N
Currently married	0,1	0.41	0.49	2988
Currently cohabiting	0,1	0.15	0.36	2988
Family received welfare growing up	0,1	0.34	0.47	2669
Currently on public assistance	0,1	0.21	0.41	2952
Currently employed full-time	0,1	0.45	0.50	2988
Currently unemployed	0,1	0.12	0.32	2988
Voted in last presidential election	0,1	0.55	0.50	2960
Bullied while growing up	0,1	0.36	0.48	2961
Ever suicidal during past year	0,1	0.07	0.25	2953
Recently or currently in therapy	0,1	0.11	0.32	2934
Identifies as entirely heterosexual	0,1	0.85	0.36	2946
Is in a same-sex romantic relationship	0,1	0.06	0.23	1056
Had affair while married/cohabiting	0,1	0.19	0.39	1869
Has ever had an STI	0,1	0.11	0.32	2911
Ever touched sexually by parent/adult	0,1	0.07	0.26	2877
Ever forced to have sex against will	0,1	0.13	0.33	2874
Educational attainment	1–5	2.86	1.11	2988
Family-of-origin safety/security	1–5	3.81	0.97	2917
Family-of-origin negative impact	1–5	2.58	0.98	2919
Closeness to biological mother	1–5	4.05	0.87	2249
Closeness to biological father	1–5	3.74	0.98	1346
Self-reported physical health	1–5	3.57	0.94	2964
Self-reported overall happiness	1–5	4.00	1.05	2957
CES-D depression index	1–4	1.89	0.62	2815
Attachment scale (depend)	1–5	2.97	0.84	2848
Attachment scale (anxiety)	1–5	2.51	0.77	2830
Impulsivity scale	1–4	1.88	0.59	2861
Level of household income	1–13	7.42	3.17	2635
Current relationship quality index	1–5	3.98	0.98	2218
Current relationship is in trouble	1–4	2.19	0.96	2274
Frequency of marijuana use	1–6	1.50	1.23	2918
Frequency of alcohol use	1–6	2.61	1.36	2922
Frequency of drinking to get drunk	1–6	1.70	1.09	2922
Frequency of smoking	1–6	2.03	1.85	2922
Frequency of watching TV	1–6	3.15	1.60	2919
Frequency of having been arrested	1–4	1.29	0.63	2951
Frequency pled guilty to non-minor offense	1–4	1.16	0.46	2947
N of female sex partners (among women)	0–11	0.40	1.10	1975
N of female sex partners (among men)	0–11	3.16	2.68	937
N of male sex partners (among women)	0–11	3.50	2.52	1951
N of male sex partners (among men)	0–11	0.40	1.60	944
Age	18–39	28.21	6.37	2988
Female	0,1	0.51	0.50	2988
White	0,1	0.57	0.49	2988
Gay-friendliness of state of residence	1–5	2.58	1.78	2988
<i>Family-of-origin structure groups</i>				
Intact biological family (IBF)	0,1	0.40	0.49	2988
Mother had same-sex relationship (LM)	0,1	0.01	0.10	2988
Father had same-sex relationship (GF)	0,1	0.01	0.75	2988
Adopted age 0–2	0,1	0.01	0.75	2988
Divorced later/joint custody	0,1	0.06	0.23	2988
Stepfamily	0,1	0.17	0.38	2988
Single parent	0,1	0.19	0.40	2988
All others	0,1	0.15	0.36	2988
<i>Mother's education</i>				
Less than high school	0,1	0.15	0.35	2988
Received high school diploma	0,1	0.28	0.45	2988
Some college/associate's degree	0,1	0.26	0.44	2988
Bachelor's degrees	0,1	0.15	0.36	2988
More than bachelor's	0,1	0.08	0.28	2988
Do not know/missing	0,1	0.08	0.28	2988
<i>Family-of-origin income</i>				
\$0–20,000	0,1	0.13	0.34	2988
\$20,001–40,000	0,1	0.19	0.39	2988
\$40,001–75,000	0,1	0.25	0.43	2988
\$75,001–100,000	0,1	0.14	0.34	2988
\$100,001–150,000	0,1	0.05	0.22	2988

(continued on next page)

Table 1 (continued)

NFSS variables	Range	Mean	SD	N
\$150,001–200,000	0, 1	0.01	0.11	2988
Above \$200,000	0, 1	0.01	0.10	2988
Do not know/missing	0, 1	0.22	0.42	2988

had ever had a sexually-transmitted infection, and if they had ever had a sexual relationship with someone else while they (the respondent) were married or cohabiting.

Among continuous variables, I included a five-category educational achievement measure, a standard five-point self-reported measure of general physical health, a five-point measure of overall happiness, a 13-category measure of total household income before taxes and deductions last year, and a four-point (frequency) measure of how often the respondent thought their current relationship “might be in trouble” (never once, once or twice, several times, or numerous times). Several continuous variables were constructed from multiple measures, including an eight-measure modified version of the CES-D depression scale, an index of the respondent’s reported current (romantic) relationship quality, closeness to the respondent’s biological mother and father, and a pair of attachment scales—one assessing dependability and the other anxiety. Finally, a pair of indexes captures (1) the overall safety and security in their family while growing up, and (2) respondents’ impressions of negative family-of-origin experiences that continue to affect them. These are part of a multidimensional relationship assessment instrument (dubbed RELATE) designed with the perspective that aspects of family life, such as the quality of the parent’s relationship with their children, create a family tone that can be mapped on a continuum from safe/predictable/rewarding to unsafe/chaotic/punishing (Busby et al., 2001). Each of the scales and their component measures are detailed in Appendix B.

Finally, I evaluate nine count outcomes, seven of which are frequency measures, and the other two counts of gender-specific sexual partners. Respondents were asked, “During the past year, how often did you . . .” watch more than 3 h of television in a row, use marijuana, smoke, drink alcohol, and drink with the intent to get drunk. Responses (0–5) ranged from “never” to “every day or almost every day.” Respondents were also asked if they have ever been arrested, and if they had ever been convicted of or pled guilty to any charges other than a minor traffic violation. Answers to these two ranged from 0 (no, never) to 3 (yes, numerous times). Two questions about respondents’ number of sex partners were asked (of both men and women) in this way: “How many different women have you ever had a sexual relationship with? This includes any female you had sex with, even if it was only once or if you did not know her well.” The same question was asked about sexual relationships with men. Twelve responses were possible: 0, 1, 2, 3, 4–6, 7–9, 10–15, 16–20, 21–30, 31–50, 51–99, and 100+.

2.6. Analytic approach

My analytic strategy is to highlight distinctions between the eight family structure/experience groups on the 40 outcome variables, both in a bivariate manner (using a simple *T*-test) and in a multivariate manner using appropriate variable-specific regression techniques—logistic, OLS, Poisson, or negative binomial—and employing controls for respondent’s age, race/ethnicity, gender, mother’s education, and perceived family-of-origin income, an approach comparable to Rosenfeld’s (2010) analysis of differences in children making normal progress through school and the overview article highlighting the findings of the first wave of the Add Health study (Resnick et al., 1997). Additionally, I controlled for having been bullied, the measure for which was asked as follows: “While growing up, children and teenagers typically experience negative interactions with others. We say that someone is bullied when someone else, or a group, says or does nasty and unpleasant things to him or her. We do not consider it bullying when two people quarrel or fight, however. Do you recall ever being bullied by someone else, or by a group, such that you still have vivid, negative memories of it?”

Finally, survey respondents’ current state of residence was coded on a scale (1–5) according to how expansive or restrictive its laws are concerning gay marriage and the legal rights of same-sex couples (as of November 2011). Emerging research suggests state-level political realities about gay rights may discernibly shape the lives of GLB residents (Hatzenbuehler et al., 2009; Rostosky et al., 2009). This coding scheme was borrowed from a *Los Angeles Times* effort to map the timeline of state-level rights secured for gay unions. I modified it from a 10-point to a 5-point scale (Times Research Reporting, 2012). I classify the respondent’s current state in one of the following five ways:

- 1 = Constitutional amendment banning gay marriage and/or other legal rights.
- 2 = Legal ban on gay marriage and/or other legal rights.
- 3 = No specific laws/bans and/or domestic partnerships are legal.
- 4 = Domestic partnerships with comprehensive protections are legal and/or gay marriages performed elsewhere are recognized.
- 5 = Civil unions are legal and/or gay marriage is legal.

Each case in the NFSS sample was assigned a weight based on the sampling design and their probability of being selected, ensuring a sample that is nationally representative of American adults aged 18–39. These sample weights were used in every

statistical procedure displayed herein unless otherwise noted. The regression models exhibited few ($N < 15$) missing values on the covariates.

This broad overview approach, appropriate for introducing a new dataset, provides a foundation for future, more focused analyses of the outcomes I explore here. There are, after all, far more ways to delineate family structure and experiences—and changes therein—than I have undertaken here. Others will evaluate such groupings differently, and will construct alternative approaches of testing for group differences in what is admittedly a wide diversity of outcome measures.

I would be remiss to claim causation here, since to document that having particular family-of-origin experiences—or the sexual relationships of one's parents—causes outcomes for adult children, I would need to not only document that there is a correlation between such family-of-origin experiences, but that no other plausible factors could be the common cause of any suboptimal outcomes. Rather, my analytic intention is far more modest than that: to evaluate the presence of simple group differences, and—with the addition of several control variables—to assess just how robust such group differences are.

3. Results

3.1. Comparisons with still-intact, biological families (IBFs)

Table 2 displays mean scores on 15 dichotomous outcome variables which can be read as simple percentages, sorted by the eight different family structure/experience groups described earlier. As in Tables 3 and 4, numbers that appear in bold indicate that the group's estimate is statistically different from the young-adult children of IBFs, as discerned by a basic t -test ($p < 0.05$). Numbers that appear with an asterisk (*) beside it indicate that the group's dichotomous variable estimate from a logistic regression model (not shown) is statistically-significantly different from IBFs, after controlling for respondent's age, gender, race/ethnicity, level of mother's education, perceived family-of-origin's income, experience with having been bullied as a youth, and the "gay friendliness" of the respondent's current state of residence.

At a glance, the number of statistically-significant differences between respondents from IBFs and respondents from the other seven types of family structures/experiences is considerable, and in the vast majority of cases the optimal outcome—where one can be readily discerned—favors IBFs. Table 2 reveals 10 (out of 15 possible) statistically-significant differences in simple t -tests between IBFs and LMs (the pool of respondents who reported that their mother has had a lesbian relationship), one higher than the number of simple differences (9) between IBFs and respondents from both single-parent and stepfamilies. All but one of those associations is significant in logistic regression analyses contrasting LMs and IBFs (the omitted category).

Beginning at the top of Table 2, the marriage rates of LMs and GFs (those who reported that their father had a gay relationship) are statistically comparable to IBFs, while LMs' cohabitation rate is notable higher than IBFs' (24% vs. 9%, respectively). Sixty-nine (69) percent of LMs and 57% of GFs reported that their family received public assistance at some point while growing up, compared with 17% of IBFs; 38% of LMs said they are currently receiving some form of public assistance, compared with 10% of IBFs. Just under half of all IBFs reported being employed full-time at present, compared with 26% of

Table 2

Mean scores on select dichotomous outcome variables, NFSS (can read as percentage: as in, 0.42 = 42%).

	IBF (intact bio family)	LM (lesbian mother)	GF (gay father)	Adopted by strangers	Divorced late (>18)	Stepfamily	Single- parent	All other
Currently married	0.43	0.36	0.35	0.41	0.36*	0.41	0.37	0.39
Currently cohabiting	0.09	0.24*	0.21	0.07 [^]	0.31*	0.19*	0.19*	0.13
Family received welfare growing up	0.17	0.69*	0.57*	0.12 [^]	0.47*	0.53*	0.48*	0.35*
Currently on public assistance	0.10	0.38*	0.23	0.27*	0.31*	0.30*	0.30*	0.23*
Currently employed full-time	0.49	0.26*	0.34	0.41	0.42	0.47 [^]	0.43 [^]	0.39
Currently unemployed	0.08	0.28*	0.20	0.22*	0.15	0.14	0.13*	0.15
Voted in last presidential election	0.57	0.41	0.73 [^]	0.58	0.63 [^]	0.57 [^]	0.51	0.48
Thought recently about suicide	0.05	0.12	0.24*	0.07	0.08	0.10	0.05	0.09
Recently or currently in therapy	0.08	0.19*	0.19	0.22*	0.12	0.17*	0.13*	0.09
Identifies as entirely heterosexual	0.90	0.61*	0.71*	0.82 [^]	0.83 [^]	0.81*	0.83*	0.82*
Is in a same-sex romantic relationship	0.04	0.07	0.12	0.23	0.05	0.13*	0.03	0.02
Had affair while married/cohabiting	0.13	0.40*	0.25	0.20	0.12 [^]	0.32*	0.19 [^]	0.16 [^]
Has ever had an STI	0.08	0.20*	0.25*	0.16	0.12	0.16*	0.14*	0.08
Ever touched sexually by parent/adult	0.02	0.23*	0.06 [^]	0.03 [^]	0.10*	0.12*	0.10*	0.08*
Ever forced to have sex against will	0.08	0.31*	0.25*	0.23*	0.24*	0.16*	0.16*	0.11 [^]

Bold indicates the mean scores displayed are statistically-significantly different from IBFs (currently intact, bio mother/father household, column 1), without additional controls.

An asterisk (*) next to the estimate indicates a statistically-significant difference ($p < 0.05$) between the group's coefficient and that of IBFs, controlling for respondent's age, gender, race/ethnicity, level of mother's education, perceived household income while growing up, experience being bullied as a youth, and state's legislative gay-friendliness, derived from logistic regression models (not shown).

A caret (^) next to the estimate indicates a statistically-significant difference ($p < 0.05$) between the group's mean and the mean of LM (column 2), without additional controls.

Table 3

Mean scores on select continuous outcome variables, NFSS.

	IBF (intact bio family)	LM (lesbian mother)	GF (gay father)	Adopted by strangers	Divorced late (>18)	Stepfamily	Single-parent	All other
Educational attainment	3.19	2.39*	2.64*	3.21 [^]	2.88[^]	2.64*	2.66*	2.54*
Family-of-origin safety/security	4.13	3.12*	3.25*	3.77[^]	3.52*	3.52[^]	3.58[^]	3.77[^]
Family-of-origin negative impact	2.30	3.13*	2.90*	2.83*	2.96*	2.76*	2.78*	2.64[^]
Closeness to biological mother	4.17	4.05	3.71*	3.58	3.95	4.03	3.85*	3.97
Closeness to biological father	3.87	3.16	3.43	–	3.29*	3.65	3.24*	3.61
Self-reported physical health	3.75	3.38	3.58	3.53	3.46	3.49	3.43*	3.41
Self-reported overall happiness	4.16	3.89	3.72	3.92	4.02	3.87*	3.93	3.83
CES-D depression index	1.83	2.20*	2.18*	1.95	2.01	1.91 [^]	1.89 [^]	1.94 [^]
Attachment scale (depend)	2.82	3.43*	3.14	3.12*	3.08[^]	3.10[^]	3.05[^]	3.02[^]
Attachment scale (anxiety)	2.46	2.67	2.66	2.66	2.71	2.53	2.51	2.56
Impulsivity scale	1.90	2.03	2.02	1.85	1.94	1.86 [^]	1.82 [^]	1.89
Level of household income	8.27	6.08	7.15	7.93 [^]	7.42 [^]	7.04	6.96	6.19*
Current relationship quality index	4.11	3.83	3.63*	3.79	3.95	3.80*	3.95	3.94
Current relationship is in trouble	2.04	2.35	2.55*	2.35	2.43	2.35*	2.26*	2.15

Bold indicates the mean scores displayed are statistically-significantly different from IBFs (currently intact, bio mother/father household, column 1), without additional controls.

An asterisk (*) next to the estimate indicates a statistically-significant difference ($p < 0.05$) between the group's coefficient and that of IBFs, controlling for respondent's age, gender, race/ethnicity, level of mother's education, perceived household income while growing up, experience being bullied as a youth, and state's legislative gay-friendliness, derived from OLS regression models (not shown).

A caret (^) next to the estimate indicates a statistically-significant difference ($p < 0.05$) between the group's mean and the mean of LM (column 2), without additional controls.

Table 4

Mean scores on select event-count outcome variables, NFSS.

	IBF (intact bio family)	LM (lesbian mother)	GF (gay father)	Adopted by strangers	Divorced late (>18)	Stepfamily	Single-parent	All other
Frequency of marijuana use	1.32	1.84*	1.61	1.33 [^]	2.00*	1.47	1.73*	1.49
Frequency of alcohol use	2.70	2.37	2.70	2.74	2.55	2.50	2.66	2.44
Frequency of drinking to get drunk	1.68	1.77	2.14	1.73	1.90	1.68	1.74	1.64
Frequency of smoking	1.79	2.76*	2.61*	2.34*	2.44*	2.31*	2.18*	1.91 [^]
Frequency of watching TV	3.01	3.70*	3.49	3.31	3.33	3.43*	3.25	2.95 [^]
Frequency of having been arrested	1.18	1.68*	1.75*	1.31 [^]	1.38	1.38[^]	1.35[^]	1.34[^]
Frequency pled guilty to non-minor offense	1.10	1.36*	1.41*	1.19	1.30	1.21*	1.17[^]	1.17 [^]
N of female sex partners (among women)	0.22	1.04*	1.47*	0.47 [^]	0.96*	0.47 [^]	0.52[^]	0.33 [^]
N of female sex partners (among men)	2.70	3.46	4.17	3.24	3.66	3.85*	3.23	3.37
N of male sex partners (among women)	2.79	4.02*	5.92*	3.49	3.97*	4.57*	4.04*	2.91 [^]
N of male sex partners (among men)	0.20	1.48*	1.47*	0.27	0.98*	0.55	0.42	0.44

Bold indicates the mean scores displayed are statistically-significantly different from IBFs (currently intact, bio mother/father household, column 1), without additional controls.

An asterisk (*) next to the estimate indicates a statistically-significant difference ($p < 0.05$) between the group's coefficient and that of IBFs, controlling for respondent's age, gender, race/ethnicity, level of mother's education, perceived household income while growing up, experience being bullied as a youth, and state's legislative gay-friendliness, derived from Poisson or negative binomial regression models (not shown).

A caret (^) next to the estimate indicates a statistically-significant difference ($p < 0.05$) between the group's mean and the mean of LM (column 2), without additional controls.

LMs. While only 8% of IBF respondents said they were currently unemployed, 28% of LM respondents said the same. LMs were statistically less likely than IBFs to have voted in the 2008 presidential election (41% vs. 57%), and more than twice as likely—19% vs. 8%—to report being currently (or within the past year) in counseling or therapy “for a problem connected with anxiety, depression, relationships, etc.,” an outcome that was significantly different after including control variables.

In concurrence with several studies of late, the NFSS reveals that the children of lesbian mothers seem more open to same-sex relationships (Biblarz and Stacey, 2010; Gartrell et al., 2011a,b; Golombok et al., 1997). Although they are not statistically different from most other groups in having a same-sex relationship *at present*, they are much less apt to identify entirely as heterosexual (61% vs. 90% of respondents from IBFs). The same was true of GF respondents—those young adults who said their father had a relationship with another man: 71% of them identified entirely as heterosexual. Other sexual differences are notable among LMs, too: a greater share of daughters of lesbian mothers report being “not sexually attracted to either males or females” than among any other family-structure groups evaluated here (4.1% of female LMs, compared to 0.5% of female IBFs, not shown in Table 2). Exactly why the young-adult children of lesbian mothers are more apt to experience same-sex attraction and behaviors, as well as self-report asexuality, is not clear, but the fact that they do seems consistent across studies. Given that lower rates of heterosexuality characterize other family structure/experience types in the

NFSS, as Table 2 clearly documents, the answer is likely located not simply in parental sexual orientation but in successful cross-sex relationship role modeling, or its absence or scarcity.

Sexual conduct within their romantic relationships is also distinctive: while 13% of IBFs reported having had a sexual relationship with someone else while they were either married or cohabiting, 40% of LMs said the same. In contrast to Gartrell et al.'s (2011a,b) recent, widely-disseminated conclusions about the absence of sexual victimization in the NLLFS data, 23% of LMs said yes when asked whether “a parent or other adult caregiver ever touched you in a sexual way, forced you to touch him or her in a sexual way, or forced you to have sexual relations,” while only 2% of IBFs responded affirmatively. Since such reports are more common among women than men, I split the analyses by gender (not shown). Among female respondents, 3% of IBFs reported parental (or adult caregiver) sexual contact/victimization, dramatically below the 31% of LMs who reported the same. Just under 10% of female GFs responded affirmatively to the question, an estimate not significantly different from the IBFs.

It is entirely plausible, however, that sexual victimization could have been at the hands of the LM respondents' biological father, prompting the mother to leave the union and—at some point in the future—commence a same-sex relationship. Ancillary (unweighted) analyses of the NFSS, which asked respondents how old they were when the first incident occurred (and can be compared to the household structure calendar, which documents who lived in their household each year up until age 18) reveal this possibility, up to a point: 33% of those LM respondents who said they had been sexually victimized by a parent or adult caregiver reported that they were also living with their biological father in the year that the first incident occurred. Another 29% of victimized LMs reported never having lived with their biological father at all. Just under 34% of LM respondents who said they had at some point lived with their mother's same-sex partner reported a first-time incident at an age that was equal to or higher than when they first lived with their mother's partner. Approximately 13% of victimized LMs reported living with a foster parent the year when the first incident occurred. In other words, there is no obvious trend to the timing of first victimization and when the respondent may have lived with their biological father or their mother's same-sex partner, nor are we suggesting by whom the respondent was most likely victimized. Future exploration of the NFSS's detailed household structure calendar offers some possibility for clarification.

The elevated LM estimate of sexual victimization is not the only estimate of increased victimization. Another more general question about forced sex, “Have you ever been physically forced to have any type of sexual activity against your will” also displays significant differences between IBFs and LMs (and GFs). The question about forced sex was asked *before* the question about sexual contact with a parent or other adult and may include incidents of it but, by the numbers, clearly includes additional circumstances. Thirty-one percent of LMs indicated they had, at some point in their life, been forced to have sex against their will, compared with 8% of IBFs and 25% of GFs. Among female respondents, 14% of IBFs reported forced sex, compared with 46% of LMs and 52% of GFs (both of the latter estimates are statistically-significantly different from that reported by IBFs).

While I have so far noted several distinctions between IBFs and GFs—respondents who said their father had a gay relationship—there are simply fewer statistically-significant distinctions to note between IBFs and GFs than between IBFs and LMs, which may or may not be due in part to the smaller sample of respondents with gay fathers in the NFSS, and the much smaller likelihood of having lived with their gay father while he was in a same-sex relationship. Only six of 15 measures in Table 2 reveal statistically-significant differences in the regression models (but only one in a bivariate environment). After including controls, the children of a gay father were statistically more apt (than IBFs) to receive public assistance while growing up, to have voted in the last election, to have thought recently about committing suicide, to ever report a sexually-transmitted infection, have experienced forced sex, and were less likely to self-identify as entirely heterosexual. While other outcomes reported by GFs often differed from IBFs, statistically-significant differences were not as regularly detected.

Although my attention has been primarily directed at the inter-group differences between IBFs, LMs, and GFs, it is worth noting that LMs are hardly alone in displaying numerous differences with IBFs. Respondents who lived in stepfamilies or single-parent families displayed nine simple differences in Table 2. Besides GFs, adopted respondents displayed the fewest simple differences (three).

Table 3 displays mean scores on 14 continuous outcomes. As in Table 2, bold indicates simple statistically-significant outcome differences with young-adult respondents from still-intact, biological families (IBFs) and an asterisk indicates a regression coefficient (models not shown) that is significantly different from IBFs after a series of controls. Consistent with Table 2, eight of the estimates for LMs are statistically different from IBFs. Five of the eight differences are significant as regression estimates. The young-adult children of women who have had a lesbian relationship fare worse on educational attainment, family-of-origin safety/security, negative impact of family-of-origin, the CES-D (depression) index, one of two attachment scales, report worse physical health, smaller household incomes than do respondents from still-intact biological families, and think that their current romantic relationship is in trouble more frequently.

The young-adult GF respondents were likewise statistically distinct from IBF respondents on seven of 14 continuous outcomes, all of which were significantly different when evaluated in regression models. When contrasted with IBFs, GFs reported more modest educational attainment, worse scores on the family-of-origin safety/security and negative impact indexes, less closeness to their biological mother, greater depression, a lower score on the current (romantic) relationship quality index, and think their current romantic relationship is in trouble more frequently.

As in Table 2, respondents who reported living in stepfamilies or in single-parent households also exhibit numerous simple statistical differences from IBFs—on nine and 10 out of 14 outcomes, respectively—most of which remain significant in

the regression models. On only four of 14 outcomes do adopted respondents appear distinctive (three of which remain significant after introducing controls).

Table 4 displays mean scores on nine event counts, sorted by the eight family structure/experience groups. The NFSS asked all respondents about experience with male and female sexual partners, but I report them here separately by gender. LM respondents report statistically greater marijuana use, more frequent smoking, watch television more often, have been arrested more, pled guilty to non-minor offenses more, and—among women—report greater numbers of both female and male sex partners than do IBF respondents. Female LMs reported an average of just over one female sex partner in their lifetimes, as well as four male sex partners, in contrast to female IBFs (0.22 and 2.79, respectively). Male LMs report an average of 3.46 female sex partners and 1.48 male partners, compared with 2.70 and 0.20, respectively, among male IBFs. Only the number of male partners among men, however, displays significant differences (after controls are included).

Among GFs, only three bivariate distinctions appear. However, six distinctions emerge after regression controls: they are more apt than IBFs to smoke, have been arrested, pled guilty to non-minor offenses, and report more numerous sex partners (except for the number of female sex partners among male GFs). Adopted respondents display no simple differences from IBFs, while the children of stepfamilies and single parents each display six significant differences with young adults from still-intact, biological mother/father families.

Although I have paid much less attention to most of the other groups whose estimates also appear in Tables 2–4, it is worth noting how seldom the estimates of young-adult children who were adopted by strangers (before age 2) differ statistically from the children of still-intact biological families. They display the fewest simple significant differences—seven—across the 40 outcomes evaluated here. Given that such adoptions are typically the result of considerable self-selection, it should not surprise that they display fewer differences with IBFs.

To summarize, then, in 25 of 40 outcomes, there are simple statistically-significant differences between IBFs and LMs, those whose mothers had a same-sex relationship. After controls, there are 24 such differences. There are 24 simple differences between IBFs and stepfamilies, and 24 statistically-significant differences after controls. Among single (heterosexual) parents, there are 25 simple differences before controls and 21 after controls. Between GFs and IBFs, there are 11 and 19 such differences, respectively.

3.2. Summary of differences between LMs and other family structures/experiences

Researchers sometimes elect to evaluate the outcomes of children of gay and lesbian parents by comparing them not directly to stable heterosexual marriages but to other types of households, since it is often the case—and it is certainly true of the NFSS—that a gay or lesbian parent first formed a heterosexual union prior to “coming out of the closet,” and witnessing the dissolution of that union (Tasker, 2005). So comparing the children of such parents with those who experienced no union dissolution is arguably unfair. The NFSS, however, enables researchers to compare outcomes across a variety of other types of family-structural history. While I will not explore in-depth here all the statistically-significant differences between LMs, GFs, and other groups *besides* IBFs, a few overall observations are merited.

Of the 239 possible between-group differences here—not counting those differences with Group 1 (IBFs) already described earlier—the young-adult children of lesbian mothers display 57 (or 24% of total possible) that are significant at the $p < 0.05$ level (indicated in Tables 2–4 with a caret), and 44 (or 18% of total) that are significant after controls (not shown). The majority of these differences are in suboptimal directions, meaning that LMs display worse outcomes. The young-adult children of gay men, on the other hand, display only 11 (or 5% of total possible) between-group differences that are statistically significant at the $p < 0.05$ level, and yet 24 (or 10% of total) that are significant after controls (not shown).

In the NFSS, then, the young-adult children of a mother who has had a lesbian relationship display more significant distinctions with other respondents than do the children of a gay father. This may be the result of genuinely different experiences of their family transitions, the smaller sample size of children of gay men, or the comparatively-rarer experience of living with a gay father (only 42% of such respondents reported ever living with their father while he was in a same-sex relationship, compared with 91% who reported living with their mother while she was in a same-sex relationship).

4. Discussion

Just how different are the adult children of men and women who pursue same-sex romantic (i.e., gay and lesbian) relationships, when evaluated using population-based estimates from a random sample? The answer, as might be expected, depends on to whom you compare them. When compared with children who grew up in biologically (still) intact, mother-father families, the children of women who reported a same-sex relationship look markedly different on numerous outcomes, including many that are obviously suboptimal (such as education, depression, employment status, or marijuana use). On 25 of 40 outcomes (or 63%) evaluated here, there are bivariate statistically-significant ($p < 0.05$) differences between children from still-intact, mother/father families and those whose mother reported a lesbian relationship. On 11 of 40 outcomes (or 28%) evaluated here, there are bivariate statistically-significant ($p < 0.05$) differences between children from still-intact, mother/father families and those whose father reported a gay relationship. Hence, there are differences in both

comparisons, but there are many more differences by any method of analysis in comparisons between young-adult children of IBFs and LMs than between IBFs and GFs.

While the NFSS may best capture what might be called an “earlier generation” of children of same-sex parents, and includes among them many who witnessed a failed heterosexual union, the basic statistical comparisons between this group and those of others, especially biologically-intact, mother/father families, suggests that notable differences on many outcomes do in fact exist. This is inconsistent with claims of “no differences” generated by studies that have commonly employed far more narrow samples than this one.

Goldberg (2010) aptly asserts that many existing studies were conducted primarily comparing children of heterosexual divorced and lesbian divorced mothers, potentially leading observers to erroneously attribute to parental sexual orientation the corrosive effects of enduring parental divorce. Her warning is well-taken, and it is one that the NFSS cannot entirely mitigate. Yet when compared with other young adults who experienced household transitions and who witnessed parents forming new romantic relationships—for example, stepfamilies—the children of lesbian mothers looked (statistically) significantly different just under 25% of the time (and typically in suboptimal directions). Nevertheless, the children of mothers who have had same-sex relationships are far less apt to differ from stepfamilies and single parents than they are from still-intact biological families.

Why the divergence between the findings in this study and those from so many previous ones? The answer lies in part with the small or nonprobability samples so often relied upon in nearly all previous studies—they have very likely underestimated the number and magnitude of real differences between the children of lesbian mothers (and to a lesser extent, gay fathers) and those raised in other types of households. While the architects of such studies have commonly and appropriately acknowledged their limitations, practically—since they are often the only studies being conducted—their results are treated as providing information about gay and lesbian household experiences *in general*. But this study, based on a rare large probability sample, reveals far greater diversity in the experience of lesbian motherhood (and to a lesser extent, gay fatherhood) than has been acknowledged or understood.

Given that the characteristics of the NFSS’s sample of children of LMs and GFs are close to estimates of the same offered by demographers using the American Community Study, one conclusion from the analyses herein is merited: the sample-selection bias problem in very many studies of gay and lesbian parenting is not incidental, but likely profound, rendering the ability of much past research to offer valid interpretations of *average* household experiences of children with a lesbian or gay parent suspect at best. Most snowball-sample-based research has, instead, shed light on *above-average* household experiences.

While studies of family structure often locate at least modest benefits that accrue to the children of married biological parents, some scholars attribute much of the benefit to socioeconomic-status differences between married parents and those parents in other types of relationships (Biblarz and Raftery, 1999). While this is likely true of the NFSS as well, the results presented herein controlled not only for socioeconomic status differences between families of origin, but also political-geographic distinctions, age, gender, race/ethnicity, and the experience of having been bullied (which was reported by 53% of LMs but only 35% of IBFs).

To be sure, those NFSS respondents who reported that a parent of theirs had had a romantic relationship with a member of the same sex are a very diverse group: some experienced numerous household transitions, and some did not. Some of their parents may have remained in a same-sex relationship, while others did not. Some may self-identify as lesbian or gay, while others may not. I did not explore in detail the diversity of household experiences here, given the overview nature of this study. But the richness of the NFSS—which has annual calendar data for household transitions from birth to age 18 and from age 18 to the present—allows for closer examination of many of these questions.

Nevertheless, to claim that there are few meaningful statistical differences between the different groups evaluated here would be to state something that is empirically inaccurate. Minimally, the population-based estimates presented here suggest that a good deal more attention must be paid to the real diversity among gay and lesbian parent experiences in America, just as it long has been among heterosexual households. Child outcomes in stable, “planned” GLB families and those that are the product of previous heterosexual unions are quite likely distinctive, as previous studies’ conclusions would suggest. Yet as demographers of gay and lesbian America continue to note—and as the NFSS reinforces—planned GLB households only comprise a portion (and an unknown one at that) of all GLB households with children.

Even if the children in planned GLB families exhibit better outcomes than those from failed heterosexual unions, the former still exhibits a diminished context of kin altruism (like adoption, step-parenting, or nonmarital childbirth), which have typically proven to be a risk setting, on average, for raising children when compared with married, biological parenting (Miller et al., 2000). In short, if same-sex parents are able to raise children with no differences, despite the kin distinctions, it would mean that same-sex couples are able to do something that heterosexual couples in step-parenting, adoptive, and cohabiting contexts have themselves not been able to do—replicate the optimal childrearing environment of married, biological-parent homes (Moore et al., 2002). And studies focusing on parental roles or household divisions of labor in planned GLB families will fail to reveal—because they have not measured it—how their children fare as adults.

The between-group comparisons described above also suggest that those respondents with a lesbian mother and those with a gay father do not always exhibit comparable outcomes in young adulthood. While the sample size of gay fathers in the NFSS was modest, any monolithic ideas about same-sex parenting experiences in general are not supported by these analyses.

Although the NFSS offers strong support for the notion that there are significant differences among young adults that correspond closely to the parental behavior, family structures, and household experiences during their youth, I have not and will not speculate here on causality, in part because the data are not optimally designed to do so, and because the causal reckoning for so many different types of outcomes is well beyond what an overview manuscript like this one could ever purport to accomplish. Focused (and more complex) analyses of unique outcomes, drawing upon idiosyncratic, domain-specific conceptual models, is recommended for scholars who wish to more closely assess the functions that the number, gender, and sexual decision-making of parents may play in young adults' lives. I am thus not suggesting that growing up with a lesbian mother or gay father causes suboptimal outcomes *because of* the sexual orientation or sexual behavior of the parent; rather, my point is more modest: the groups display numerous, notable distinctions, especially when compared with young adults whose biological mother and father remain married.

There is more that this article does not accomplish, including closer examinations of subpopulations, consideration of more outcomes and comparisons between other groups, and stronger tests of statistical significance—such as multiple regression with more numerous independent variables, or propensity score matching. That is what the NFSS is designed to foster. This article serves as a call for such study, as well as an introduction to the data and to its sampling and measurement strengths and abilities. Future studies would optimally include a more significant share of children from planned gay families, although their relative scarcity in the NFSS suggests that their appearance in even much larger probability samples will remain infrequent for the foreseeable future. The NFSS, despite significant efforts to randomly over-sample such populations, nevertheless was more apt to survey children whose parents exhibited gay and lesbian relationship behavior *after* being in a heterosexual union. This pattern may remain more common today than many scholars suppose.

5. Conclusion

As scholars of same-sex parenting aptly note, same-sex couples have and will continue to raise children. American courts are finding arguments against gay marriage decreasingly persuasive (Rosenfeld, 2007). This study is intended to neither undermine nor affirm any legal rights concerning such. The tenor of the last 10 years of academic discourse about gay and lesbian parents suggests that there is little to nothing about them that might be negatively associated with child development, and a variety of things that might be uniquely positive. The results of analyzing a rare large probability sample reported herein, however, document numerous, consistent differences among young adults who reported maternal lesbian behavior (and to a lesser extent, paternal gay behavior) prior to age 18. While previous studies suggest that children in planned GLB families seem to fare comparatively well, their actual representativeness among all GLB families in the US may be more modest than research based on convenience samples has presumed.

Although the findings reported herein may be explicable in part by a variety of forces uniquely problematic for child development in lesbian and gay families—including a lack of social support for parents, stress exposure resulting from persistent stigma, and modest or absent legal security for their parental and romantic relationship statuses—the empirical claim that no notable differences exist must go. While it is certainly accurate to affirm that sexual orientation or parental sexual behavior need have nothing to do with the *ability* to be a good, effective parent, the data evaluated herein using population-based estimates drawn from a large, nationally-representative sample of young Americans suggest that it may affect the *reality* of family experiences among a significant number.

Do children need a married mother and father to turn out well as adults? No, if we observe the many anecdotal accounts with which all Americans are familiar. Moreover, there are many cases in the NFSS where respondents have proven resilient and prevailed as adults in spite of numerous transitions, be they death, divorce, additional or diverse romantic partners, or remarriage. But the NFSS also clearly reveals that children appear most apt to succeed well as adults—on multiple counts and across a variety of domains—when they spend their entire childhood with their married mother and father, and especially when the parents remain married to the present day. Insofar as the share of intact, biological mother/father families continues to shrink in the United States, as it has, this portends growing challenges within families, but also heightened dependence on public health organizations, federal and state public assistance, psychotherapeutic resources, substance use programs, and the criminal justice system.

Appendix A. Comparison of weighted NFSS results with parallel national survey results on selected demographic and lifestyle variables, US adults (in percentages)

	NFSS 2011, N = 941 (18–23)	NSYR 2007–2008, N = 2520 (18–23)	NFSS 2011, N = 1123 (24–32)	Add Health 2007–2008, N = 15,701 (24–32)	NFSS 2011, N = 2988 (18–39)	NSFG 2006–2010, N = 16,851 (18–39)	CPS ASEC 2011, N = 58,788 (18–39)
<i>Gender</i>							
Male	52.6	48.3	47.3	50.6	49.4	49.8	50.4
Female	47.4	51.7	52.8	49.4	50.6	50.2	49.6

Appendix A (continued)

	NFSS 2011, N = 941 (18-23)	NSYR 2007-2008, N = 2520 (18-23)	NFSS 2011, N = 1123 (24-32)	Add Health 2007-2008, N = 15,701 (24-32)	NFSS 2011, N = 2988 (18-39)	NSFG 2006-2010, N = 16,851 (18-39)	CPS ASEC 2011, N = 58,788 (18-39)
<i>Age</i>							
18-23					28.9	28.6	28.2
24-32					41.2	40.6	42.1
33-39					29.9	30.9	29.8
<i>Race/ethnicity</i>							
White, NH	54.2	68.3	60.2	69.2	57.7	61.6	59.6
Black, NH	11.0	15.0	13.0	15.9	12.6	13.3	13.2
Hispanic	24.9	11.2	20.7	10.8	20.8	18.6	19.5
Other (or multiple), NH	10.0	5.5	6.2	4.2	8.9	6.5	7.8
<i>Region</i>							
Northeast	18.9	11.8	16.5		17.6		17.5
Midwest	18.7	25.6	23.3		21.1		21.2
South	34.3	39.1	39.6		36.7		37.0
West	28.2	23.5	20.6		24.6		24.4
Mother's education (BA or above)	28.4	33.3	24.6	21.9	25.3	22.2	
Respondent's education (BA or above)	5.3	3.8	33.7	30.0	26.5	24.2	
<i>Household income (current)</i>							
Under \$10,000	21.0		9.7	5.6	11.9	9.5	5.7
\$10,000-19,999	13.3		9.1	6.9	9.2	13.1	7.4
\$20,000-29,999	11.6		10.3	10.1	10.5	13.5	9.5
\$30,000-39,999	8.0		11.0	11.1	9.6	13.4	9.4
\$40,000-49,999	6.5		12.8	11.8	9.9	8.5	9.1
\$50,000-74,999	14.9		22.3	24.3	19.2	19.5	20.3
\$75,000 or more	24.7		24.9	30.2	29.8	22.7	38.6
Ever had sex	66.5	75.6	90.6	93.9	85.6	91.2	
Never been married	89.3	92.8	45.7	50.0	51.7	52.3	54.4
Currently married	8.0	6.9	44.9	44.6	40.6	39.2	37.9
<i>Church attendance</i>							
Once a week or more	18.4	20.2	22.1	16.0	22.3	26.2	
Never	32.3	35.6	31.2	32.1	31.7	25.8	
Not religious	21.1	24.7	22.5	20.2	22.0	21.7	
<i>Self-reported health</i>							
Poor	1.8	1.5	1.0	1.2	1.5	0.7	
Fair	8.4	9.2	11.0	7.9	10.7	5.3	
Good	28.7	26.7	37.6	33.5	33.9	24.9	
Very Good	39.6	37.5	35.7	38.2	37.3	40.9	
Excellent	21.5	25.2	14.8	19.1	16.7	28.3	
Never drinks alcohol	30.5	21.9	22.4	26.1	25.4	18.7	

Appendix B. Construction of outcome indexes**B.1. CES-D (depression) index (8 items, $\alpha = 0.87$)**

Respondents were asked to think about the past 7 days, and assess how often each of the following things were true about them. Answer categories ranged from “never or rarely” (0) to “most of the time or all of the time” (3). Some items were reverse-coded for the index variable (e.g., “You felt happy.”):

1. You were bothered by things that usually do not bother you.
2. You could not shake off the blues, even with help from your family and your friends.
3. You felt you were just as good as other people.
4. You had trouble keeping your mind on what you were doing.
5. You felt depressed.
6. You felt happy.
7. You enjoyed life.
8. You felt sad.

B.2. Current romantic relationship quality (6 items, $\alpha = 0.96$)

Respondents were asked to assess their current romantic relationship. Answer categories ranged from strongly disagree (1) to strongly agree (5):

1. We have a good relationship.
2. My relationship with my partner is very healthy.
3. Our relationship is strong.
4. My relationship with my partner makes me happy.
5. I really feel like part of a team with my partner.
6. Our relationship is pretty much perfect.

B.3. Family-of-origin relationship safety/security (4 items, $\alpha = 0.90$)

Respondents were asked to evaluate the overall atmosphere in their family while growing up by responding to four statements whose answer categories ranged from strongly disagree (1) to strongly agree (5):

1. My family relationships were safe, secure, and a source of comfort.
2. We had a loving atmosphere in our family.
3. All things considered, my childhood years were happy.
4. My family relationships were confusing, inconsistent, and unpredictable.

B.4. Family-of-origin negative impact (3 items, $\alpha = 0.74$)

Respondents were asked to evaluate the present-day impact of their family-of-origin experiences by responding to three statements whose answer categories ranged from strongly disagree (1) to strongly agree (5):

1. There are matters from my family experience that I am still having trouble dealing with or coming to terms with.
2. There are matters from my family experience that negatively affect my ability to form close relationships.
3. I feel at peace about anything negative that happened to me in the family in which I grew up.

B.5. Impulsivity (4 items, $\alpha = 0.76$)

Respondents were asked to respond to four statements about their decision-making, especially as it concerns risk-taking and new experiences. Answer categories ranged from 1 (never or rarely) to 4 (most or all of the time):

1. When making a decision, I go with my ‘gut feeling’ and do not think much about the consequences of each alternative.
2. I like new and exciting experiences, even if I have to break the rules.
3. I am an impulsive person.
4. I like to take risks.

B.6. Closeness to biological mother and father (6 items, $\alpha = 0.89$ and 0.92)

Respondents were asked to evaluate their current relationship with up to four parent figures—who they reported living with for at least 3 years when they were 0–18 years old—by reporting the frequency of six parent–child interactions. For each parent figure, these six items were coded and summed into a parental closeness index. From these, I derived indices of closeness to the respondent’s biological mother and biological father. Response categories ranged from never (1) to always (5):

1. How often do you talk openly with your parent about things that are important to you?
2. How often does your parent really listen to you when you want to talk?
3. How often does your parent explicitly express affection or love for you?
4. Would your parent help you if you had a problem?
5. If you needed money, would you ask your parent for it?
6. How often is your parent interested in the things you do?

B.7. Attachment (depend, 6 items, $\alpha = 0.80$; anxiety, 6 items, $\alpha = 0.82$)

For a pair of attachment measures, respondents were asked to rate their general feelings about romantic relationships, both past and present, in response to 12 items. Response categories ranged from “not at all characteristic of me” (1) to “very characteristic of me” (5). Items 1–6 were coded and summed into a “depend” scale, with higher scores denoting greater comfort with depending upon others. Items 7–12 were coded and summed into an anxiety scale, with higher scores denoting greater anxiety in close relationships, in keeping with the original Adult Attachment Scale developed by Collins and Read (1990). The measures employed were:

1. I find it difficult to allow myself to depend on others.
2. I am comfortable depending on others.
3. I find that people are never there when you need them.
4. I know that people will be there when I need them.
5. I find it difficult to trust others completely.
6. I am not sure that I can always depend on others to be there when I need them.
7. I do not worry about being abandoned.
8. In relationships, I often worry that my partner does not really love me.
9. I find that others are reluctant to get as close as I would like.
10. In relationships, I often worry that my partner will not want to stay with me.
11. I want to merge completely with another person.
12. My desire to merge sometimes scares people away.

References

- Anderssen, Norman, Amlie, Christine, Erling, Ytteroy A., 2002. Outcomes for children with lesbian or gay parents. A review of studies from 1978 to 2000. *Scandinavian Journal of Psychology* 43 (4), 335–351.
- Balsam, Kimberly F., Beauchaine, Theodore P., Rothblum, Esther D., Solomon, Sondra E., 2008. Three-year follow-up of same-sex couples who had civil unions in Vermont, same-sex couples not in civil unions, and heterosexual married couples. *Developmental Psychology* 44, 102–116.
- Baumle, Amanda K., Compton, D’Lane R., Poston Jr., Dudley L., 2009. Same-Sex Partners: The Demography of Sexual Orientation. SUNY Press, Albany, NY.
- Berg, Sven, 1988. Snowball sampling. In: Kotz, Samuel, Johnson, Norman L. (Eds.), *Encyclopedia of Statistical Sciences*, vol. 8. Wiley-Interscience, New York.
- Biblarz, Timothy J., Raftery, Adrian E., 1999. Family structure, educational attainment, and socioeconomic success: rethinking the ‘pathology of matriarchy’. *American Journal of Sociology* 105, 321–365.
- Biblarz, Timothy J., Stacey, Judith, 2010. How does the gender of parents matter? *Journal of Marriage and Family* 72 (1), 3–22.
- Bos, Henny M.W., Sandfort, Theo G.M., 2010. Children’s gender identity in lesbian and heterosexual two-parent families. *Sex Roles* 62, 114–126.
- Bos, Henny M.W., van Balen, Frank, van den Boom, Dymphna C., 2007. Child adjustment and parenting in planned lesbian parent families. *American Journal of Orthopsychiatry* 77, 38–48.
- Brewaays, Anne, Ponjaert, Ingrid, Van Hall, Eylard V., Golombok, Susan, 1997. Donor insemination: child development and family functioning in lesbian mother families. *Human Reproduction* 12, 1349–1359.
- Brown, Susan L., 2004. Family structure and child well-being: the significance of parental cohabitation. *Journal of Marriage and Family* 66 (2), 351–367.
- Busby, Dean M., Holman, Thomas B., Taniguchi, Narumi, 2001. RELATE: relationship evaluation of the individual, family, cultural, and couple contexts. *Family Relations* 50, 308–316.
- Collins, Nancy L., Read, Stephen J., 1990. Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology* 58, 644–663.
- Crowl, Alicia L., Ahn, Soyeon, Baker, Jean, 2008. A meta-analysis of developmental outcomes for children of same-sex and heterosexual parents. *Journal of GLBT Family Sciences* 4 (3), 385–407.
- Finer, Lawrence B., Henshaw, Stanley K., 2006. Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. *Perspectives on Sexual and Reproductive Health* 38, 90–96.
- Fulcher, Megan, Sutfin, Erin L., Patterson, Charlotte J., 2008. Individual differences in gender development: associations with parental sexual orientation, attitudes, and division of labor. *Sex Roles* 57, 330–341.
- Gartrell, Nanette K., Bos, Henny M.W., 2010. US national longitudinal lesbian family study: psychological adjustment of 17-year-old adolescents. *Pediatrics* 126 (1), 1–11.

- Gartrell, Nanette K., Bos, Henny M.W., Goldberg, Naomi G., 2011a. Adolescents of the U.S. national longitudinal lesbian family study: sexual orientation, sexual behavior, and sexual risk exposure. *Archives of Sexual Behavior* 40, 1199–1209.
- Gartrell, Nanette K., Bos, Henny M.W., Goldberg, Naomi G., 2011b. New trends in same-sex sexual contact for American adolescents? *Archives of Sexual Behavior*. <http://dx.doi.org/10.1007/s10508-011-9883-5>.
- Gates, Gary J., 2011. Family formation and raising children among same-sex couples. NCFR Report 56 (4), F1–F3.
- Gates, Gary J., Ost, Jason, 2004. *The Gay and Lesbian Atlas*. The Urban Institute Press, Washington, DC.
- Goldberg, Abbie E., 2010. *Lesbian and Gay Parents and Their Children: Research on the Family Life Cycle*. APA Books, Washington, DC.
- Golombok, Susan, Perry, Beth, Burston, Amanda, Murray, Clare, Mooney-Somers, Julie, Stevens, Madeleine, Golding, Jean, 2003. Children with lesbian parents: a community study. *Developmental Psychology* 39, 20–33.
- Golombok, Susan, Tasker, Fiona, Murray, Clare, 1997. Children raised in fatherless families from infancy: family relationships and the socioemotional development of children of lesbian and single heterosexual mothers. *Journal of Child Psychology and Psychiatry* 38, 783–792.
- Hatzenbuehler, Mark L., Keyes, Katherine M., Hasin, Deborah S., 2009. State-level policies and psychiatric morbidity in lesbian, gay, and bisexual populations. *American Journal of Public Health* 99 (12), 2275–2281.
- Herbenick, Debby, Reece, Michael, Schick, Vanessa, Sanders, Stephanie A., Dodge, Brian, Fortenberry, J.Dennis, 2010. Sexual behavior in the United States: results from a national probability sample of men and women ages 14–94. *Journal of Sexual Medicine* 7 (Suppl. 5), 255–265.
- Huffington Post: Healthy Living, 2011. Child Abuse Rate at Zero Percent in Lesbian Households, New Report Finds. The Huffington Post. <http://www.huffingtonpost.com/2010/11/10/lesbians-child-abuse-0-percent_n_781624.html> (accessed 01.13.12).
- Times Research Reporting, 2012. Interactive: Gay Marriage Chronology. Los Angeles Times. <<http://www.latimes.com/news/local/la-gmtimeline-fl0,5345296.htmlstory>> (accessed 01.03.12).
- MacCallum, Fiona, Golombok, Susan, 2004. Children raised in fatherless families from infancy: a follow-up of children of lesbian and single heterosexual mothers at early adolescence. *Journal of Psychology and Psychiatry* 45, 1407–1419.
- Manning, Wendy D., Smock, Pamela J., Majumdar, Debarun, 2004. The relative stability of cohabiting and marital unions for children. *Population Research and Policy Review* 23, 135–159.
- McLanahan, Sara, Sandefur, Gary, 1994. *Growing Up with a Single Parent: What Hurts, What Helps*. Harvard University Press, Cambridge.
- Miller, Brent C., Fan, Xitao, Christensen, Matthew, Grotevant, Harold, van Dulmen, Manfred, 2000. Comparisons of adopted and nonadopted adolescents in a large, nationally representative sample. *Child Development* 71 (5), 1458–1473.
- Moore, Kristin Anderson, Jekielek, Susan M., Emig, Carol, 2002. Marriage from a Child's Perspective: How Does Family Structure Affect Children, and What Can We Do About It? *Child Trends Research Brief*, Child Trends, Washington, DC.
- Movement Advancement Project, Family Equality Council and Center for American Progress, 2011. *All Children Matter: How Legal and Social Inequalities Hurt LGBT Families*, Full Report.
- National Center for Family and Marriage Research, 2010. *Same-Sex Couple Households in the US, 2009*. Family Profiles, FP-10-08.
- Nock, Steven L., 2001. Affidavit of Steven Nock. Halpern et al. v. Canada and MCCT v. Canada. ON S.C.D.C. <http://marriagelaw.cua.edu/Law/cases/Canada/ontario/halpern/aff_nock.pdf> (accessed 12.20.11).
- Patterson, Charlotte J., 1997. Children of lesbian and gay parents. In: Ollendick, Thomas H., Prinz, Ronald J. (Eds.), *Advances in Clinical Child Psychology*, vol. 19. Plenum, New York.
- Patterson, Charlotte J., 2000. Family relationships of lesbians and gay men. *Journal of Marriage and the Family* 62, 1052–1069.
- Patterson, Charlotte J., 2006. Children of lesbian and gay parents. *Current Directions in Psychological Science* 15 (5), 241–244.
- Perrin, Ellen C., Committee on Psychosocial Aspects of Child and Family Health, 2002. Technical report: coparent or second-parent adoption by same-sex partners. *Pediatrics* 109, 341–344.
- Redding, Richard R., 2008. It's really about sex: same-sex marriage, lesbian parenting, and the psychology of disgust. *Duke Journal of Gender Law and Policy* 16, 127–193.
- Resnick, Michael D., Bearman, Peter S., Blum, Robert W., Bauman, Karl E., Harris, Kathleen M., Jones, Jo, Tabor, Joyce, Beuhring, Trish, Sieving, Renee E., Shew, Marcia, Ireland, Marjorie, Bearinger, Linda H., Udry, J.R., 1997. Protecting adolescents from harm: findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association* 278 (10), 823–832.
- Rosenfeld, Michael, 2007. *The Age of Independence: Interracial Unions, Same-Sex Unions and the Changing American Family*. Harvard University Press, Cambridge, MA.
- Rosenfeld, Michael J., 2010. Nontraditional families and childhood progress through school. *Demography* 47, 755–775.
- Rostosky, Sharon Scales, Riggle, Ellen D.B., Horne, Sharon G., Miller, Angela D., 2009. Marriage amendments and psychological distress in lesbian, gay, and bisexual (LGB) adults. *Journal of Counseling Psychology* 56 (1), 56–66.
- Sirota, Theodora, 2009. Adult attachment style dimensions in women who have gay or bisexual fathers. *Archives of Psychiatric Nursing* 23 (4), 289–297.
- Snijders, Tom A.B., 1992. Estimation on the basis of snowball samples: how to weight? *Bulletin de Méthodologie Sociologique* 36, 59–70.
- Stacey, Judith, Biblarz, Timothy J., 2001a. (How) does the sexual orientation of parents matter? *American Sociological Review* 66 (2), 159–183.
- Stacey, Judith, Biblarz, Timothy, 2001b. Affidavit of Judith Stacey and Timothy Biblarz. Halpern et al. v. Canada and MCCT v. Canada. ON S.C.D.C. <http://www.samesexmarriage.ca/docs/stacey_biblarz.pdf> (accessed 12.20.11).
- Tasker, Fiona, 2005. Lesbian mothers, gay fathers, and their children: a review. *Developmental and Behavioral Pediatrics* 26 (3), 224–240.
- Tasker, Fiona, 2010. Same-sex parenting and child development: reviewing the contribution of parental gender. *Journal of Marriage and Family* 72, 35–40.
- Tasker, Fiona L., Golombok, Susan, 1997. *Growing Up in a Lesbian Family*. Guilford, New York.
- Vanfraussen, Katrien, Ponjaert-Kristoffersen, Ingrid, Brewaeys, Anne, 2003. Family functioning in lesbian families created by donor insemination. *American Journal of Orthopsychiatry* 73 (1), 78–90.
- Veldorale-Brogan, Amanda, Cooley, Morgan, 2011. Child outcomes for children with LGBT parents. NCFR Report 56 (4), F15–F16.
- Wainright, Jennifer L., Patterson, Charlotte J., 2006. Delinquency, victimization, and substance use among adolescents with female same-sex parents. *Journal of Family Psychology* 20 (3), 526–530.
- Wainright, Jennifer L., Russell, Stephen T., Patterson, Charlotte J., 2004. Psychosocial adjustment, school outcomes, and romantic relationships of adolescents with same-sex parents. *Child Development* 75 (6), 1886–1898.

EXHIBIT 65



Contents lists available at SciVerse ScienceDirect

Social Science Research

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

Same-sex parenting and children's outcomes: A closer examination of the American psychological association's brief on lesbian and gay parenting

Loren Marks*

Louisiana State University, 341 School of Human Ecology, Baton Rouge, LA 70803, United States

ARTICLE INFO

Article history:

Received 3 October 2011

Revised 8 March 2012

Accepted 12 March 2012

Keywords:

Same-sex parenting

Lesbian

Gay

ABSTRACT

In 2005, the American Psychological Association (APA) issued an official brief on lesbian and gay parenting. This brief included the assertion: "Not a single study has found children of lesbian or gay parents to be disadvantaged in any significant respect relative to children of heterosexual parents" (p. 15). The present article closely examines this assertion and the 59 published studies cited by the APA to support it. Seven central questions address: (1) homogeneous sampling, (2) absence of comparison groups, (3) comparison group characteristics, (4) contradictory data, (5) the limited scope of children's outcomes studied, (6) paucity of long-term outcome data, and (7) lack of APA-urged statistical power. The conclusion is that strong assertions, including those made by the APA, were not empirically warranted. Recommendations for future research are offered.

© 2012 Elsevier Inc. All rights reserved.

1. Introduction

Over the past few decades, differences have been observed between outcomes of children in marriage-based intact families and children in cohabiting, divorced, step, and single-parent families in large, representative samples.¹ Based on four nationally representative longitudinal studies with more than 20,000 total participants, McLanahan and Sandefur conclude:

*Children who grow up in a household with only one biological parent are worse off, on average, than children who grow up in a household with both of their biological parents... regardless of whether the resident parent remarries.*²

Differences have recurred in connection with myriad issues of societal-level concern including: (a) health,³ mortality,⁴ and suicide risks,⁵ (b) drug and alcohol abuse,⁶ (c) criminality and incarceration,⁷ (d) intergenerational poverty,⁸ (e) education and/or labor force contribution,⁹ (f) early sexual activity and early childbearing,¹⁰ and (g) divorce rates as adults.¹¹ These outcomes represent important impact variables that influence the well-being of children and families, as well as the national economy.

* Fax: +1 225 578 2697.

E-mail address: lorenm@lsu.edu¹ See Table 2; McLanahan and Sandefur (1994) and Wilcox et al. (2005).² McLanahan and Sandefur (1994), p. 1 (emphasis in original).³ Waite (1995).⁴ Gaudino et al. (1999) and Siegel et al. (1996).⁵ Wilcox et al. (2005, p. 28) and Cutler et al. (2000).⁶ Bachman et al. (1997), Flewelling and Bauman (1990), Horwitz et al. (1996), Johnson et al. (1996), Simon (2002), Waite and Gallagher (2000), Weitoft et al. (2003), and Wilcox et al. (2005).⁷ Blackmon et al. (2005), Harper and McLanahan (2004), Kamark and Galston (1990, pp. 14–15), Manning and Lamb (2003), and Margolin (1992, p. 546).⁸ Akerlof (1998), Blackmon et al. (2005), Brown (2004), Oliver and Shapiro (1997), Rank and Hirschl (1999).⁹ Amato (2005), Battle (1998), Cherlin et al. (1998), Heiss (1996), Lansford (2009), Manning and Lamb (2003), McLanahan and Sandefur (1994), Phillips and Asbury (1993), and Teachman et al. (1998).¹⁰ Amato (2005), Amato and Booth (2000), Ellis et al. (2003), and McLanahan and Sandefur (1994).¹¹ Cherlin et al. (1995) and Wolfinger (2005).

By way of comparison, social science research with small convenience samples has repeatedly reported no significant differences between children from gay/lesbian households and heterosexual households. These recurring findings of no significant differences have led some researchers and professional organizations to formalize related claims. Perhaps none of these claims has been more influential than the following from the 2005 American Psychological Association (APA) Brief on "Lesbian and Gay Parenting".^{12,13}

Not a single study has found children of lesbian or gay parents to be disadvantaged in any significant respect relative to children of heterosexual parents.

Are we witnessing the emergence of a new family form that provides a context for children that is equivalent to the traditional marriage-based family? Many proponents of same-sex marriage contend that the answer is yes. Others are skeptical and wonder—given that other departures from the traditional marriage-based family form have been correlated with more negative long-term child outcomes—do children in same-sex families demonstrably avoid being "disadvantaged in any significant respect relative to children of heterosexual parents" as the APA Brief asserts? This is a question with important implications, particularly since the 2005 APA Brief on "Lesbian and Gay Parenting" has been repeatedly invoked in the current same-sex marriage debate.

2. Statement of purpose

The overarching question of this paper is: *Are the conclusions presented in the 2005 APA Brief on "Lesbian and Gay Parenting" valid and precise, based on the cited scientific evidence?*¹⁴ In the present paper, seven questions relating to the cited scientific evidence are posed, examined, and addressed.¹⁵

Two portions of the APA Brief are of particular concern to us in connection with these questions: (a) the "Summary of Research Findings" (pp. 5–22), and (b) the first and largest section of the annotated bibliography, entitled "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children" (pp. 23–45). In the latter section (pp. 23–45), the APA references 67 manuscripts. Eight of these studies are "unpublished dissertations".¹⁶ The 59 published studies are listed in Table 1 of this paper, providing clear parameters from which to formulate responses to the seven outlined questions, next.

2.1. Question 1: how representative and culturally, ethnically, and economically diverse were the gay/lesbian households in the published literature behind the APA brief?

In response to question 1, more than three-fourths (77%) of the studies cited by the APA brief are based on small, non-representative, convenience samples of fewer than 100 participants. Many of the non-representative samples contain far fewer than 100 participants, including one study with five participants (Wright, 1998; see Table 1). As Strasser (2008) notes:

Members of the LGBT community... vary greatly in their attitudes and practices. For this reason, it would be misleading to cite a study of gay men in urban southern California as if they would represent gay men nationally (p. 37).

By extension, it seems that influential claims by national organizations should be based, at least partly, on research that is nationally representative.

Lack of representativeness often entails lack of diversity as well.¹⁷ A closer examination of the APA-cited literature from the "Empirical Studies" (pp. 23–45) section of the APA Brief reveals a tendency towards not only non-representative but racially homogeneous samples. For example:

¹² The APA Brief's stated objective was primarily to influence family law. The preface states that "the focus of the publication...[is] to serve the needs of psychologists, lawyers, and parties in family law cases.... Although comprehensive, the research summary is focused on those issues that often arise in family law cases involving lesbian mothers or gay fathers" (APA Brief, 2005, p. 3). Redding (2008) reports that "leading professional organizations including the *American Psychological Association*" have issued statements and that "advocates have used these research conclusions to bolster support for lesbian/gay parenting and marriage rights, and the research is now frequently cited in public policy debates and judicial opinions" (p. 136).

¹³ Patterson, p. 15 (from APA Brief, 2005).

¹⁴ Kuhn (1970/1996) has stated that there is an "insufficiency of methodological directives, by themselves, to dictate a unique substantive conclusion to many sorts of scientific questions" (p. 3). To draw substantive conclusions, a socially and historically influenced paradigm is needed. Research is then "directed to the articulation of those phenomena and theories that the paradigm already supplies" (p. 24). Indeed, paradigmatic biases, and other influences, can make us vulnerable to "discrepancies between warranted and stated conclusions in the social sciences" (Glenn, 1989, p. 119; see also Glenn, 1997).

¹⁵ Kuhn (1970/1996) has noted that "when scientists disagree about whether the fundamental problems of their field have been solved, the search for rules gains a function that it does not ordinarily possess" (p. 48).

¹⁶ These unpublished dissertations include Land (1991), McPherson (1993), Osterweil (1991), Paul (1986), Puryear (1983), Rees (1979), Sbordone (1993), and Steckel (1985). An adapted portion of one of these dissertations (Steckel, 1985) was eventually published (Steckel, 1987) and is included in the present examination; the other unpublished work is not included in Table 1 of this paper.

¹⁷ Of the 59 published "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children", no studies mention African-American, Hispanic, or Asian-American families in either their titles or subtitles. The reference list in the APA Brief's "Summary of Research Findings" (pp. 15–22) is also void of any studies focusing on African-American, Hispanic, or Asian-American families. None of the "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children" (pp. 23–45) holds, as its focus, any of these minorities. (Note: Three years after the 2005 APA Brief, Moore (2008) published a small but pioneering study on African-American lesbians.)

Table 1
Publications Cited in APA brief on lesbian and gay parenting (pp. 23–45).

Author and year	GayLes N	Hetero N	Stat used	Cohen N	Stat power	Outcome studied	Hetero compar group
Bailey et al. (1995)	55par; 82chl	0	T-test/Chi	393	N/A	Sexual orientation	None
Barrett and Tasker (2001)	101	0	T-test/Chi	393	N/A	Child responses to a gay parent	None
Bigner and Jacobsen (1989a)	33	33	T-test	393	No	Parents reports of values of children	Fathers
Bigner and Jacobsen (1989b)	33	33	T-test	393	No	Parent reports of parent behavior	Fathers
Bos et al. (2003)	100	100	MANOVA	393	No	Parental motives and desires	Families
Bos et al. (2004)	100	100	MANOVA	393	No	Parent reports of couple relations	Families
Bozett (1980)	18	0	Qualitative	N/A	N/A	Father disclosure of homosexuality	None
Brewaeys et al. (1997)	30	68	ANOVA	393	No	Emotional/gender development	DI/Non-DI Couples
Chan et al. (1998a)	30	16	Various	393	No	Division of labor/child adjustment	DI Couples
Chan et al. (1998b)	55	25	Various	393	Reported	Psychosocial adjustment	DI Couples
Ciano-Boyce and Shelley-Sireci (2002)	67	44	ANOVA	393	No	Division of child care	Adoptive Parents
Crawford et al. (1999)	0	0	MANOVA	393	N/A	388 Psychologists' attitudes	N/A
Flaks et al. (1995)	15	15	MANOVA	393	No	Cognitive/behavioral/parenting	Married Couples
Fulcher et al. (2002)	55	25	T-test/Chi	393	Reported	DI/adult-child relationships	Parents
Gartrell et al. (1996)	154	0	Descript.	N/A	N/A	Prospective Parent Reports	None
Gartrell et al. (1999)	156	0	Descript.	N/A	N/A	Reports on parenting issues	None
Gartrell et al. (2000)	150	0	Descript.	N/A	N/A	Reports on parenting issues	None
Gartrell et al. (2005)	74	0	Descript.	N/A	N/A	Health, school/education	None
Gershon et al. (1999)	76	0	Reg.	390	N/A	Adolescent coping	None
Golombok et al. (1983)	27	27	T-test/Chi	393	No	Psychosexual development	Single mother families
Golombok et al. (2003)	39	134	Various	393	No	Socioemotional dev./relations	Couples & singles
Golombok and Rust (1993)	N/A	N/A	N/A	N/A	N/A	Reliability testing of a pre-school gender inventory	
Golombok and Tasker (1996)	25	21	Pearson	783	Reported	Sexual orientation	Children of single mothers
Golombok et al. (1997)	30	83	MANOVA	393	No.	Parent-child interactions	Couples & singles
Green (1978)	37	0	Descript.	N/A	N/A	Sexual identity	None
Green et al. (1986)	50par; 56chl	40par; 48chl	Various	390	No	Sexual identity/social relations	Single mothers
Harris and Turner (1986)	23	16	ANOVA/Chi	393	No	Sex roles/relationship with child	Single moth. & fath.
Hoeffler (1981)	20	20	ANOVA	393	No	Sex-role behavior	Single mothers
Huggins (1989)	18	18	T-test	393	No	Self-esteem of adolescent children	Divorced mothers
Johnson and O'Connor (2002)	415	0	Various	N/A	No	Parenting beliefs/division of labor/etc.	None
King and Black (1999)	N/A	N/A	F	393	N/A	338 College students' perceptions	N/A
Kirkpatrick et al. (1981)	20	20	Descript.	N/A	No	Gender development	Single mothers
Koepke et al. (1992)	47 couples	0	MANOVA	N/A	N/A	Relationship quality	None
Kweskin and Cook, 1982	22	22	Chi-Sqr	785	No	Sex-role behavior	Single mothers
Lewis, 1980	21	0	Qualitative	N/A	N/A	Child response to m. disclosure	None
Lott-Whitehead and Tully, 1993	45	0	Descriptive	N/A	N/A	Adult reports of impacts on children	None
Lyons, 1983	43	37	Descriptive	N/A	No	Adult self-reports	Divorced mothers
McLeod et al., 1999	0	0	Mult. regr.	N/A	No	151 College student reports	N/A
Miller, 1979	54	0	Qualitative	N/A	N/A	Father behavior & f-child bond	None
Miller et al., 1981	34	47	Chi-Sqr	785	No	Mother role/home environment	Mothers
Morris et al., 2002	2431	0	MANCOVA	N/A	N/A	Adult reports on "coming out"	None
Mucklow and Phelan, 1979	34	47	Chi-Sqr	785	No	Behavior and self-concept	Married mothers
O'Connell, 1993	11	0	Qualitative	N/A	N/A	Social and sexual identity	None
Pagelow, 1980	20	23	Qual/Descr.	N/A	N/A	Problems and coping	Single mothers
Patterson (1994)	66	0	T-test	393	No	Social/behavioral/sexual identity	Available norms
Patterson (1995)	52	0	T-test/Chi/F	393	No	Division of labor/child adjustment	None

(continued on next page)

Table 1 (continued)

Author and year	GayLes N	Hetero N	Stat used	Cohen N	Stat power	Outcome studied	Hetero compar group
Patterson (2001)	66	0	Various	393	No	Maternal mental health/child adjustment	None
Patterson et al., 1998	66	0	Various	393	No	Contact w/grandparents & adults	None
Rand et al. (1982)	25	0	Correlations	783	No	Mothers' psychological health	None
Sarantakos, 1996	58	116	F-test	393	N/A	Children's educational/social outcomes	Married/non-married
Siegenthaler and Bigner, 2000	25	26	T-test	393	No	Mothers' value of children	Mothers
Steckel (1987)	(Review)	N/A	N/A	N/A	No	Psychosocial development of children	None
Sullivan, 1996	34 couples	0	Qualitative	N/A	N/A	Division of labor	None
Tasker and Golombok, 1995	25	21	Pearson/T	783	No	Psychosocial/sexual orientation	Single mothers
Tasker and Golombok (1997)	27	27	Various	393	Reported	Psychological outcomes/family rel.	Single mothers
Tasker and Golombok (1998)	15	84	ANCOVA/Chi	785	N/A	Work and family life	DI & NC couples
Vanfraussen et al. (2003)	24	24	ANOVA	393	No	Donor insemination/family funct.	Families
Wainwright et al. (2004)	44	44	Various	393	No	Psychosocial/school/romantic	Couples
Wright (1998)	5	0	Qualitative	N/A	N/A	Family issues/processes/meaning	None

N/A = Not applicable (e.g., in connection with statistical power, qualitative studies and studies without heterosexual comparison groups are coded as N/A).

1. "All of [the fathers in the sample] were Caucasian" (Bozett, 1980, p. 173).
2. "Sixty parents, all of whom were White" comprised the sample (Flaks et al., 1995, p. 107).
3. "[All 40] mothers... were white" (Hoeffler, 1981, p. 537).
4. "All the children, mothers, and fathers in the sample were Caucasian" (Huggins, 1989, p. 126).
5. "The 25 women were all white" (Rand et al., 1982, p. 29).
6. "All of the women... [were] Caucasian" (Siegenthaler and Bigner, 2000, p. 82).
7. "All of the birth mothers and co-mothers were white" (Tasker and Golombok, 1998, p. 52).
8. "All [48] parents were Caucasian" (Vanfraussen et al., 2003, p. 81).

Many of the other studies do not explicitly acknowledge all-White samples, but also do not mention or identify a single minority participant—while a dozen others report "almost" all-white samples.¹⁸ Same-sex family researchers Lott-Whitehead and Tully (1993) cautiously added in the discussion of their APA Brief-cited study:

Results from this study must be interpreted cautiously due to several factors. First, the study sample was small ($N = 45$) and biased toward well-educated, white women with high incomes. These factors have plagued other [same-sex parenting] studies, and remain a concern of researchers in this field (p. 275).

Similarly, in connection with this bias, Patterson (1992), who would later serve as sole author of the 2005 APA Brief's "Summary of Research Findings on Lesbian and Gay Families", reported¹⁹:

Despite the diversity of gay and lesbian communities, both in the United States and abroad, samples of children [and parents] have been relatively homogeneous... Samples for which demographic information was reported have been described as predominantly Caucasian, well-educated, and middle to upper class.

In spite of the privileged and homogeneous nature of the non-representative samples employed in the studies at that time, Patterson's (1992) conclusion was as follows²⁰:

Despite shortcomings [in the studies], however, results of existing research comparing children of gay or lesbian parents with those of heterosexual parents are *extraordinarily clear*, and they merit attention... There is no evidence to suggest that psychosocial development among children of gay men or lesbians is compromised *in any respect* relative to that among offspring of heterosexual parents.

¹⁸ Examples of explicit or implicitly all-White (or nearly all-White) samples include, but are not limited to: Bigner and Jacobsen (1989a,b), Bozett (1980), Flaks et al. (1995), Green (1978), Green et al. (1986), Hoeffler (1981), Huggins (1989), Koepke et al. (1992), Rand et al. (1982), Siegenthaler and Bigner (2000), Tasker and Golombok (1995, 1998), Vanfraussen et al. (2003).

¹⁹ Patterson (1992, p. 1029).

²⁰ Patterson (1992, p. 1036) (emphasis added).

Patterson's conclusion in a 2000 review was essentially the same²¹:

[C]entral results of existing research on lesbian and gay couples and families with children are *exceptionally clear*. . . . [The] home environments provided by lesbian and gay parents are just as likely as those provided by heterosexual parents to enable psychosocial growth among family members.

Although eight years had passed, in this second review, Patterson (2000) reported the continuing tendency of same-sex parenting researchers to select privileged lesbian samples. Specifically, she summarized, "Much of the research [still] involved small samples that are predominantly White, well-educated [and] middle-class" (p. 1064).²² Given the privileged, homogeneous, and non-representative samples of lesbian mothers employed in "much of the research", it seems warranted to propose that Patterson was empirically premature to conclude that comparisons between "gay or lesbian parents" and "heterosexual parents" were "extraordinarily clear"²³ or "exceptionally clear".²⁴

There is an additional point that warrants attention here. In Patterson's statements above, there are recurring references to research on children of "gay" men/parents. In 2000, Demo and Cox reported that "children living with gay fathers" was a "rarely studied household configuration".²⁵ In 2005, how many of the 59 published studies cited in the APA's list of "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children" (pp. 23–45) specifically addressed the outcomes of children from gay fathers? A closer examination reveals that only eight studies did so.²⁶ Of these eight studies, four did not include a heterosexual comparison group.²⁷ In three of the four remaining studies (with heterosexual comparison groups), the outcomes studied were:

- (1) "the value of children to . . . fathers" (Bigner and Jacobsen, 1989a, p. 163);
- (2) "parenting behaviors of . . . fathers" (Bigner and Jacobsen, 1989b, p. 173);
- (3) "problems" and "relationship with child" (Harris and Turner, 1986, pp. 107–8).

The two Bigner and Jacobsen (1989a,b) studies focused on fathers' reports of *fathers'* values and behaviors, not on children's outcomes—illustrating a recurring tendency in the same-sex parenting literature to focus on the parent rather than the child. Harris and Turner (1986) addressed parent–child relationships, but their study's male heterosexual comparison group was composed of two single fathers. Although several studies have examined aspects of gay fathers' lives, none of the studies comparing gay fathers and heterosexual comparison groups referenced in the APA Brief (pp. 23–45) appear to have specifically focused on children's developmental outcomes, with the exception of Sarantakos (1996), a study to which we will later return.

In summary response to question 1 ("How representative and culturally, ethnically, and economically diverse were the gay/lesbian households in the published literature behind the APA Brief?"), we see that in addition to relying primarily on small, non-representative, convenience samples, many studies do not include any minority individuals or families. Further, comparison studies on children of gay fathers are almost non-existent in the 2005 Brief. By their own reports, social researchers examining same-sex parenting have repeatedly selected small, non-representative, homogeneous samples of privileged lesbian mothers to represent all same-sex parents. This pattern across three decades of research raises significant questions regarding lack of representativeness and diversity in the same-sex parenting studies.

2.2. Question 2: how many studies of gay/lesbian parents had no heterosexual comparison group?

Of the 59 publications cited by the APA in the annotated bibliography section entitled "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children" (pp. 23–45), 33 included a heterosexual comparison group. In direct response to question 2, 26 of the studies (44.1%) on same-sex parenting did not include a heterosexual comparison group. In well-conducted science, it is important to have a clearly defined comparison group before drawing conclusions regarding differences or the lack thereof. We see that nearly half of the "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children" referenced in the APA Brief allowed no basis for comparison between these two groups (see Table 1). To proceed with precision, this fact does not negate the APA claim. It does, however, dilute it considerably as we are left with not 59, but 33, relevant studies with heterosexual comparison groups.

2.3. Question 3: when heterosexual comparison groups were used, what were the more specific characteristics of those groups?

We now turn to a question regarding the nature of comparison samples. Of the 33 published "Empirical Studies Specifically Related to Lesbian and Gay Parents and Their Children" (APA Brief, pp. 23–45) that did directly include a heterosexual

²¹ Patterson (2000, p. 1064) (emphasis added).

²² Patterson (2000, p. 1064).

²³ Patterson (1992, p. 1036).

²⁴ Patterson (2000, p. 1064).

²⁵ Demo and Cox (2000, p. 890).

²⁶ Bailey et al. (1995), Barrett and Tasker (2001), Bigner and Jacobsen (1989a,b), Bozett (1980), Harris and Turner (1986), Miller (1979), Sarantakos (1996),

²⁷ Bailey et al. (1995), Barrett and Tasker (2001), Bozett (1980), Miller (1979).

Table 2

Brief overview of 15 intact/divorce/step/single family studies.

(N)	Number of reported participants	Probability	Comp Grp	Long
<i>Probability</i>	Is the study based on a probability sample?			
<i>Comp Grp</i>	Is a probability sample used as a comparison group?			
<i>Long</i>	Does the study employ measurements across time?			
<i>Key</i>	! = Yes; X = No			
(N)	Probability	Comp Grp	Long	
Amato (1991)	9643	!	!	!
Aquilino (1994)	4516	!	!	!
Brown (2004) ^a	35,938	!	!	X
Chase-Lansdale et al. (1995) ^b	17,414	!	!	!
Cherlin et al. (1998) ^c	11,759	!	!	!
Ellis et al. (2003)	762	!	!	!
Harper and McLanahan (2004) ^d	2846	!	!	!
Hetherington and Kelly (2002) ^e	1400	!	!	!
Jekielek (1998)	1640	!	!	!
Lichter et al. (2003) ^f	7665	!	!	X
Manning and Lamb (2003)	13,231	!	!	X
McLanahan and Sandefur (1994) (based on four data sets)				
PSID ^g	2900	!	!	!
NLSY ^h	5246	!	!	!
HSBS ⁱ	10,400	!	!	!
NSFH ^j	13,017 ^k	!	!	!
Mitchell et al. (2009) ^l	4663	!	!	!
Nock (1998) ^m	3604	!	!	!
Page and Stevens (2005) ⁿ	2023	!	!	!
Total	148,667			

^a National Survey of America's Families (NSAF).^b United Kingdom study and sample.^c United Kingdom study and sample.^d National Longitudinal Survey of Young Men and Women (NLSY).^e Virginia Longitudinal Study (VLS).^f National Survey of Family Growth (NSFG).^g Panel Study of Income Dynamics (PSID).^h National Longitudinal Survey of Young Men and Women (NLSY).ⁱ The High School and Beyond Study (HSBS).^j National Survey of Families and Households (NSFH).^k This is the total original sample. The sub-sample is unlisted but is likely smaller.^l National Longitudinal Study of Adolescent Health (Add Health).^m National Longitudinal Survey of Young Men and Women (NLSY).ⁿ Panel Study of Income Dynamics (PSID).

comparison group, *what were the more specific characteristics of the groups that were compared?* The earlier examination and response related to question 1 documented that, by Patterson's reports, "Despite the diversity of gay and lesbian communities... in the United States",²⁸ the repeatedly selected representatives of same-sex parents have been "small samples [of lesbians] that are predominantly White, well-educated [and] middle-class" (p. 1064).²⁹

In spite of homogeneous sampling, there is considerable diversity among gay and lesbian parents. Considerable diversity exists among heterosexual parents as well. Indeed, the opening paragraph of the present article noted recurring differences in several outcomes of societal concern for children in marriage-based intact families compared with children in cohabiting, divorced, step, and single-parent families.³⁰ Many of the cited findings are based on probability samples of thousands (see Table 2).

Because children in marriage-based intact families have historically fared better than children in cohabiting, divorced, step, or single-parent families on the above outcomes, the question of what "groups" researchers selected to represent heterosexual parents in the same-sex parenting studies becomes critical. A closer examination of the 33 published same-sex parenting studies (APA Brief, pp. 23–45) with comparison groups, listed chronologically, reveals that:

1. Pagelow (1980) used "single mothers" as a comparison group (p. 198).
2. Hoeffler (1981) used "heterosexual single mothers" (p. 537).
3. Kirkpatrick et al. (1981) used "single, heterosexual mothers" (p. 545).
4. Kveskin and Cook (1982) used women from Parents without Partners (p. 969).

²⁸ Patterson (1992, p. 1029).²⁹ Patterson (2000, p. 1064).³⁰ See Footnotes 2–10 for documentation.

5. Lyons (1983) used “heterosexual single mothers” (p. 232).
6. Golombok et al. (1983) used “single-parent households” (p. 551).
7. Green et al. (1986) used “solo parent heterosexual mothers” (p. 175).
8. Harris and Turner (1986) used 2 “male single parents” and 14 “female single parents” (p. 105).
9. Huggins (1989) used “divorced heterosexual mothers”³¹ (p. 123).
10. Tasker and Golombok (1995) used “heterosexual single mothers” (p. 203).
11. Tasker and Golombok (1997) used “single heterosexual mothers” (p. 38).

We see that in selecting *heterosexual* comparison groups for their studies, many same-sex parenting researchers have not used marriage-based, intact families as heterosexual representatives, but have instead used single mothers (see Table 1). Further, Bigner and Jacobsen used 90.9 percent single-father samples in two other studies (1989a, 1989b).³² In total, in at least 13 of the 33 comparison studies listed in the APA Brief’s list of “Empirical Studies” (pp. 23–45) that include heterosexual comparison groups, the researchers explicitly sampled “single parents” as representatives for heterosexual parents. The repeated (and perhaps even modal) selection of single-parent families as a comparison heterosexual-parent group is noteworthy, given that a Child Trends (2002) review has stated that “children in single-parent families are more likely to have problems than are children who live in intact families headed by two biological parents”.³³

Given that at least 13 of the 33 comparison studies listed in the APA Brief’s list of “Empirical Studies” (pp. 23–45) used single-parent families as heterosexual comparison groups, what group(s) did the remaining 20 studies use as heterosexual representatives? In closely examining the 20 remaining published comparison group studies, it is difficult to formulate precise reports of the comparison group characteristics, because in many of these studies, the heterosexual comparison groups are referred to as “mothers” or “couples” without appropriate specificity (see Table 1). Were these mothers continuously married—or were they single, divorced, remarried, or cohabiting? When couples were used, were they continuously married—or remarried or cohabiting? These failures to explicitly and precisely report sample characteristics (e.g., married or cohabiting) are significant in light of Brown’s (2004) finding based on her analysis of a data set of 35,938 US children and their parents, that “regardless of economic and parental resources, the outcomes of adolescents (12–17 years old) in cohabiting families...are worse...than those...in *two-biological-parent* married families”.³⁴ Because of the disparities noted by Brown and others, scientific precision requires that we know whether researchers used: (a) single mothers, (b) cohabiting mothers and couples, (c) remarried mothers, or (d) continuously married mothers and couples as heterosexual comparison groups.

Due to the ambiguity of the characteristics of the heterosexual samples in many same-sex parenting studies, let us frame a question that permits a more precise response, namely: *How many of the studies in the APA Brief’s “Empirical Studies” section (pp. 23–45) explicitly compare the outcomes of children from intact, marriage-based families with those from same-sex families?* In an *American Psychologist* article published the year after the APA Brief, Herek (2006) referred to a large, national study by McLanahan and Sandefur (1994) “comparing the children of intact heterosexual families with children being raised by a single parent”. Herek then emphasized that “this [large scale] research literature does not include studies comparing children raised by two-parent same-sex couples with children raised by two-parent heterosexual couples”.³⁵ Isolated exceptions exist with relatively small samples (as discussed shortly in response to question 4 and as listed in Table 1), but they are rare.

Given what we have seen regarding heterosexual comparison group selection, let us revisit three related claims. First, in 1992, Patterson posited that³⁶:

[N]ot a single study has found children of gay and lesbian parents to be disadvantaged in any respect relative to children of heterosexual parents.

Patterson’s (2000) claim was similar³⁷:

[C]entral results of existing research on lesbian and gay couples and families with children are exceptionally clear. ... [The] home environments provided by lesbian and gay parents are just as likely as those provided by heterosexual parents to enable psychosocial growth among family members.

Lastly, and most significantly, we turn to the APA Brief’s “Summary of Research Findings on Lesbian and Gay Parenting”, also single-authored by Patterson (see p. 5)³⁸:

Not a single study has found children of lesbian or gay parents to be disadvantaged in any significant respect relative to children of heterosexual parents.

³¹ “Four of the 16 [divorced] heterosexual mothers were either remarried or currently living with a heterosexual lover” (p. 127).

³² “Of the 66 respondents, six were married, 48 were divorced, eight were separated, and four had never been married” (Bigner and Jacobsen (1989a, p. 166). This means the sample was 90.9% single.

³³ Moore et al. (2002); for an extensive review, see Wilcox et al. (2011).

³⁴ Brown (2004, p. 364) (emphasis added).

³⁵ Herek (2006, p. 612).

³⁶ Patterson (1992, p. 1036) (emphasis added).

³⁷ Patterson (2000, p. 1064) (emphasis added).

³⁸ Patterson, p. 15 (from APA Brief, 2005), (emphasis added).

In all three of these claims (including that latter from the 2005 APA Brief), Patterson uses the broad and plural term “heterosexual parents”, a term that includes marriage-based, intact families. This broad claim is not nuanced by the information that, with rare exceptions, the research does not include studies comparing children raised by two-parent, same-sex couples with children raised by marriage-based, heterosexual couples. Further, no mention is made that in at least 13 of the 33 extant comparison studies referenced in the Brief (pp. 23–45), the groups selected to represent “heterosexual parents” were composed largely, if not solely, of single parents. We now move to another related examination of the APA Brief.

2.4. Question 4: does a scientifically-viable study exist to contradict the conclusion that “not a single study has found children of lesbian or gay parents to be disadvantaged”?

There is at least one notable exception³⁹ to the APA’s claim that “Not a single study has found children of lesbian or gay parents to be disadvantaged in any significant respect relative to children of heterosexual parents”.⁴⁰ In the “Summary of Findings” section, the APA Brief references a study by Sarantakos (1996),⁴¹ but does so in a footnote that critiques the study (p. 6, Footnote 1). On page 40 of the APA Brief’s annotated bibliography, a reference to the Sarantakos (1996) article is offered, but there is no summary of the study’s findings, only a note reading “No abstract available”.

Upon closer examination, we find that the Sarantakos (1996) study is a comparative analysis of 58 children of heterosexual married parents, 58 children of heterosexual cohabiting couples, and 58 children living with homosexual couples that were all “matched according to socially significant criteria (e.g., age, number of children, education, occupation, and socio-economic status)”.⁴² The combined sample size (174) is the seventh-largest sample size of the 59 published studies listed in the APA Brief’s “Summary of Research Findings on Lesbian and Gay Parenting” (see Table 1). However, the six studies with larger sample sizes were all adult self-report studies,⁴³ making the Sarantakos combined sample the largest study (APA Brief, pp. 23–45) that examined *children’s developmental outcomes*.

Key findings of the Sarantakos study are summarized below. To contextualize these data, the numbers are based on a teacher rating-scale of performance “ranging from 1 (very low performance), through 5 (moderate performance) to 9 (very high performance)”.⁴⁴ Based on teacher (not parent) reports, Sarantakos found several significant differences between married families and homosexual families.⁴⁵

Language Achievement	Married 7.7, Cohabiting 6.8, Homosexual 5.5
Mathematics Achievement	Married 7.9, Cohabiting 7.0, Homosexual 5.5
Social Studies Achievement	Married 7.3, Cohabiting 7.0, Homosexual 7.6
Sport Interest/Involvement	Married 8.9, Cohabiting 8.3, Homosexual 5.9
Sociability/Popularity	Married 7.5, Cohabiting 6.5, Homosexual 5.0
School/Learning Attitude	Married 7.5, Cohabiting 6.8, Homosexual 6.5
Parent-School Relationships	Married 7.5, Cohabiting 6.0, Homosexual 5.0
Support with Homework	Married 7.0, Cohabiting 6.5, Homosexual 5.5
Parental Aspirations	Married 8.1, Cohabiting 7.4, Homosexual 6.5 ^a

^a Sarantakos, 1996, pp. 24–27.

Sarantakos concluded, “Overall, the study has shown that children of married couples are more likely to do well at school in academic and social terms, than children of cohabiting and homosexual couples”.⁴⁶

The APA’s decision to de-emphasize the Sarantakos (1996) study was based, in part, on the criticism that “nearly all indicators of the children’s functioning were based on subjective reports by *teachers*”.⁴⁷ The Sarantakos study was based, in part, on teacher reports. However, teacher reports included “tests” and “normal school assessment” (p. 24). Subsequently, it may be

³⁹ Other arguably contradictory studies are reviewed by Schumm (2011).

⁴⁰ Patterson, p. 15 (from APA Brief, 2005).

⁴¹ Among the diverse types of gay/lesbian parents there are at least two major categories that warrant scholarly precision: (a) two lesbian or gay parents raising an adopted or DI (donor insemination) child from infancy with these and only these two parents; and (b) two lesbian or gay parents raising a child who is the biological offspring of one of the parents, following a separation or divorce from a heterosexual partner. The Sarantakos sample is of the latter (b) type. In terms of scholarly precision, it is important to differentiate and not draw strong implications from ‘a’ to ‘b’ or ‘b’ to ‘a.’ Indeed, the author would posit that adopted versus DI children may also warrant separate consideration. The core issue is that precision is essential and overextension of findings should be avoided. This same issue is of serious concern in connection with the tendency to overextend findings regarding lesbian mothers to apply to gay fathers (see Regnerus, this volume).

⁴² Sarantakos (1996, p. 23).

⁴³ In order, these six studies include: (1) Morris et al., 2002 (N = 2431), who addressed adults’ reports of “coming out”; (2) Johnson and O’Connor (2002) (N = 415), who addressed adults’ reports of parenting beliefs, division of labor, etc.; (3) Crawford et al. (1999) (N = 388), who addressed psychologists’ self-reports of gay adoption; (4) King and Black (1999) (N = 338), who addressed college students’ perceptions of gay parents; (5) Bos et al. (2003) (N = 200), who addressed parental motives and desires; and (6) Bos et al. (2004) (N = 200), who addressed parental reports of couple relations. These foci are not *children’s* outcomes.

⁴⁴ Sarantakos (1996, p. 24).

⁴⁵ Social Studies Achievement is significant at the $p = .008$ level; the eight other differences are significant at the $p = .000$ level.

⁴⁶ Sarantakos (1996, p. 30).

⁴⁷ APA Brief (2005), Footnote 1, p. 6 (emphasis added).

argued that Sarantakos' decision *not* to rely solely or extensively on parent reports, as is done in most same-sex parenting studies, is a strength, given parents' tendencies towards bias when reporting on their own children.⁴⁸ Sarantakos⁴⁹ also drew data from school aptitude tests and observations, thereby modeling a research ideal of *triangulation* of sources.⁵⁰ In fact, the study integrated not only three data sources to triangulate; it featured at least four (i.e., teachers, tests, observations, and child reports). Further, the study controlled for "education, occupation, and socio-economic status" and then, based on teacher reports, compared marriage-based families with gay/lesbian families and found nine significant differences—with children from marriage-based families rating higher in eight areas. By objective standards, compared with the studies cited by the APA Brief, the 1996 Sarantakos study was:

- (a) *The largest comparison study to examine children's outcomes*,⁵¹
- (b) *One of the most comparative* (only about five other studies used three comparison groups),⁵² and
- (c) *The most comprehensively triangulated study* (four data sources) conducted on same-sex parenting.⁵³

Accordingly, this study deserves the attention of scientists interested in the question of homosexual and heterosexual parenting, rather than the footnote it received.

As we conclude the examination of question 4, let us review a portion of APA's published negation of Sarantakos' (1996) study⁵⁴:

[*Children Australia*, the journal where the article was published] 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.

For other scientists, however, the salient point behind the Sarantakos findings is that the novel comparison group of marriage-based families introduced significant differences in children's outcomes (as opposed to the recurring "no difference" finding with single-mother and "couple" samples). We now turn to the fifth question.

2.5. Question 5: what types of outcomes have been investigated?

With respect to the APA Brief's claim that "not a single study has found children of lesbian or gay parents to [have] disadvantaged [outcomes]", *what types of outcomes have been examined and investigated?* Specifically, how many of the same-sex parenting studies in Table 1 address the societal concerns of intergenerational poverty, collegiate education and/or labor force contribution, serious criminality, incarceration, early childbearing, drug/alcohol abuse, or suicide that are frequently the foci of national studies on children, adolescents, and young adults, as discussed at the outset of this paper?

Anderssen and colleagues cataloged the foci of same-sex parenting studies in a 2002 review and reported⁵⁵:

Emotional functioning was the most often studied outcome (12 studies), followed by sexual preference (nine studies), gender role behavior (eight studies), behavioral adjustment (seven studies), gender identity (six studies), and cognitive functioning (three studies).

Examination of the articles cited in the 2005 APA Brief on Lesbian and Gay Parenting yields a list of studied outcomes that are consistent with Anderssen's summary, including: "sexual orientation"⁵⁶; "behavioral adjustment, self-concepts, and sex-role identity"⁵⁷; "sexual identity"⁵⁸; "sex-role behavior"⁵⁹; "self-esteem"⁶⁰; "psychosexual and psychiatric appraisal"⁶¹; "socioemotional development"⁶²; and "maternal mental health and child adjustment".⁶³

⁴⁸ It is well replicated that individuals tend to rate the group with which they most identify more positively than they do other groups. This positive bias includes within-family ratings Roese and Olson (2007).

⁴⁹ Sarantakos is the author of several research methods textbooks (2005, 2007b) and the author/editor of a four-volume, 1672-page work in Sage Publications' *Benchmarks in Social Research Series* (2007a).

⁵⁰ "Triangulation is a means of checking the integrity of the inferences one draws. It can involve the use of multiple data sources, ...multiple theoretical perspectives, multiple methods, or all of these" (Schwandt, 2001, p. 257). In effect, the standard of triangulation is advocacy for checks and balances.

⁵¹ Six of the 59 studies listed in the 2005 APA Brief (pp. 23–45) had larger samples, but, as discussed earlier, they all focused on adult reports of adult perceptions and outcomes.

⁵² For example, Brewaeys et al. (1997), Golombok et al. (2003, 1997), MacCallum and Golombok (2004), and Tasker and Golombok (1998).

⁵³ In spite of the strong design with respect to triangulation, the Sarantakos study does not appear to be based on a true probability sample, nor is it a *large* sample (although it is a subsample of a 900-plus study). The study is rigorous by comparison to other same-sex parenting studies, but is limited compared with most of the nationally representative studies on intact families listed in Table 2.

⁵⁴ Patterson (2005) in APA Brief, p. 7, Footnote 1.

⁵⁵ Anderssen et al. (2002, p. 343).

⁵⁶ Bailey et al. (1995) and Golombok and Tasker (1996).

⁵⁷ Patterson (1994).

⁵⁸ Green (1978).

⁵⁹ Hoeffler (1981) and Kveskin and Cook (1982).

⁶⁰ Huggins (1989).

⁶¹ Golombok et al. (1983).

⁶² Golombok et al. (1997).

⁶³ Patterson (2001).

With these focal outcomes identified, it is noteworthy that all of the aforementioned outcomes of societal-level concern are absent from the list of “most often studied outcome(s)” as identified by Anderssen et al.⁶⁴ In response to the present article’s question 5 (what *types* of outcomes have been investigated for children of gay/lesbian families?), it may be concluded: In the same-sex parenting research that undergirded the 2005 APA Brief, it appears that gender-related outcomes were the dominant research concern. To be more precise, Table 1 lists several categories of information regarding the 59 published empirical studies; one of these categories is the “outcome studied”. More than 20 studies have examined gender-related outcomes, but there was a dearth of peer-reviewed journal articles from which to form science-based conclusions in myriad areas of societal concern.⁶⁵

One book-length empirical study⁶⁶ entitled *Same-Sex Couples* (Sarantakos, 2000, Harvard Press) did examine several issues of societal concern. In connection with the questions raised in the present article, this study:

- (1) includes a diverse sample of lesbian *and* gay parents instead of focusing on privileged lesbian mothers (question 1);
- (2) uses not only one but two heterosexual comparison samples; one married parent sample and one cohabitating parent sample (questions 2 and 3);
- (3) examines several outcomes of societal concern (question 5); and
- (4) is unique in presenting long-term (post-18 years old) outcomes of children with lesbian and gay parents (question 6, addressed later).

This study’s conclusion regarding outcomes of gay and lesbian parents reads, in part:

If we perceive deviance in a general sense, to include excessive drinking, drug use, truancy, sexual deviance, and criminal offenses, and if we rely on the statements made by adult children (over 18 years of age) . . . [then] children of homosexual parents report deviance in higher proportions than children of (married or cohabiting) heterosexual couples (Sarantakos, 2000, p. 131).

The 2005 APA Brief does not cite this study, again leaving us to more closely examine the claim that “Not a single study has found children of lesbian or gay parents to be disadvantaged in any significant respect relative to children of heterosexual parents” (p. 15).

The Sarantakos (2000) study also includes the report that “the number of children who were labeled by their parents as gay, or identified themselves as gay, is much higher than the generally expected proportion” (p. 133). However, the study also notes areas of no significant heterosexual–homosexual differences (i.e., “Physical and emotional well-being”, p. 130), consistent with the 2005 APA Brief’s claims. All of these findings warranted attention in the 2005 APA Brief but were overlooked. Of most interest to us here, however, is the novel attention of Sarantakos (2000) on multiple concerns of societal importance, including drug and alcohol abuse, education (truancy), sexual activity, and criminality.

In any less-developed area of empirical inquiry it takes time, often several decades, before many of the central and most relevant questions can be adequately addressed. This seems to be the case with same-sex parenting outcomes, as several issues of societal concern were almost entirely unaddressed in the 2005 APA Brief.

2.6. Question 6: what do we know about the long-term outcomes of children of lesbian and gay parents?

In the preceding response to question 5, the outcomes of intergenerational poverty, criminality, college education and/or labor force contribution, drug/alcohol abuse, suicide, early sexual activity, early childbearing, and eventual divorce as adults were mentioned. Close consideration reveals that the majority of these outcomes are not “child” outcomes. Indeed, most of these outcomes are not optimally observable until (at the earliest) mid-late adolescence or early adulthood (and in the case of divorce, not until middle adulthood). As discussed in question 5, virtually none of the peer-reviewed, same-sex parenting comparison studies addressed these outcomes.⁶⁷

Additionally, of the 59 published studies cited by the APA 2005 Brief (pp. 23–45), it is difficult to find comparison studies of any kind that examine late adolescent outcomes of any kind. The few that utilize comparison groups have comparison groups of 44 or fewer.⁶⁸ Let us further explore the importance of a lack of data centered on adolescents and young adults.

Table 2 identifies 15 of the hundreds of available studies on outcomes of children from intact families (as contrasted with comparison groups such as cohabiting couples and single parents). One of these studies included a data set of 35,938 children—one of “the largest . . . nationally representative survey[s] of US children and their parents”.⁶⁹ Based on analysis of this

⁶⁴ Anderssen et al. (2002, p. 343).

⁶⁵ Including: intergenerational poverty, criminality, college education and/or labor force contribution, drug/alcohol abuse, suicide, sexual activity and early childbearing, and eventual divorce.

⁶⁶ This study is a later, larger, and more detailed report on the earlier mentioned Sarantakos (1996) study. The sample of that study was larger than the other comparison samples in Table 1.

⁶⁷ Gartrell and colleagues (1999, 2000, 2005) have commenced to do so, but in 2005 they were reporting on children who were only 10 years old (with a sample size of 74 and no heterosexual comparison group).

⁶⁸ I.e. Wainwright et al. (2004).

⁶⁹ Brown (2004), p. 355.

nationally representative sample, Susan Brown emphasized, “The findings of this study... demonstrate the importance of separately examining children and adolescents”. She then explained⁷⁰:

Although the outcomes of children (6–11 years old) in cohabiting families... are worse... than those of children in two-biological-parent married families, much of this difference... is economic.... In contrast, regardless of economic and parental resources, the outcomes of adolescents (12–17 years old) in cohabiting families... are worse... than those... in two-biological-parent married families.

In short, in the case of cohabiting families and “two-biological-parent married families” the differences in children’s outcomes *increase in significance as the children grow older*. The likelihood of significant differences arising between children from same-sex and married families may also increase across time—not just into adolescence but into early and middle adulthood. For example, research indicates that “[d]aughters raised outside of intact marriages are... more likely to end up young, unwed mothers than are children whose parents married and stayed married”, and that “[p]arental divorce increases the odds that adult children will also divorce”.⁷¹

Longitudinal studies that follow children across time and into adulthood to examine such outcomes are comparatively rare and valuable. We briefly turn to a key finding from one such study that followed children of divorce into middle adulthood. Based on a 25-year longitudinal study, Wallerstein and colleagues (2001) state:

Contrary to what we have long thought, the major impact of divorce does not occur during childhood or adolescence. Rather, it rises in adulthood as serious romantic relationships move center stage. When it comes time to choose a life mate and build a new family, the effects of divorce crescendo (p. xxix).

Wallerstein’s research, like nearly all of the studies in the same-sex parenting literature, is based on a small, non-representative sample that should not be generalized or overextended. Her longitudinal work does, however, indicate that “effects [can] crescendo” in adulthood. Did any published same-sex parenting study cited by the 2005 APA Brief (pp. 23–45) track the societally significant long-term outcomes into adulthood? No. Is it possible that “the major impact” of same-sex parenting might “not occur during childhood or adolescence... [but that it will rise] in adulthood as serious romantic relationships move center stage”? Is it also possible that “when it comes time to choose a life mate and build a new family” that the effects of same-sex parenting will similarly “crescendo” as they did in Wallerstein’s study of divorce effects? In response to this or any question regarding the long-term, adult outcomes of lesbian and gay parenting we have almost no empirical basis for responding. An exception is provided by the findings from self-reports of adult “children” (18 + years of age) in Sarantakos’ (2000) book-length study, but those results not encouraging. This is a single study however—a study that, like those cited by the APA Brief, lacks the statistical power and rigor of the large, random, representative samples used in marriage-based family studies (see Table 2). We now move to a final related empirical question regarding the same-sex parenting literature.

2.7. *Question 7: have the studies in this area committed the type II error and prematurely concluded that heterosexual couples and gay and lesbian couples produce parental outcomes with no differences?*

The Summary of Research Findings in the APA brief reads, “As is true in any area of research, questions have been raised with regard to sampling issues, statistical power, and other technical matters” (p. 5). However, neither statistical power nor the related concern of Type II error is further explained or addressed. This will be done next.

In social science research, questions are typically framed as follows: “Are we 95% sure the two groups being compared are different?” ($p < .05$). If our statistics seem to confirm a difference with 95% or greater confidence, then we say the two groups are “significantly different”. But what if, after statistical analysis, we are only 85% sure that the two groups are different? By the rules of standard social science, we would be obligated to say we were unable to satisfactorily conclude that the two groups are different. However, a reported finding of “no statistically significant difference” (at the $p < .05$ level; 95%-plus certainty) is a grossly inadequate basis upon which to offer the science-based claim that the groups were conclusively “the same”. In research, incorrectly concluding that there is no difference between groups when there is in fact a difference is referred to as a Type II error. A Type II error is more likely when undue amounts of random variation are present in a study. Specifically, small sample size, unreliable measures, imprecise research methodology, or unaccounted for variables can all increase the likelihood of a Type II error. All one would have to do to be able to come to a conclusion of “no difference” is to conduct a study with a small sample and/or sufficient levels of random variation. These weaknesses compromise a study’s “statistical power” (Cohen, 1988).

It must be re-emphasized that a conclusion of “no significant difference” means that it is unknown whether or not a difference exists on the variable(s) in question (Cohen, 1988). This conclusion does not necessarily mean that the two groups are, in fact, the same on the variable being studied, much less on all other characteristics. This point is important with same-sex parenting research because Patterson (1992, 2000) and the 2005 APA Brief seem to draw inferences of sameness based on the observation that gay and lesbian parents and heterosexual parents appear not to be statistically different from one another based on small, non-representative samples—thereby becoming vulnerable to a classic Type II error.

⁷⁰ Brown (2004), p. 364.

⁷¹ Wilcox et al. (2011), p. 11.

To make the APA Brief's proposition of sameness more precarious, in a review published one year after the APA Brief in the flagship APA journal, *American Psychologist*, Herek (2006) acknowledged that many same-sex parenting studies have "utilized small, select convenience samples and often employed unstandardized measures".⁷² Anderssen et al. (2002) similarly indicated in their review of same-sex parenting studies, "The samples were most often small, increasing the chance to conclude that no differences exist between groups when in fact the differences do exist. This casts doubt on the external validity of the studies".⁷³ With these limitations noted, the 2005 APA Brief explicitly claimed that findings of non-significant differences between same-sex and heterosexual parents had been "repeatedly replicated" (p. 7, Footnote 1).

Reasons for skepticism regarding the APA Brief's claim that findings have been "repeatedly replicated" rest in Neuman's (1997) point that "the logic of replication implies that different researchers are unlikely to make the same errors".⁷⁴ However, if errors (e.g., similarly biased sampling approaches employing "small, select convenience samples"⁷⁵ and comparison groups) are repeated by different researchers, the logic behind replication is undermined. As has been previously detailed in the response to question 1 in this article, same-sex parenting researchers have repeatedly selected White, well-educated, middle- and upper-class lesbians to represent same-sex parents. This tendency recurred even after this bias was explicitly identified by Patterson (1992, 2000).⁷⁶ Further, repeated sampling tendencies in connection with heterosexual comparison groups (e.g., single mothers), were documented in response to Question 3 in this paper. These repeated (convenience) sampling tendencies across studies that employed different measures do not seem to constitute valid scientific replication.

An additional scientific question raised by the above information regarding "small, select convenience"⁷⁷ samples is framed by Stacey and Biblarz (2001) who reveal that "many of these [comparative same-sex parenting] studies use conventional levels of significance. . . on miniscule samples, substantially increasing their likelihood of failing to reject the null hypothesis".⁷⁸ Was the APA's claim that "Not a single study has found children of lesbian or gay parents to be disadvantaged. . ." based on clear scientific evidence or (perhaps) Type II errors? In response, we now turn to the APA-acknowledged but unexplained critique of low "statistical power" in these studies (p. 5).

The last three editions of the APA Publication manual (1994, 2001, 2010) have urged scholars to report effect sizes and to take statistical power into consideration when reporting their results. The APA 5th Publication manual (2001) in use at the time of APA's 2005 Brief on Lesbian and Gay Parenting stated:

Take seriously the statistical power considerations associated with your tests of hypotheses. Such considerations relate to the likelihood of correctly rejecting the tested hypotheses, given a particular alpha level, effect size, and sample size. In that regard, you should routinely provide evidence that your study has power to detect effects of substantive interest (e.g., see Cohen, 1988). You should be similarly aware of the role played by sample size in cases in which not rejecting the null hypothesis is desirable (i.e., when you wish to argue that there are no differences [between two groups]). . . (p. 24).

This awareness of statistical power in cases "when you wish to argue that there are no differences" bears directly on same-sex comparative research. The APA 5th Publication manual (2001) continues:

Neither of the two types of probability [alpha level or *p* value] directly reflects the magnitude of an effect or the strength of a relationship. For the reader to fully understand the importance of your findings, it is almost always necessary to include some index of effect size or strength of relationship in your Results section (p. 25).

Let us review three statements from the *APA 5th Publication Manual* for emphasis:

- (1) The APA urges researchers to: "Take seriously the statistical power considerations" and "routinely provide evidence" (p. 24).
- (2) The APA identifies a specific concern with sample size and statistical power in connection with cases where authors "wish to argue that there are no differences" between compared groups (p. 24).
- (3) The APA concludes: "It is almost always necessary to include some index of effect size or strength of relationship in your Results section" (p. 25).

The APA's first highlighted exhortation is that an author "should routinely provide evidence that your study has sufficient power. . . (e.g., see Cohen, 1988)" (p. 24). The reference cited here by the APA is the volume *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.) by the late psychometrician Jacob Cohen, who has been credited with foundational work in statistical meta-analysis (Borenstein, 1999). In his APA-cited volume, Cohen states:

⁷² Herek (2006), p. 612.

⁷³ Anderssen et al. (2002), p. 348.

⁷⁴ Neuman (1997), p. 150.

⁷⁵ Herek (2006), p. 612.

⁷⁶ Further, single mothers have been repeatedly selected to represent heterosexual parents as documented in this paper's response to question 3.

⁷⁷ Herek (2006), p. 612.

⁷⁸ Stacey and Biblarz (2001, p. 168), Footnote 9.

⁷⁹ Patterson, p. 15 (from APA Brief, 2005).

Most psychologists of whatever stripe believe that samples, even small samples, mirror the characteristics of their parent populations. In effect, they operate on the unstated premise that the law of large numbers holds for small numbers as well. ... [Citing Tversky and Kahneman] "The believer in the law of small numbers has incorrect intuitions about significance level, power, and confidence intervals. Significance levels are usually computed and reported, but power and confidence levels are not. Perhaps they should be".

But as we have seen, too many of our colleagues have not responded to [this] admonition.... They do so at their peril (p. xv).

Let us contextualize "the law of small numbers" with respect to the same-sex parenting studies cited in the APA Brief. The combined non-representative sample total of all 59 same-sex parenting studies in the 2005 APA Brief (pp. 23–45) is 7800⁸⁰ (see Table 1). By comparison, Table 2 lists 15 prominent studies that contrast children's outcomes in intact, single-parent, divorced, and/or step-family forms using large probability samples and comparison groups.⁸¹ The average sample size in these studies is 9911⁸²—a figure larger than all 59 same-sex parenting studies combined (7800).

We now turn to another question relating to Cohen's statements: How many of the published same-sex parenting studies with a heterosexual comparison group cited in APA's Brief (pp. 23–45) "provide[d] evidence" of statistical power, consistent with APA's *Publication Manual* and the "admonition" of Jacob Cohen who is cited in the APA manual? An examination of the studies indicates that only four of the 59 did so.⁸³

In addition to Cohen's (1988) statement that statistical power is ignored at our own peril, he offered several tables in his volume for researchers to reference. Employing these tables, statistical experts Lerner and Nagai (2001) computed the sample sizes required for "a power level of .80, or a Type II error rate of .20, or one in five findings" (p. 102). At this power level, the minimum number of cases required to detect a small effect size⁸⁴ is 393 for a T-test or ANOVA, or 780-plus for Chi-Square or Pearson Correlation Coefficient tests.⁸⁵ In Table 1 of this report, the 59 published same-sex parenting studies cited in the APA Brief (pp. 23–45) are compared against these standards. A close examination indicates that not a single study, including the few that reported power, meets the standards needed to detect a small effect size. Indeed, it appears that only two of the comparison studies (Bos et al., 2003, 2004) have combined sample sizes of even half of "the minimum number of cases".⁸⁶

In their book-length examination of same-sex parenting studies, Lerner and Nagai (2001) further indicate that 17 of the 22 same-sex parenting comparison studies they reviewed had been designed in such a way that the odds of failing to find a significant difference [between homo- and hetero-sexual groups] was 85% or higher.⁸⁷ Indeed, only one of the 22 studies they analyzed revealed a probability of Type II error below 77 percent, and that study *did* find differences.⁸⁸ These methodological concerns (and others) were raised and explained in Lerner and Nagai's monograph (see pp. 95–108), and in an 81-page report by Nock (2001) preceding the APA Brief.⁸⁹ Nock concluded:

All of the [same-sex parenting] articles I reviewed contained at least one fatal flaw of design or execution. Not a single one was conducted according to generally accepted standards of scientific research. ... [I]n my opinion, the only acceptable conclusion at this point is that the literature on this topic does not constitute a solid body of scientific evidence (Nock, 2001, pp. 39, 47).

⁸⁰ This figure (7800) includes same-sex parents and their children, as well as heterosexual comparison samples (1404), psychologists (388), and college students' perception reports (489).

⁸¹ Table 2 lists 15 studies that contrast children's outcomes in intact families compared with other family forms using large, probability samples and comparison groups. The focal topics of these studies are not "sexual preference, gender role behavior...[and] gender identity" (Anderssen et al., 2002, p. 343), but outcomes such as "educational attainment", "labor force attachment", and "early childbearing" (McLanahan and Sandefur, 1994, pp. 20–21), as recommended in the earlier examination of question 5. Further, all but two of the 15 studies employ longitudinal designs, as recommended in the earlier examination of question 6.

⁸² This figure is the result of 148,667 divided by 15 studies.

⁸³ These include Chan et al. (1998b), Fulcher et al. (2002), Golombok and Tasker (1996), and Tasker and Golombok (1997).

⁸⁴ By way of context, in a 67 study meta-analysis of the average differences in outcomes between children with "divorced and continuously married parents", Amato (2001) reported an average weighted effect size of between -0.12 and -0.22 (a -0.17 average) with an advantage in all five domains considered to children of continuously married parents (p. 360). These effect sizes of about .20, although statistically robust, would be classified by Cohen (1992) as small effect sizes. Even so, based on the data, most family scholars would agree that children whose parents remain continuously married tend to fare slightly to moderately better than when parents divorce. However, large numbers were needed to determine this "small" but important effect. Indeed, most effect sizes in social science research tend to be small. Rigorous and sound social science tends to include and account for many influential factors that each has a small but meaningful effect size. In social science, detecting a novel "large effect" from a single variable (whether it is divorce, remarriage, or same-sex parenting), is a comparatively rare occurrence. If we are to examine possible effects of same-sex parenting with scientific precision and rigor, related examinations would, like Amato's work, be designed and refined to detect "small effect" sizes.

⁸⁵ Cohen (1988) proposes a "relatively high power" of .90 for cases where one is trying to "demonstrate the r [difference] is trivially small" (p. 104). If the .90 power were applied, the required sample sizes would further increase. However, because none of the studies in Table 1 of the present report approach the .80 power levels, .90 calculations are unnecessary here.

⁸⁶ The "minimum number of cases" is 393. The two Bos et al. studies both have combined samples of 200. Four other larger samples are not comparison studies Crawford et al. (1999), Johnson and O'Connor (2002), King and Black (1999), and Morris et al. (2002).

⁸⁷ Lerner and Nagai (2001, p. 103).

⁸⁸ The single exception was Cameron and Cameron (1996) with a comparatively low probability error rate of 25%. This study, like the Sarantakos (1996) study mentioned earlier, did report some significant differences between children of heterosexual and homosexual parents but, like Sarantakos (1996), was not addressed in the body of the 2005 APA brief but was instead moved to a footnote on p. 7. See Redding (2008) for additional discussion (p. 137).

⁸⁹ For similar critiques preceding the 2005 APA brief, see Nock (2001), Schumm (2004), Wardle (1997), and Williams (2000). For similar critiques post-dating the 2005 APA brief, see Byrd (2008), Schumm (2010a,b, 2011), and Redding (2008, p. 138).

More specifically, Nock identified: (a) several flaws related to sampling (including biased sampling, non-probability sampling, convenience sampling, etc.); (b) poorly operationalized definitions; (c) researcher bias; (d) lack of longitudinal studies; (e) failure to report reliability; (f) low response rates; and (g) lack of statistical power (pp. 39–40).⁹⁰ Although some of these flaws are briefly mentioned in the 2005 APA Summary of Research Findings on Lesbian and Gay Parenting, many of the significant concerns raised by Nock or Lerner and Nagai are not substantively addressed.⁹¹ Indeed, the Lerner and Nagai volume and the Nock report are neither mentioned nor referenced.

To restate, in connection with the APA's published urging that researchers: "Take seriously the statistical power considerations" and "routinely provide evidence", the academic reader is left at a disadvantage.⁹² Only a few comparison studies specifically reported statistical power at all and no comparison study approached the minimum sample size of 393 needed to find a small effect.

The author's response to question 7 has examined how comparisons have been made from a research methods standpoint. In summary, some same-sex parenting researchers have acknowledged that "miniscule samples"⁹³ significantly increase "the chance to conclude that no differences exist between groups when in fact the differences do exist"—thereby casting "doubt on the external validity of the studies".⁹⁴ An additional concern is that the APA Brief's claim of "repeatedly replicated" findings of no significant difference rested almost entirely on studies that were published without reports of the APA-urged effect sizes and statistical power analyses.⁹⁵ This inconsistency seems to justify scientific skepticism, as well as the effort of more closely assessing the balance, precision, and rigor behind the conclusions posed in the 2005 APA Brief.

3. Conclusion

The 2005 APA Brief, near its outset, claims that "even taking into account all the questions and/or limitations that may characterize research in this area, none of the published research suggests conclusions different from that which will be summarized" (p. 5). The concluding summary later claims, "Indeed, the evidence to date suggests that home environments provided by lesbian and gay parents are as likely as those provided by heterosexual parents to support and enable children's psychosocial growth" (p. 15).⁹⁶

We now return to the overarching question of this paper: Are we witnessing the emergence of a new family form that provides a context for children that is equivalent to the traditional marriage-based family? Even after an extensive reading of the same-sex parenting literature, the author cannot offer a high confidence, data-based "yes" or "no" response to this question. To restate, not one of the 59 studies referenced in the 2005 APA Brief (pp. 23–45; see Table 1) compares a large, random, representative sample of lesbian or gay parents and their children with a large, random, representative sample of married parents and their children. The available data, which are drawn primarily from small convenience samples, are insufficient to support a strong generalizable claim either way. Such a statement would not be grounded in science. To make a generalizable claim, representative, large-sample studies are needed—many of them (e.g., Table 2).

Some opponents of same-sex parenting have made "egregious overstatements"⁹⁷ disparaging gay and lesbian parents. Conversely, some same-sex parenting researchers seem to have contended for an "exceptionally clear"⁹⁸ verdict of "no difference" between same-sex and heterosexual parents since 1992. However, a closer examination leads to the conclusion that strong, generalized assertions, including those made by the APA Brief, were not empirically warranted.⁹⁹ As noted by Shiller (2007) in *American Psychologist*, "the line between science and advocacy appears blurred" (p. 712).

The scientific conclusions in this domain will increase in validity as researchers: (a) move from small convenience samples to large representative samples; (b) increasingly examine critical societal and economic concerns that emerge during adolescence and adulthood; (c) include more diverse same-sex families (e.g., gay fathers, racial minorities, and those without middle-high socioeconomic status); (d) include intact, marriage-based heterosexual families as comparison groups; and (e)

⁹⁰ Four of these seven issues are addressed in the present paper. The exceptions include researcher bias, failure to report reliability, and low response rates.

⁹¹ The 2005 APA Brief's Summary on Research Findings acknowledges criticisms of same-sex parenting research including: (a) non-representative sampling, (b) "poorly matched or no control groups", (c) "well-educated, middle class [lesbian] families", and (d) "relatively small samples" (p. 5). The respective responses to these criticisms in the APA brief are: (a) "contemporary research on children of lesbian and gay parents involves a wider array of sampling techniques than did earlier studies"; (b) "contemporary research on children of lesbian and gay parents involves a wider array of research designs (and hence, control groups) than did earlier studies"; (c) "contemporary research on children of lesbian and gay parents involves a greater diversity of families than did earlier studies"; and (d) "contemporary research has benefited from such criticisms" (p. 5). The APA Brief does not challenge the validity of these research criticisms but notes that improvements are being made.

⁹² See Schumm (2010b) for more comprehensive, article-length treatment of these statistical issues.

⁹³ Stacey and Biblarz (2001, p. 168).

⁹⁴ Anderssen et al. (2002, p. 348).

⁹⁵ Schumm (2010b).

⁹⁶ The APA Brief also states that "the existing data are still limited, and any conclusions must be seen as tentative". Also, that "it should be acknowledged that research on lesbian and gay parents and their children, though no longer new, is still limited in extent" (p. 15). For some scientists, these salient points seem to be overridden by the APA Brief's conclusions.

⁹⁷ This reality has been disappointingly documented by Shiller (2007).

⁹⁸ Patterson (1992).

⁹⁹ In 2006, the year following APA's release of the brief on Lesbian and Gay Parenting, "former APA president Nicholas Cummings argued that there has been significant erosion" of the APA's established principle (Shiller (2007), p. 712). . . . that "when we speak as psychologists we speak from research evidence and clinical experience and expertise" (Cummings (2006), p. 2).

constructively respond to criticisms from methodological experts.¹⁰⁰ Specifically, it is vital that critiques regarding sample size, sampling strategy, statistical power, and effect sizes not be disregarded. Taking these steps will help produce more methodologically rigorous and scientifically informed responses to significant questions affecting families and children.

References

- Akerlof, G., 1998. Men without children. *Economic Journal* 108, 287–309.
- Amato, P., 1991. Parental absence during childhood and depression in later life. *Sociological Quarterly* 32, 543–556.
- Amato, P., 2001. Children of divorce in the 1990s: an update of the Amato and Keith (1991) meta-analysis. *Journal of Family Psychology* 15, 355–370.
- Amato, P., 2005. The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The Future of Children* 15, 75–96.
- Amato, P., Booth, A., 2000. *A Generation at Risk: Growing Up in an Era of Family Upheaval*. Harvard University Press, Cambridge, MA.
- Anderssen, N., Amli, C., Ytteroy, E.A., 2002. Outcomes for children with lesbian or gay parents: a review of studies from 1978 to 2000. *Scandinavian Journal of Psychology* 43, 335–351.
- Publication manual of the American Psychological Association (forth ed.), 1994. APA, Washington, DC.
- Publication manual of the American Psychological Association (fifth ed.), 2001. APA, Washington, DC.
- Publication manual of the American Psychological Association (sixth ed.), 2010. APA, Washington, DC.
- Aquilino, W.S., 1994. Impact of childhood family disruption on young adults' relationships with parents. *Journal of Marriage and the Family* 56, 295–313.
- Bachman, J.G. et al., 1997. Smoking, Drinking and Drug Abuse in Young Adulthood. Erlbaum, Mahwah, NJ.
- Bailey, J.M., Bobrow, D., Wolfe, M., Mikach, S., 1995. Sexual orientation of adult sons of gay fathers. *Developmental Psychology* 31, 124–129.
- Barrett, H., Tasker, F., 2001. Growing up with a gay parent: views of 101 gay fathers on their sons' and daughters' experiences. *Educational and Child Psychology* 18, 62–77.
- Battle, J., 1998. What beats having two parents?: educational outcomes for African-American students in single- versus dual-parent families. *Journal of Black Studies* 28, 783–801.
- Bigner, J.J., Jacobsen, R.B., 1989a. The value of children to gay and heterosexual fathers. *Journal of Homosexuality* 19, 163–172.
- Bigner, J.J., Jacobsen, R.B., 1989b. Parenting behaviors of homosexual and heterosexual fathers. *Journal of Homosexuality* 19, 173–186.
- Blackmon, L., Clayton, O., Glenn, N., Malone-Colon, L., Roberts, A., 2005. *The Consequences of Marriage for African Americans: A Comprehensive Literature Review*. Institute for American Values, New York.
- Borenstein, M., 1999. Jacob Cohen, PhD, 1923–1998. *Archives of General Psychiatry* 56, 581.
- Bos, H.M.W., van Balen, F., van den Boom, D.C., 2003. Planned lesbian families: their desire and motivation to have children. *Human Reproduction* 10, 2216–2224.
- Bos, H.M.W., van Balen, F., van den Boom, D.C., 2004. Experience of parenthood, couple relationship, social support, and child-rearing goals in planned lesbian mother families. *Journal of Child Psychology and Psychiatry* 45, 755–764.
- Bozett, F.W., 1980. Gay fathers: how and why they disclose their homosexuality to their children. *Family Relations* 29, 173–179.
- Brewaews, A., Ponjaert, I., Van Hall, E.V., Golombok, S., 1997. Donor insemination: child development and family functioning in lesbian mother families. *Human Reproduction* 12, 1349–1359.
- Brown, S.L., 2004. Family structure and child well-being: the significance of parental cohabitation. *Journal of Marriage and Family* 66, 351–367.
- Byrd, A.D., 2008. Conjugal marriage fosters healthy human and societal development. In: Wardle, L. (Ed.), *What's the Harm? Does Legalizing Same-Sex Marriage Really Harm Individuals, Families or Society?* University Press, Lanham, MD, pp. 3–26.
- Cameron, P., Cameron, K., 1996. Homosexual parents. *Adolescence* 31, 757–776.
- Chan, R.W., Brooks, R.C., Raboy, B., Patterson, C.J., 1998a. Division of labor among lesbian and heterosexual parents: associations with children's adjustment. *Journal of Family Psychology* 12, 402–419.
- Chan, R.W., Raboy, B., Patterson, C.J., 1998b. Psychosocial adjustment among children conceived via donor insemination by lesbian and heterosexual mothers. *Child Development* 69, 443–457.
- Chase-Lansdale, P.L., Cherlin, A.J., Kiernan, K.K., 1995. The long-term effects of parental divorce on the mental health of young adults: a developmental perspective. *Child Development* 66, 1614–1634.
- Cherlin, A.J. et al., 1995. Parental divorce in childhood and demographic outcomes in young adulthood. *Demography* 32, 299–318.
- Cherlin, A.J., Chase-Lansdale, P.L., McRae, C., 1998. Effects of parental divorce on mental health throughout the life course. *American Sociological Review* 63, 239–249.
- Ciano-Boyce, C., Shelley-Sireci, L., 2002. Who is mommy tonight? Lesbian parenting issues. *Journal of Homosexuality* 43, 1–13.
- Cohen, J., 1988. *Statistical Power Analysis for the Behavioral Sciences*, second ed. Erlbaum, Hillsdale, NJ.
- Cohen, J., 1992. A power primer. *Psychological Bulletin* 112, 155–159.
- Crawford, I., McLeod, A., Zamboni, B.D., Jordan, M.B., 1999. Psychologists' attitudes toward gay and lesbian parenting. *Professional Psychology: Research and Practice* 30, 394–401.
- Cummings, N.A., 2006. The APA and psychology need reform. Paper presented at the annual convention of the American Psychological Association (August 12). New Orleans, LA.
- Cutler, D.M. et al., 2000. Explaining the rise in youth suicide. Working Paper 7713. National Bureau of Economic Research, Cambridge.
- Demo, D.H., Cox, M.J., 2000. Families with young children: a review of research in the 1990s. *Journal of Marriage and the Family* 62, 876–895.
- Ellis, B.J. et al., 2003. Does father absence place daughters at special risk for early sexual activity and teenage pregnancy? *Child Development* 74, 801–821.
- Flaks, D., Ficher, I., Masterpasqua, F., Joseph, G., 1995. Lesbians choosing motherhood: a comparative study of lesbian and heterosexual parents and their children. *Developmental Psychology* 31, 104–114.
- Flewelling, R.L., Bauman, K.E., 1990. Family structure as a predictor of initial substance use and sexual intercourse in early adolescence. *Journal of Marriage and the Family* 52, 171–181.
- Fulcher, M., Chan, R.W., Raboy, B., Patterson, C.J., 2002. Contact with grandparents among children conceived via donor insemination by lesbian and heterosexual mothers. *Parenting: Science and Practice* 2, 61–76.
- Gartrell, N., Hamilton, J., Banks, A., Mosbacher, D., Reed, N., Sparks, C.H., Bishop, H., 1996. The national lesbian family study: I. Interviews with prospective mothers. *American Journal of Orthopsychiatry* 66, 272–281.
- Gartrell, N., Banks, A., Hamilton, J., Reed, N., Bishop, H., Rodas, C., 1999. The national lesbian family study: II. Interviews with mothers of toddlers. *American Journal of Orthopsychiatry* 69, 362–369.
- Gartrell, N., Banks, A., Reed, N., Hamilton, J., Rodas, C., Deck, A., 2000. The national lesbian family study: III. Interviews with mothers of five-year olds. *American Journal of Orthopsychiatry* 70, 542–548.
- Gartrell, N., Deck, A., Rodas, C., Peyser, H., Banks, A., 2005. The national lesbian family study: 4. Interviews with the 10-year old children. *American Journal of Orthopsychiatry* 75, 518–524.
- Gaudino, J.A. et al., 1999. No fathers' names: a risk factor for infant mortality in the state of Georgia. *Social Science and Medicine* 48, 253–265.

¹⁰⁰ At least one such study (Rosenfeld, 2010) has emerged in the years since the 2005 APA brief was issued. This study features a very large sample but has also received criticism (Schumm, 2011).

- Gershon, T.D., Tschann, J.M., Jemerin, J.M., 1999. Stigmatization, self-esteem, and coping among the adolescent children of lesbian mothers. *Journal of Adolescent Health* 24, 437–445.
- Glenn, N.D., 1989. What we know, what we say we know: discrepancies between warranted and stated conclusions in the social sciences. In: Eulau, H. (Ed.), *Crossroads of Social Science. The ICPSR 25th Anniversary Volume*. Agathon Press, New York, pp. 119–140.
- Glenn, N.D., 1997. A reconsideration of the effect of no-fault divorce on divorce rates. *Journal of Marriage and the Family* 59, 1023–1025.
- Golombok, S., Rust, J., 1993. The pre-school activities inventory: a standardized assessment of gender role in children. *Psychological Assessment* 5, 131–136.
- Golombok, S., Tasker, F., 1996. Do parents influence the sexual orientation of their children? Findings from a longitudinal study of lesbian families. *Developmental Psychology* 32, 3–11.
- Golombok, S., Spencer, A., Rutter, M., 1983. Children in lesbian and single-parent households: psychosexual and psychiatric appraisal. *Journal of Child Psychology and Psychiatry* 24, 551–572.
- Golombok, S., Tasker, F., Murray, C., 1997. Children raised in fatherless families from infancy: family relationships and the socioemotional development of children of lesbian and single heterosexual mothers. *Journal of Child Psychology and Psychiatry* 38, 783–791.
- Golombok, S., Perry, B., Burston, A., Murray, C., Mooney-Somers, J., Stevens, M., Golding, J., 2003. Children with lesbian parents: a community study. *Developmental Psychology* 39, 20–33.
- Green, R., 1978. Sexual identity of 37 children raised by homosexual or transsexual parents. *American Journal of Psychiatry* 135, 692–697.
- Green, R., Mandel, J.B., Hotvedt, M.E., Gray, J., Smith, L., 1986. Lesbian mothers and their children: a comparison with solo parent heterosexual mothers and their children. *Archives of Sexual Behavior* 7, 175–181.
- Harper, C., McLanahan, S., 2004. Father absence and youth incarceration. *Journal of Research on Adolescence* 14, 369–397.
- Harris, M.B., Turner, P.H., 1986. Gay and lesbian parents. *Journal of Homosexuality* 12, 101–113.
- Heiss, J., 1996. Effects of African American family structure on school attitude and performance. *Social Problems* 43, 246–267.
- Herek, G.M., 2006. Legal recognition of same-sex relationships in the United States: a social science perspective. *American Psychologist* 61, 607–621.
- Hetherington, M., Kelly, J., 2002. *For Better or for Worse: Divorce Reconsidered*. Norton, New York.
- Hoeffler, B., 1981. Children's acquisition of sex-role behavior in lesbian mother families. *American Journal of Orthopsychiatry* 5, 536–544.
- Horwitz, A.V., White, H.R., Howell-White, S., 1996. Becoming married and mental health: a longitudinal study of a cohort of young adults. *Journal of Marriage and the Family* 58, 895–907.
- Huggins, S.L., 1989. A comparative study of self-esteem of adolescent children of divorced lesbian mothers and divorced heterosexual mothers. *Journal of Homosexuality* 18, 123–135.
- Jekielek, S., 1998. Parental conflict, marital disruption, and children's emotional well-being. *Social Forces* 76, 905–936.
- Johnson, S.M., O'Connor, E., 2002. *The Gay Baby Boom: The Psychology of Gay Parenthood*. NYU Press, New York.
- Johnson, R.A. et al., 1996. *The Relationship Between Family Structure and Adolescent Substance Abuse*. US Dept. of Health and Human Services, Rockville, MD.
- Kamark, E.C., Galston, W.A., 1990. *Putting Children First: A Progressive Family Policy for the 1990s*. Progressive Policy Institute, Washington, DC.
- King, B.R., Black, K.N., 1999. College students' perceptual stigmatization of the children of lesbian mothers. *American Journal of Orthopsychiatry* 69, 220–227.
- Kirkpatrick, M., Smith, C., Roy, R., 1981. Lesbian mothers and their children: a comparative survey. *American Journal of Orthopsychiatry* 51, 545–551.
- Koepke, L., Hare, J., Moran, P., 1992. Relationship quality in a sample of lesbian couples with children and child-free lesbian couples. *Family Relations* 41, 224–229.
- Kuhn, T.S., 1970/1996. *The Structure of Scientific Revolutions*, third ed. University of Chicago Press, Chicago.
- Kweskin, S.L., Cook, A.S., 1982. Heterosexual and homosexual mothers' self-described sex-role behavior and ideal sex-role behavior in children. *Sex Roles* 8, 967–975.
- Lansford, J.E., 2009. Parental divorce and children's adjustment. *Perspectives on Psychological Science* 4, 140–152.
- Lerner, R., Nagai, A., 2001. *No Basis: What the Studies Don't Tell us About Same-Sex Parenting*. Marriage Law Project, Washington, DC.
- Lewis, K.G., 1980. Children of lesbians: Their point of view. *Social Work*, 198–203.
- Lichter, D.T., Graefe, D.R., Brown, J.B., 2003. Is marriage a panacea? Union formation among economically disadvantaged unwed mothers. *Social Problems* 50, 60–86.
- Lott-Whitehead, L., Tully, C.T., 1993. The family lives of lesbian mothers. *Smith College Studies in Social Work* 63, 265–280.
- Lyons, T.A., 1983. Lesbian mother's custody fears. *Women & Therapy* 2, 231–240.
- MacCallum, F., Golombok, S., 2004. Children raised in fatherless families from infancy: a follow-up of children of lesbian and single heterosexual mothers at early adolescence. *Journal of Child Psychology and Psychiatry* 45, 1407–1419.
- Manning, W.D., Lamb, K.A., 2003. Adolescent well-being in cohabiting, married, and single-parent families. *Journal of Marriage and Family* 65, 876–893.
- Margolin, L., 1992. Child abuse by mothers' boyfriends: why the overrepresentation? *Child Abuse and Neglect* 16, 541–551.
- McLanahan, S., Sandefur, G., 1994. *Growing Up with a Single Parent: What Hurts, What Helps*. Harvard University Press, Cambridge, MA.
- McLeod, A.C., Crawford, I., Zecheister, J., 1999. Heterosexual Undergraduates' Attitudes Toward Gay Fathers and their Children. *Journal of Psychology and Human Sexuality* 11, 43–62.
- Miller, B., 1979. Gay fathers and their children. *Family Coordinator* 28, 544–552.
- Miller, J.A., Jacobsen, R.B., Bigner, J.J., 1981. The child's home environment for lesbian versus heterosexual mothers: a neglected area of research. *Journal of Homosexuality* 7, 49–56.
- Mitchell, K.S., Booth, A., King, V., 2009. Adolescents with nonresident fathers: are daughters more disadvantaged than sons? *Journal of Marriage and Family* 71, 650–662.
- Moore, M.R., 2008. Gendered power relations among women: a study of household decision making in Black, lesbian step families. *American Sociological Review* 73, 335–356.
- Moore, K.A., Jekielek, S.M., Emig, C.E., 2002. *Marriage From a Child's Perspective: How Does Family Structure Affect Children, and What Can We Do About It?* Child Trends Research Brief, Washington, DC.
- Morris, J.F., Balsam, K.F., Rothblum, E.D., 2002. Lesbian and bisexual mothers and non-mothers: demographics and the coming out process. *Journal of Family Psychology* 16, 144–156.
- Mucklow, B.M., Phelan, G.K., 1979. Lesbian and traditional mothers' responses to adult responses to child behavior and self concept. *Psychological Reports* 44, 880–882.
- Neuman, W.L., 1997. *Social Research Methods*, third ed. Allyn & Bacon, Boston.
- Nock, S.L., 1998. *Marriage in Men's Lives*. Oxford University Press, New York.
- Nock, S., 2001. *The Affidavit of Steven Nock, Halpern v. Attorney General of Canada*, No. 684/00 (Ont. Sup. Ct. of Justice).
- O'Connell, A., 1993. Voices from the heart: the developmental impact of a mother's lesbianism on her adolescent children. *Smith College Studies in Social Work* 63, 281–299.
- Oliver, M.L., Shapiro, T.M., 1997. *Black Wealth/White Wealth*. Routledge, New York.
- Page, M.E., Stevens, A.H., 2005. Understanding racial differences in the economic costs of growing up in a single-parent family. *Demography* 42, 75–90.
- Pagelow, M.D., 1980. Heterosexual and lesbian single mothers: a comparison of problems, coping, and solutions. *Journal of Homosexuality* 5, 198–204.
- Patterson, C.J., 1992. Children of lesbian and gay parents. *Child Development* 63, 1025–1042.
- Patterson, C.J., 1994. Children of the lesbian baby boom: Behavioral adjustment, self-concepts, and sex-role identity. In: Greene, B., Herek, G. (Eds.), *Contemporary Perspectives on Lesbian and Gay Psychology: Theory, Research, and Application*. Sage, Beverly Hills, CA, pp. 156–175.
- Patterson, C.J., 1995. Families of the lesbian baby boom: parents' division of labor and children's adjustment. *Developmental Psychology* 31, 115–123.

- Patterson, C.J., 2000. Family relationships of lesbians and gay men. *Journal of Marriage and the Family* 62, 1052–1069.
- Patterson, C.J., 2001. Families of the lesbian baby boom: maternal mental health and child adjustment. *Journal of Gay and Lesbian Psychotherapy* 4 (3/4), 91–107.
- Patterson, C.J., 2005. Lesbian and gay parents and their children: summary of research findings. *Lesbian and Gay Parenting: American Psychological Association*, pp. 5–22.
- Patterson, C.J., Hurst, S., Mason, C., 1998. Families of the lesbian baby boom: children's contacts with grandparents and other adults. *American Journal of Orthopsychiatry* 68, 390–399.
- Phillips, C.P., Asbury, C.A., 1993. Parental divorce/separation and the motivational characteristics and educational aspirations of African American university students. *The Journal of Negro Education* 62, 204–210.
- Rand, C., Graham, D.L.R., Rawlings, E.L., 1982. Psychological health and factors the court seeks to control in lesbian mother custody trials. *Journal of Homosexuality* 8, 27–39.
- Rank, M.R., Hirschl, T.A., 1999. The economic risk of childhood in America: estimating the probability of poverty across the formative years. *Journal of Marriage and the Family* 61, 1058–1067.
- Redding, R., 2008. It's really about sex: same-sex marriage, lesbian/gay parenting, and the psychology of disgust. *Duke Journal of Gender Law & Policy* 15, 128–193.
- Roose, N.J., Olson, J.M., 2007. Better, stronger, faster self-serving judgment, affect regulation, and the optimal vigilance hypothesis. *Perspectives on Psychological Science* 2, 124–141.
- Rosenfeld, M.J., 2010. Nontraditional families and childhood progress through school. *Demography* 47, 755–775.
- Sarantakos, S., 1996. Children in three contexts: family, education, and social development. *Children Australia* 21, 23–31.
- Sarantakos, S., 2000. *Same-Sex Couples*. Harvard Press, Sydney.
- Sarantakos, S., 2005. *Social Research*, third ed. Palgrave Macmillan.
- Sarantakos, S., 2007a. *Data analysis*, vol. 4. Sage, Thousand Oaks, CA.
- Sarantakos, S., 2007b. *Tool Kit for Quantitative Data Analysis*. Palgrave Macmillan.
- Schumm, W.R., 2004. What was really learned from Tasker and Golombok's (1995) study of lesbian and single parent mothers? *Psychological Reports* 94, 422–424.
- Schumm, W.R., 2010a. Comparative relationship stability of lesbian mother and heterosexual mother families: a review of evidence. *Marriage & Family Review* 46, 499–509.
- Schumm, W.R., 2010b. Statistical requirements for properly investigating a null hypothesis. *Psychological Reports* 107, 953–971.
- Schumm, W.R., 2011. Child outcomes associated with lesbian parenting: Comments on Biblarz and Stacy's 2010 report. *Journal of Human Sexuality* 3, 35–80.
- Schwandt, T., 2001. *Dictionary of Qualitative Inquiry*. Sage, Thousand Oaks, CA.
- Shiller, V.M., 2007. Science and advocacy issues in research on children of gay and lesbian parents. *American Psychologist* 62, 712–713.
- Siegel, C. et al, 1996. Mortality from intentional and unintentional injury among infants of young mothers in Colorado, 1982–1992. *Archives of Pediatric and Adolescent Medicine* 150, 1077–1083.
- Siegenthaler, A.L., Bigner, J.J., 2000. The value of children to lesbian and non-lesbian mothers. *Journal of Homosexuality* 39, 73–91.
- Simon, R.W., 2002. Revisiting the relationships among gender, marital status, and mental health. *American Journal of Sociology* 107, 1065–1096.
- Stacey, J., Biblarz, T.J., 2001. (How) does the sexual orientation of parents matter? *American Sociological Review* 66, 159–183.
- Steckel, A., 1985. *Separation-Individuation in Children of Lesbian and Heterosexual Couples*. Unpublished doctoral dissertation, The Wright Institute Graduate School, Berkeley, CA.
- Steckel, A., 1987. Psychosocial development of children in lesbian mothers. In: Bozett, F.W. (Ed.), *Gay and Lesbian Parents*. Praeger, New York, pp. 75–85.
- Strasser, M., 2008. The alleged harms of recognizing same-sex marriage. In: Wardle, L. (Ed.), *What's the Harm? Does Legalizing Same-Sex Marriage Really Harm Individuals, Families or Society?* University Press, Lanham, MD, pp. 27–46.
- Sullivan, M., 1996. Rozzie and Harriett? Gender and family parents of lesbian coparents. *Gender and Society* 10, 747–767.
- Tasker, F.L., Golombok, S., 1995. Adults raised as children in lesbian families. *American Journal of Orthopsychiatry* 65, 203–215.
- Tasker, F.L., Golombok, S., 1997. *Growing Up in a Lesbian Family: Effects on Child Development*. Guilford, New York.
- Tasker, F.L., Golombok, S., 1998. The role of co-mothers in planned lesbian-led families. *Journal of Lesbian Studies* 2, 49–68.
- Teachman, J.R. et al, 1998. Sibling resemblance in behavioral and cognitive outcomes: the role of father presence. *Journal of Marriage and the Family* 60, 835–848.
- Vanfraussen, K., Ponjaert-Kristoffersen, I., Brewaeys, A., 2003. Family functioning in lesbian families created by donor insemination. *American Journal of Orthopsychiatry* 73, 78–90.
- Wainright, J.L., Russell, S.T., Patterson, C.J., 2004. Psychosocial adjustment, school outcomes, and romantic relationships of adolescents with same-sex parents. *Child Development* 75, 1886–1898.
- Waite, L., 1995. Does marriage matter? *Demography* 32, 483–507.
- Waite, L., Gallagher, M., 2000. *The Case for Marriage: Why Married People are Happier, Healthier, and Better off Financially*. Doubleday, New York.
- Wallerstein, J., Lewis, J.M., Blakeslee, S., 2001. *The Unexpected Legacy of Divorce*. Hyperion, New York.
- Wardle, L.D., 1997. The potential impact of homosexual parenting on children. *University of Illinois Law Review* 1997, 833–919.
- Weitof, G.R. et al, 2003. Mortality, severe morbidity, and injury in children living with single parents in Sweden: a population-based study. *The Lancet* 361, 289–295.
- Wilcox, W.B. et al, 2005. *Why Marriage Matters*, second ed. Institute for American Values, New York.
- Wilcox, W.B. et al, 2011. *Why Marriage Matters*, third ed. Institute for American Values, New York.
- Williams, R.N., 2000. A critique of the research on same-sex parenting. In: Dollahite, D.C. (Ed.), *Strengthening Our Families*. Bookcraft, Salt Lake City, UT, pp. 325–355.
- Wolinger, N.H., 2005. *Understanding the Divorce Cycle: The Children of Divorce in their Own Marriages*. Cambridge University Press, New York.
- Wright, J.M., 1998. *Lesbian Stepfamilies: An Ethnography of Love*. Harrington Park, New York.

EXHIBIT 66

Hum. Dev. 18: 245--266 (1975)

Fathers: Forgotten Contributors to Child Development

Michael E. Lamb¹

Yale University, New Haven, Conn.

Key Words. Fathers · Social development · Family · Personality development · Socialization

Abstract. Theoretical and research literature on the role of fathers in child development is reviewed. The first section points out that there is little known about father-infant interaction, and the impact of the father on infant social development, though diverse theoretical perspectives all assume that the father's role is minimal, and, at best, indirect. It is suggested that this assumption is unsubstantiated. Fathers are believed to play an influential role in later child development, though the theoretical assumptions, again, are inadequately validated by research. A new hypothesis is proposed whereby fathers are seen as playing a vitally important role in socialization, yet one which is qualitatively different from that played by mothers. Various research designs are suggested whereby this hypothesis can be subject to empirical validation.

Research and theorizing on the social influences on human development have been a major concern of psychologists for many years. There is a widespread belief that early experiences have a disproportionately powerful effect on both cognitive and affective development, and many consider the nuclear family to be a major factor in socialization. Within the last decade, there have been

¹ This paper was written while the author was engaged in research supported by the Foundation for Child Development through the Ecology of Human Development Program. Thanks are offered to *Thomas M. Achenbach*, *Urie Bronfenbrenner*, *Greta G. Fein*, *William Kessen*, and *Jamie E. Lamb* for their thoughtful and generous criticisms of earlier drafts of this article, and for their encouragement and assistance.

numerous attempts to explore the mother-child relationship, on the assumption that its absence may be pathogenic (*Bowlby*, 1951, 1969). The purpose of this review is to suggest that the father-child relationship deserves more explicit attention than it has been accorded in the past. Specifically, I shall argue that both mothers and fathers play crucial and qualitatively different roles in the socialization of the child; indeed, this is probably what accounts for the socializing performance of the nuclear family.

Previous research has implied that the father plays essentially no role in the social development of the infant, while in later childhood he is believed to be a crucial figure in sex role and moral development. I will contend that the father-infant and mother-infant interaction differ substantially in character. This makes plausible the possibility that the parents contribute differentially to socialization from infancy. Subsequently, I shall focus on the theories concerning the role of the father in later childhood, and suggest that the correlational search for effects which dominates most of the research is premature; logically, it should follow characterization of the nature of the father-infant relationship. Lastly, I will suggest, largely for heuristic purposes, an hypothesis concerning the role of the father, and suggest several approaches whereby the nature of the father-child relationship, and the role of the father in the mother-father-child family system, might best be explored in the future.

Infancy

From the earlier writings of *Freud*, psychologists have believed that one of the prerequisites for normal development is a satisfactory relationship with the mother in infancy. As *Freud* wrote 'In these ... lies the root of the mother's importance, unique, without parallel, established unalterably for the whole lifetime as the first and strongest love-object, and as the prototype of all later love-relations - for both sexes' (1949, p. 45). As I will demonstrate in this section, most of the theorists and researchers who succeeded *Freud*, whatever their theoretical persuasion, have concurred in emphasizing the mother-infant relationship. The father is assumed to be of minimal importance during infancy, and where he is accorded any consideration, he is seen as no more than an occasional mother-substitute. *Bowlby's* belief (which indeed is the belief of most theorists) is that '... the child's relation to his mother ... is without doubt in ordinary circumstances, by far his most important relationship during these years ... (W)hile continual reference will be made to the mother-child relation, little will be said of the father-child relation; *his value as the economic and emotional support of the mother will be assumed*' (*Bowlby*, 1951, p. 13; present author's italics).

Attachment Theory

Attachment theory holds that the human infant is biologically or genetically biased so as to emit certain behaviors (attachment behaviors) which have as their predictable outcome, the attainment or maintenance of proximity to the attachment object (Bowlby, 1969; Lamb, 1974). Whether or not Bowlby is correct in assuming that the infant is preprogrammed to seek proximity to a protective person, however, there is little reason why this should necessarily be the infant's mother. Although Bowlby (1969) has suggested that there are hormonal factors which predispose a mother to act maternally, there is little evidence that this is true. Bowlby recognizes this, since he argues that the mother to whom the infant becomes attached need not be the biological mother. The selection of the infant's attachment figure is determined instead by the extent of the infant's exposure to various adults. The deficiencies in this argument will be discussed in the section on *The Availability Hypothesis*.

Cognitive-Developmental Perspectives

The widespread belief in the primary importance of the mother-child relationship is shared not only by social-learning and attachment theorists, but by cognitive developmentalists as well. Kohlberg, for example, states 'the boy's affectional tie to his mother is deep, and it takes some time before the boy's self-conceptual or sex-role identity considerations can lead him to subordinate it to the development of a tie to the father' (Kohlberg, 1966, p. 135). According to Kohlberg, the relationship with the father is formed between 4 and 8 years of age (Kohlberg and Zigler, 1967). Similar assumptions are made by Parsons and Bales (1955) and Mowrer (1950): 'The first identification infants make with mother figures is undifferentiated ... it is only at a later stage, presumably, that the child becomes aware of the partition of mankind into two sexes; and it is then that the father, who has played a somewhat subsidiary role up to this point, normally comes forward as the boy's special mentor, guide, and model' (Mowrer, 1950, pp. 607-608). The implication is that for the young girl, her father remains a shadowy, subsidiary, and presumably irrelevant entity in her socialization.

The Secondary Drive Theory

In earlier years, additional support for the 'natural' preeminence of the mother as a socialization agent would be drawn from the secondary drive hypothesis. This lay at the root of Freud's notions of the mother's importance, and was also basic to learning theory expositions (Ainsworth, 1969; Bijou and Baer, 1961; Maccoby and Masters, 1970). This notion, in brief, proposed that the child became attached to his mother because she was the person who fed him and satisfied his basic needs: in learning theory terms, an associative bond was formed between the pleasurable sensation of need gratification and the person of the mother. This theory, which emphasized the feeding situation, was

discredited when *Harlow* (1961; *Harlow and Zimmerman*, 1959,) demonstrated that infant monkeys preferred to cling to, and derived comfort from, a terry-cloth mother surrogate rather than a wire surrogate that fed them.

The Availability Hypothesis

More recently, social learning theorists (*Gewirtz*, 1972) and implicitly, too, *Bowlby* and *Ainsworth*, have assumed that the mother is the most important person in the infant's life because she spends the most time with him. Actually, the conflicting evidence on the effects of day care on mother-infant attachment (*Fein and Clarke-Stewart*, 1973) suggests that duration of time in proximity may be a poor index of the security of the infant's attachment to either parent. *Pederson and Robson* (1969) found a negligible correlation between the amount of time the fathers spent in play and the degree of infant attachment as determined by reported intensity of greeting behavior. Likewise, *Schaffer and Emerson* (1964) found that the amount of time that a mother spent with her child was uncorrelated with the intensity of the child's attachment to her.

In addition, there is little known about the amount of time mothers and fathers actually interact with their infants. A study by *Pederson and Robson* (1969) based on maternal reports, indicated that fathers spent, on average, 8 h/week in play with their infants (aged 8–9 months).² In a far more extensive study, unfortunately also reliant on maternal reports, the *Newsons* (1963, 1968) found that with 1-year-olds, 52 % of the fathers were highly participant, while 27 % took a moderate share in the care of their babies. With 4-year-olds, 51 % of the fathers were highly participant, and 40 % were moderately participant. 'A highly participant father is usually described as one who will do anything for the children' (*Newson and Newson*, 1965, p. 137) whereas 'a moderately participant father is one who in general is prepared to help with the children if he is asked or in an emergency, but who does not do a great deal as a matter of course' (p. 138). Play with the infants was excluded from this categorization, since 99 % of the fathers played with their children. Thus there is clear evidence that most fathers are highly accessible to their offspring when in the home.

Clarke-Stewart's (1972) findings make abundantly clear, too, that the amount of interaction between the infant and his mother should not be exaggerated. Play with, object stimulation by, and affectionate contact with the mother each accounted for 5 % or less of the infant's waking day. While mothers

² Another oft-cited study (*Rebelsky and Hanks*, 1971) suggested that fathers spent an average of only 37 sec/day talking to their infants in the first quarter-year of life. *Bronfenbrenner* (personal commun.), however, has pointed out that the data provided indicate that there were errors in the computation of this average. In addition, the sample was small and the data itself questionable. Further, the data at best refer only to the extent of vocal interaction. It is quite possible that further nonvocal interaction took place. Finally, we do not know to what extent the fathers were inhibited by the microphone worn by the infants.

spend a great deal of time in the same room as their infants, interaction is surprisingly limited.

One must also bear in mind the affective quality of the infant's interaction with each parent — the opportunity for brief yet highly emotionally charged interaction with the father each evening may offset the longer hours spent with a harrassed and dissatisfied mother during the day (*Birnbaum, 1971; Yarrow et al., 1962*). Just as 'it is possible that the nonworking mother spends relatively little time in direct positive interaction with her child, and thus the working mother's deliberate efforts might end up in more positive interaction time' (*L. Hoffman, 1974, p. 214*), it is possible that fathers may be making the same deliberate efforts.

The availability hypothesis is deficient, then, insofar as it fails to take into account the fact which these theorists all emphasize in other contexts, namely that the important variable is not so much the amount of time spent together, but the sensitivity of the adult and infant to one another's behavioral signals (*Ainsworth et al., 1974*), and the quality of the interaction. If the frequent extended daily separations involved in day care cannot be shown to affect the mother-child attachment, it is unreasonable to assume that the daily separations from the father are inimical to the development of an infant-father relationship if the working father does avail himself of the opportunities to interact in the evenings.

Summary

Thus most of the evidence indicates that the availability hypothesis is not sufficient to explain the hypothesized preeminence of mothers as attachment figures and socializing agents. None of the reasons set forth above amount to adequate justification for the almost universal emphasis on mother-infant relations. Before fathers can safely be ignored, as far as research on infancy is concerned, it must be established that they are necessarily less adequate, or secondary, attachment figures, as *Bowlby (1969)* believes.

Studies of Fathers and Infants

Recently, *Greenberg and Morris (1974)* have reported, on the basis of the self-reports of the fathers of newborns, that the birth of a child has a profound impact on most fathers. The fathers reported positive attitudes towards the neonates, and an awareness of a bond and of the personality and individuality of the infant. The implication is that the newborn has an impact on both parents, not solely on the mother, and that there is every likelihood that both parents will become salient social objects, drawn to interact with and care for the newest member of the family system.