CHILDREN OF HOMOSEXUALS MORE APT TO BE HOMOSEXUALS? A REPLY TO MORRISON AND TO CAMERON BASED ON AN EXAMINATION OF MULTIPLE SOURCES OF DATA

WALTER R. SCHUMM

Kansas State University, Manhattan, KS, USA

Summary. Ten narrative studies involving family histories of 262 children of gay fathers and lesbian mothers were evaluated statistically in response to Morrison’s (2007) concerns about Cameron’s (2006) research that had involved three narrative studies. Despite numerous attempts to bias the results in favour of the null hypothesis and allowing for up to 20 (of 63, 32%) coding errors, Cameron’s (2006) hypothesis that gay and lesbian parents would be more likely to have gay, lesbian, bisexual or unsure (of sexual orientation) sons and daughters was confirmed. Percentages of children of gay and lesbian parents who adopted non-heterosexual identities ranged between 16% and 57%, with odds ratios of 1.7 to 12.1, depending on the mix of child and parent genders. Daughters of lesbian mothers were most likely (33% to 57%; odds ratios from 4.5 to 12.1) to report non-heterosexual identities. Data from ethnographic sources and from previous studies on gay and lesbian parenting were re-examined and found to support the hypothesis that social and parental influences may influence the expression of non-heterosexual identities and/or behaviour. Thus, evidence is presented from three different sources, contrary to most previous scientific opinion, even most previous scientific consensus, that suggests intergenerational transfer of sexual orientation can occur at statistically significant and substantial rates, especially for female parents or female children. In some analyses for sons, intergenerational transfer was not significant. Further research is needed with respect to pathways by which intergenerational transfer of sexual orientation may occur. The results confirm an evolving tendency among scholars to cite the possibility of some degree of intergenerational crossover of sexual orientation.

Introduction

Cameron (2006) presented data from three sources of popular literature (Howey & Samuels, 2000; Gottlieb, 2003; Garner, 2005) concerning the important question of
the extent to which children of gay or lesbian parents would tend to adopt a homosexual orientation or preference themselves. In spite of Cameron’s (1999, 2006) evidence, as well as the cautious support of Stacey & Biblarz (2001), the question remains controversial. For example, Garner (2005, p. 169) argued that ‘Children of gay parents are no more or less likely to be gay than any other children.’ In fact, Garner (p. 169) considers the idea that gay people ‘will raise their children to be gay’ as a prejudiced, and presumably unwarranted, assumption. Rekers & Kilgus (2002) reviewed literature on homosexual parenting and, despite citing numerous methodological concerns, acknowledged that most scholars had reported little or no evidence for intergenerational transfer of sexual orientation. Schumm (2005, 2008) reviewed over 50 previous reviews of the literature on homosexual parenting and found nearly all of them claiming that homosexual parenting had no effects at all, not even with respect to sexual orientation of children, much less any other outcome.

Cameron (2006) was subsequently criticized by Morrison (2007) for not including two other books (Saffron, 1997; Rosier & Hauschild, 1999) that concerned the children of gay or lesbian parents. In fact, Cameron also missed another popular book (Rafkin, 1990) on gay parenting, mentioned by Rosier & Hauschild (1999, p. 8), as well as Asten (1997), Drucker (1998), Gillespie (1999) and Boenke (1999, 2003). Morrison also noted, correctly, that non-random samples may not be representative of gays and lesbians in general. While analysis of seven other popular sources may not improve generalizability, it may allow a more thorough test of the hypothesis of intergenerational transfer of sexual orientation. Finally, I would argue that we can do better than merely reviewing ‘books on gay parents’ and finding ‘that some of the adult children interviewed were non-heterosexual,’ (Morrison, 2007, p. 154); it is possible to evaluate the matter statistically. The authors of these ten books have done important data collection for the entire scientific community. While their samples may not be random, they may be no worse than the convenience and snowball samples used in much of previous research with gay and lesbian parents; certainly, their combined dataset is far larger than many of the early studies on gay and lesbian parenting (Schumm, 2005, 2008).

Garner (2005, p. 169) argued that, ‘Many are relieved to hear that contrary to what anti-gay rhetoric would like everyone to believe, their children will not automatically grow up to be gay.’ Garner further argues that the rights of gay parents should not depend on their propensity to produce heterosexual children, an important issue, but not the focus of this analysis. Many of the other authors also rejected Cameron’s (2006) hypothesis that gay and lesbian parents would be more likely to raise homosexual children. Drucker (1998, p. 240) acknowledged that, ‘A number of both parents and children express concern that the children may be gay or lesbian,’ only to reassure us that ‘The older teens and the adult children have generally come to believe that their own sexual orientation is not a product of their parents’ homosexuality.’ Gottlieb noted that only two of the twelve (17%) sons of gay fathers turned out to be gay themselves (2003, p. 156). Saffron (1997, p. 203) reports that, ‘The studies done so far indicate that lesbian and gay parents are not more likely to produce more lesbian and gay children than heterosexual parents.’ She admits, however, that ‘the conclusion from these studies is still uncertain,’ (p. 203).
Clearly, the question of the impact of a parent’s sexual orientation is important. Just as clearly, at least some of the authors of ten popular narratives on the lives of the children of gay and lesbian parents have dismissed any notion that the null hypothesis had ever been, or ever would be, rejected scientifically. Garner (2005, p. 176) quotes a gay male named Dan as saying, ‘Gay people, of all people, should know it’s not something we choose.’ In other words, socialization is assumed to have nothing at all to do with one’s sexual orientation (although his statement does not rule out a genetic influence). Thus, it is of particular interest what these authors’ own narratives might tell us, if examined systematically and evaluated statistically, because many of the authors and their participants reject any notion that parental sexual orientation could have any influence on a child’s sexual orientation.

Social science claims

The book authors’ claims have been substantiated by claims from numerous social scientists. An idea commonly reported by social scientists is that intergenerational transfer of sexual orientation does not occur. Gottman (1989, p. 190) concluded from her own research that there was ‘no evidence to suggest that daughters of lesbian mothers became homosexual themselves’ and from her review of literature that parental sexual orientation did not influence children’s sexual orientation directly or indirectly (p. 191). As part of his discussion of the myth that being exposed to a homosexual parent might have adverse effects on a child, Herek (1991) indicated that, ‘Researchers similarly have not observed differences between children from gay and heterosexual households in development of sexual orientation,’ (p. 159) and that ‘nor does [having a gay male or lesbian role model] influence the sexual orientation eventually adopted by a child,’ (p. 161). Likewise, Falk (1994) stated that, ‘The second assumption with respect to gender or sexual development, and perhaps the most uniformly cited assumption, is that the child will be more likely to become homosexual than a child raised by heterosexual parents,’ (p. 136). She noted a court decision in which it was argued that ‘there is substantial consensus among experts that being raised by a homosexual parent does not increase the likelihood that a child will become homosexual’, (p. 136). Patterson (1995, p. 265) stated that, ‘Research to date gives no evidence to support the view that having non-heterosexual parents predisposes a child to become lesbian or gay’; later she echoed the same claim, ‘There is no reason to believe that the offspring of lesbian or gay parents are any more likely than those of heterosexual parents to become lesbian or gay themselves’ (Patterson, 1996, p. 287), an argument reiterated more recently (Patterson, 2006).

McNeill (1998, p. 23) argued that ‘there is extensive evidence that children of homosexuals are no more likely to become homosexual themselves as a consequence of the parent’s sexual orientation.’ Fitzgerald (1999, p. 63) italicized her following comment in its entirety to highlight its importance: ‘Specifically, the incidence of homosexuality is no higher if one is raised by a gay or lesbian parent, than if one is raised by a heterosexual parent.’ Armesto (2002, p. 74) reported that children of lebigay parents did not differ from children of heterosexual parents in terms of sexual orientation, among other outcomes. Ball (2003) challenged Stacey & Biblarz’s (2001) conclusion that intergenerational transfer of sexual orientation might occur, citing
that conclusion as essentially unfounded and, thus, ‘both useless and dangerous’ (p. 703). Patterson (2005, p. 10) claims that, ‘Taken together, the data do not suggest elevated rates of homosexuality among the offspring of lesbian or gay parents.’ Fisher et al. (2008) reviewed the literature and found no evidence for any greater prevalence of LGB orientation among children of LGB parents. Rimalower & Caty (2009, p. 27) reviewed the literature and concluded that the children of same-sex parents were not more likely to experience even more same-sex romantic attraction, much less same-sex sexual orientation or behaviour, than children of heterosexual parents. It is clear that the standard ‘scientific’ answer for the past twenty years is little or no intergenerational transfer of sexual orientation.

Legal implications

McNeill (1998, p. 11) observed that courts often denied parents custody of children because of a belief that, ‘Their children are more likely to become gay or lesbian themselves.’ Clearly, McNeill disagreed with that belief of the courts but admitted indirectly that it was indeed a widespread public belief. Likewise, Patterson (1995, p. 259) said that, ‘Judges may fear that children will themselves grow up to be lesbian or gay, an outcome that they generally view as negative.’ Cameron (1999, p. 290) is even cited by critics as agreeing with the ‘common sense’ notion that parents influence children, even in the area of sexual orientation (Hicks, 2005, p. 162). Patterson et al. (2002, p. 177) expressed concern that some US states had adopted antigay adoption statutes, an indication presumably of at least some public sentiments. Elovitz (1995) argued that all restrictions on gays and lesbians in the courts were based entirely on prejudice because social science research was ‘remarkable’ in, among other things, showing no indication that the ‘children of lesbian and gay parents... were likely to become gay or lesbian themselves,’ (p. 177). In other words, the public, the courts, and the legislatures were wrong, biased and prejudiced, refusing to recognize what social science had allegedly proven.

Recent questioning of social science claims

In spite of the apparent consensus among the authors of the ten books and among many scholars, some scholars, as early as 1995, began to question the null hypothesis regarding intergenerational transfer of sexual orientation. Baumrind (1995, p. 134) stated that:

Bailey et al. (1995, as well as Patterson, 1992) concluded that the children of gay men and lesbians are not more likely than children of heterosexuals to adopt a homosexual orientation. I question their conclusion on theoretical and empirical grounds. Theoretically, one might expect children to identify with lifestyle features of their gay and lesbian parents. One might also expect gay and lesbian parents to be supportive rather than condemnatory of their child’s non-normative sexual orientation.

Whether the percentage of gay and lesbian offspring differs depending on the parents’ sexual orientation is open to debate, and a final conclusion must await more extensive research. Second, children of lesbian parents appear to be more open to same-sex sexual experiences.

Patterson (2004), apparently deviating from her later (2006) stance, stated that rates of non-heterosexuality observed among sons of gay fathers might be elevated over base rates for heterosexual parents but that, ‘At this time, the data do not allow unambiguous interpretation on this point,’ (p. 409). Herek (2006) noted that parental influence on children’s sexual orientation is sometimes discussed but its relevance ‘to policy is dubious because homosexuality is neither an illness nor a disability, and the mental health professions do not regard a homosexual or bisexual orientation as harmful, undesirable, or requiring intervention or prevention,’ (p. 613). He also claimed, while some ‘theorists have suggested it would be surprising if no association existed between the sexual orientation of parents and that of their children (e.g. Baumrind, 1995; Stacey & Biblarz, 2001),’ empirical data on the association between parental and child sexual orientation were ‘limited’ (p. 613). Redding (2008) reviewed the literature and found evidence across several studies that children (particularly girls) raised by lesbigay parents were ‘somewhat more likely to experience homoerotic attraction and homosexual relationships,’ (p. 150), though he discounted its relevance for public policy. Most recently, Biblarz & Stacey (2010) revisited the issue, citing an unpublished report by Bos et al. (2006) in which the Dutch researchers had compared 64 children from planned lesbian families and 68 children from heterosexual families (ages 8 to 12), finding an effect size of 0.15 (ns) for sons and 0.74 (p<0.05) for daughters.

Even Burroway (2006), who severely criticized JBS for publishing Cameron (2006), admitted that the hypothesis might be true when he said:

In fact, whether your preferred theory of homosexuality is based on biology, genetics, psychoanalysis, beliefs, or any combination of these, all of these theories can explain a higher incidence of homosexuality in the children of LGBT parents. When you think about it, it would be very strange if there were no statistical differences in the sexual orientation of adult children of gay parents when compared to those of heterosexual parents. No one has been able to prove that there is no difference, although so far the differences don’t appear to be large [citing Stacey & Biblarz, 2001].

Thus, it appears that the scientific consensus against intergenerational transfer of sexual orientation may have begun to evolve, at least slightly, from ‘myth’ with no evidence (1991–1996) to theoretically plausible but little evidence (1995–2001) to some, ambiguous evidence (2004) to limited but irrelevant evidence (2006–2008).

**Hypotheses**

**Hypothesis one**

While Cameron (2006) argued in favour of the intergenerational transfer of sexual orientation, he offered no statistical evidence to support his argument. Morrison (2007) was right to question Cameron’s argument, especially since that argument was not supported with statistical evaluations. If it is assumed, rather generously, that 10% of the children of heterosexual parents might become gay or lesbian in their
sexual orientation, the results found in the ten books can be compared statistically with an equivalent size artificial sample of heterosexuals, using a chi-squared test and odds ratios for comparison purposes.

Hypothesis two

A reviewer of an earlier draft of this report suggested that the data be analysed at the family level in addition to the individual level. Here the hypothesis was keyed to gender of child and of parent: within families, would female children or mothers be more likely to have higher rates of intergenerational transfer of sexual orientation for at least one child? If gay or lesbian parents had a male and a female child, would daughters be more likely to model their sexual orientation after their lesbian mother and sons after their gay father?

Methods

Sample

Ten books that concerned the children of gay, lesbian or transsexual parents were reviewed, including the three books previously analysed by Cameron (2006) and the two recommended by Morrison (2007). Each of the 277 children discussed in the ten books was assessed by name, gender, age and sexual orientation of parent(s). However, on a reviewer’s recommendation, no transgender parents or children (N=15) were included in the following analyses, leaving N=262. Evidence for each child’s sexual orientation was identified by quotations in most cases; in a few cases by the narrative, as indicated by specific pages in each book. When no mention was made regarding a child’s sexual orientation, it was coded as heterosexual (N=122 cases), in order to minimize the risk of overestimating the percentage of gay or lesbian children. This was a conservative decision from a statistical perspective because Garner (2005, pp. 171–175) notes that many gay children conceal their sexual orientation in order to avoid the public connecting their own and their parent’s sexual orientations. This decision influenced the coding. Jesse, age 30, ‘is adamant about not declaring his sexual orientation at all,’ (Garner, 2005, p. 173). As his sexual orientation was not mentioned, he was coded as heterosexual; however, the context implied he was gay, which is how Cameron (2006, p. 417) apparently coded his sexual orientation. Sexual orientation was coded as heterosexual, homosexual, bisexual and unsure with the latter three categories being collapsed to form a heterosexual versus non-heterosexual contrast. That contrast reflects Patterson’s (1992) admission that many people are not only concerned about the children of homosexuals becoming homosexuals per se but also about their being confused or unsure of their sexual orientation (as noted by Gottlieb, 2003, p. 156). Likewise, all children of unstated sexual orientation were coded as heterosexual regardless of age, even though none of the children under seven years of age (N=34) reported anything other than a heterosexual (or unstated) sexual orientation. Inter-rater reliability was assessed by having a graduate student of diverse gender and race from the author code the 262 children’s sexual orientations; although
she agreed on the heterosexual codings, she disagreed on two of the 63 non-
heterosexual ratings (61/63=96.8% agreement).

In addition, for comparison purposes, a simulated database of 280 heterosexual
parents, divided evenly between mothers and fathers with male and female
children, was created, with 10% homosexual children. Laumann et al. (1994, p. 295) found that
when asked anonymously, no more than 9.1% of men and 4.3% of women said they
had ever had any kind of same-gender sexual contact since puberty; percentages for
same-gender sexual attraction were under 8% for men and women while self-
identification rates as gay or lesbian were 2.8% and 1.4% (p. 293). Only 10.1% of men
and 8.6% of women reported adult same-sex sexual attraction, identity or behaviour
(p. 299). Combining Laumann et al.’s (1994) data with General Social Survey (GSS)
data, Black et al. (2000, p. 142) found that no more than 4.7% of men and 3.6% of
women had at least one same-sex partner since age 18. Sirotta (1997, p. 70) in her
study of 67 daughters of heterosexual fathers only found two (3%) daughters to have
developed a non-heterosexual sexual preference. Assuming that 10% of the children
of heterosexuals would develop non-heterosexual identity, attraction or behaviour is
generous in the direction suitable for disproving the hypothesis; it could easily be
argued that assuming 5% non-heterosexual preference or less would have been quite
adequate for testing the hypothesis.

To evaluate the second hypothesis, a second database was created using
family-level data from the same ten books. In addition to the sexual orientation of the
parents, families were coded in terms of the reported number of sons and daughters
in each family and whether the family included gay sons or lesbian daughters. Data
were also coded in terms of whether or not all children were over 15 years of age,
based on research that indicates that many children only become aware of a GLBT
sexual orientation at puberty (Connolly, 2006, p. 8), if not later in life (Cohler, 2006,
p. 26).

Analyses

To evaluate hypothesis one, the percentages of children identified as gay or lesbian
were compared across the actual and the simulated databases, using odds ratios to
compare the odds of a child becoming gay or lesbian as a function of their parent’s
sexual orientation. Odds ratios were examined, also, as a function of the gender of the
child, the gender of the parent, and the combination of parent and child gender. Controls
were also applied for the clarity of evidence about the child’s sexual
orientation and child’s age. Concerns about the independence of the data (i.e. some
children were siblings, from the same family) were addressed indirectly by using
family-level analysis in the second hypothesis and by using conservative two-tailed
tests even though the expected direction of effect was one-tailed.

Finally, to assess the robustness of the comparisons, it was assumed that 20 errors
had been made incorrectly classifying heterosexual children as gay or lesbian and the
odds ratio was reassessed. For purposes of assessing substantive, as well as statistical
significance, it was assumed that odds ratios of between 1.50 and 2.00 or greater
would indicate a noteworthy increased probability of child sexual orientation as a
function of parental sexual orientation.
To assess the second hypothesis, gender comparisons were made using percentage cross-tabulations and chi-squared tests. All statistical analyses were computed using SPSS (Norusis, 2004, 2006). Unless otherwise specified, all chi-squared tests reported involved only one degree of freedom.

**Results**

*Descriptive results*

Data were coded for 262 children of gay fathers or lesbian mothers. Of those 262 children, 63 were coded as non-heterosexual (homosexual, 22; bisexual, 26; unsure of sexual orientation, 15). Of the 262 children, 140 (53.4%) included relatively clear evidence of their sexual orientation; all of the unclear assignments were coded as heterosexual, though it is quite likely that some of them were not heterosexuals. One hundred and five daughters and 63 sons had lesbian mothers; 38 daughters and 39 sons had gay fathers; and 8 daughters and 9 sons had both a gay father and a lesbian mother.

The average age of the children of the gay and lesbian parents was 18.8 years (SD=10.5 years) with a median age of 19 years (eight cases had missing data on age). Male children were slightly older (mean=19.7 years, SD=12.0 years) than female children (mean=18.1 years, SD=9.3 years) but the difference was not statistically significant by an independent samples *t*-test. A Levene test indicated significant (*p*<0.001) heterogeneity of variance in ages among heterosexual, homosexual, bisexual and unsure children (*F*(3, 510)=8.88). The difference in age by child’s sexual orientation was significant (*p*<0.001), using the Welch test (*F*(3, 41.8)=32.2): heterosexuals (mean=17.3, SD=10.5), homosexuals (mean=27.3, SD=8.8), bisexuals (mean=23.9, SD=6.2) and unsure (mean=15.9, SD=11.1). The differences in ages for heterosexuals versus homosexuals and bisexuals were significant (*p*<0.05) by Scheffe tests, as was the difference between homosexuals and those unsure. The unsure were significantly different (*p*<0.05) from bisexuals by the LSD test but not when using the more statistically conservative Scheffe test.

*Hypothesis one*

When comparing all children, those children who had both a gay father and a lesbian mother were included. There were eighteen children who had mutually homosexual parents, of whom four (22.2%) were not heterosexual. The difference in percentages of non-heterosexual children was not significant across homosexual parent gender (lesbian mother, 26.9%, 46/171; gay father, 19.3%, 16/83). When comparing children on the basis of each parental gender, the children of mutually homosexual parents were omitted from the analyses. The results of the analyses of parental versus child sexual orientation are presented in Table 1 for all children and as a function of both parental and child gender, separately and combined. Results are presented for all children and for only those children who provided clear evidence regarding their own sexual orientation.
As a check on the robustness of the data, an error rate of \(N=20\) was assumed in classifying children incorrectly, but the resulting odds ratio of 1.77 (16.4%, 43/262) remained significant statistically \((p<0.03)\) (compared to 10%, 28/280). Using only the best data, a higher odds ratio of 3.99 \((p<0.001)\) (30.7%, 43/140) was obtained.

**Hypothesis two**

The objective of the second hypothesis was to examine, at the family level rather than the individual level of the child, indications of non-heterosexuality as a function of parental gender, child gender and the interaction of parental and child gender. Controls were used for age of child (age 16 or older) and clarity (specified/not specified) of evidence regarding children’s sexual orientation. Results are presented in Table 2.

**Gender of parent**

When data were collapsed into 218 families, 31.9% (43/135) of the families of lesbian mothers, 19.4% (12/62) of the families of gay fathers, and 25.0% (3/12) of the

---

**Table 1.** Odds ratios predicting child’s sexual orientation status from parental sexual orientation using a simulated comparison group of heterosexual parents

<table>
<thead>
<tr>
<th>Group</th>
<th>Child gender</th>
<th>Parent gender</th>
<th>Parent heterosexual</th>
<th>Parent not heterosexual</th>
<th>Odds ratio</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td>24.0</td>
<td>2.85</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL children*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td>45.0</td>
<td>7.36</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL children</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td>16.2</td>
<td>1.74</td>
<td>&lt;0.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL children*</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td>29.8</td>
<td>3.82</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL children</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td>30.5</td>
<td>3.95</td>
<td>&lt;0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL children*</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0</td>
<td>55.6</td>
<td>11.25</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All significant tests reported are two-tailed, even though the direction of effect was specified in advance.

*Using only children for whom evidence of sexual orientation was clearly discussed.

As a check on the robustness of the data, an error rate of \(N=20\) was assumed in classifying children incorrectly, but the resulting odds ratio of 1.77 (16.4%, 43/262) remained significant statistically \((p<0.03)\) (compared to 10%, 28/280). Using only the best data, a higher odds ratio of 3.99 \((p<0.001)\) (30.7%, 43/140) was obtained.

Hypothesis two

The objective of the second hypothesis was to examine, at the family level rather than the individual level of the child, indications of non-heterosexuality as a function of parental gender, child gender and the interaction of parental and child gender. Controls were used for age of child (age 16 or older) and clarity (specified/not specified) of evidence regarding children’s sexual orientation. Results are presented in Table 2.

Gender of parent

When data were collapsed into 218 families, 31.9% (43/135) of the families of lesbian mothers, 19.4% (12/62) of the families of gay fathers, and 25.0% (3/12) of the
families of both a gay father and a lesbian mother indicated a non-heterosexual child. When the evidence was clear for children’s sexual orientation, 57.3% (43/75) of the families of lesbian mothers and 34.3% (12/35) of the families of gay fathers included a non-heterosexual child. When the analyses were restricted to children older than 15 years of age, 46.7% (35/75) of the families of lesbian mothers and 22.4% (11/49) of the families of gay fathers included a non-heterosexual child. When the analyses were restricted to both older age and clear evidence, 58.3% (35/60) of the families of lesbian mothers and 33.3% (11/33) of the families of gay fathers included a non-heterosexual child. In all of the previous analyses, families of lesbian mothers were more likely to include a non-heterosexual child than were families of gay fathers (Table 2).

### Gender of child

When families with only all male or only female children were examined, 29.0% (27/93) of the only female children families and 11.3% (8/71) of the only male children families included a non-heterosexual child. Corresponding percentages for families restricted to children over age 15 were 38.3% (23/60) and 15.9% (7/44); for families restricted to children with unequivocal evidence of sexual orientation, 55.1% (27/49) and 21.6% (8/37); with both restrictions applied, 57.5% (23/40) and 21.2% (7/33). In all cases, families with only female children were significantly more likely to include a non-heterosexual child than were families with only male children (Table 2).

### Gender of parent and of child

Limiting the analyses to families with only female or only male children reduced the sample size and statistical power considerably; therefore, significance levels

<table>
<thead>
<tr>
<th>Parent gender</th>
<th>Child gender</th>
<th>Children not heterosexual</th>
<th>Older children not heterosexual</th>
<th>Children not heterosexual, clear evidence</th>
<th>Older children not heterosexual, clear evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>31.9†</td>
<td>46.7**</td>
<td>57.3**</td>
<td>58.3*</td>
</tr>
<tr>
<td>Female</td>
<td>Male</td>
<td>11.3</td>
<td>15.9</td>
<td>21.6</td>
<td>21.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>29.0**</td>
<td>38.3*</td>
<td>55.1**</td>
<td>57.5**</td>
</tr>
<tr>
<td>Male</td>
<td>Male</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Female</td>
<td>Male</td>
<td>28.0**</td>
<td>31.8*</td>
<td>53.8**</td>
<td>58.3**</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>17.1</td>
<td>30.0</td>
<td>36.8</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>30.5†</td>
<td>45.2</td>
<td>60.0+</td>
<td>60.9</td>
</tr>
</tbody>
</table>

Note: All percentage differences associated with gender were evaluated with one-sided Fisher Exact tests.

†p<0.10; *p<0.05; **p<0.01.
obtained from one-sided Fisher’s Exact tests are reported hereafter and results for \( p < 0.10 \) are also reported. Twenty-eight per cent (7/25) of the daughters from families of gay fathers were non-heterosexual compared with none (0/22) of the sons from families of gay fathers \( (p < 0.01) \). For families of lesbian mothers, the corresponding percentages were 30.5\% (18/59) and 17.1\% (7/41) \( (p < 0.10) \). When only clear evidence was used, 53.8\% (7/13) of the daughters of gay fathers compared with none (0/11) of the sons of gay fathers were non-heterosexual \( (p < 0.01) \); the corresponding percentages for lesbian families were 60.0\% (18/30) and 36.8\% (7/19) \( (p < 0.10) \). When only data from children over age 15 were used, the corresponding percentages were 31.8\% (7/22), 45.2\% (14/31) and 30.0\% (6/20) \( (p < 0.02, \text{ for gay father families only}) \). Applying both restrictions yielded percentages of 58.3\% (7/12), 60.9\% (14/23) and 40.0\% (6/15) \( (p < 0.005, \text{ gay father families only}) \). Although families with daughters were consistently more likely to have a non-heterosexual child, the gender differences were only significant statistically for families with a gay father.

**Gender-mixed families**

When there was exactly one male and one female child in a family and no more than one child was non-heterosexual \( (n=30, 9 \text{ gay fathers, 21 \text{ lesbian mothers}}) \), 33.3\% of both types of families (gay father, lesbian mother) had one non-heterosexual child; notably, all of the non-heterosexual children were of the same gender as their non-heterosexual parent, an unlikely outcome \( (p < 0.01) \). The percentage rate of non-heterosexuality in those 30 families was significantly higher than expected had they been compared with 30 heterosexual families with a 10\% rate of non-heterosexual children \( (p < 0.05) \). Two other lesbian-led families with one son and one daughter featured both children being non-heterosexual. Aside from the gender-mixed families with two children, there was one family that included two boys and two girls of a lesbian mother, with one son being gay. Therefore, of the 24 lesbian mother families with equal numbers of children, 41.7\% (10/24) included at least one non-heterosexual child and 8.3\% (2/24) included two non-heterosexual children.

A reviewer suggested analysing the data for only those children age 25 years or older, assuming that sexual orientation would be more certain by then, and only for children based on their ‘final’ orientation (i.e. if they had been LGB but were now heterosexual). Doing so yielded a sample of 94 children of whom 33.0\% were non-heterosexual \( (p < 0.001) \), including 43 sons and 51 daughters of whom 25.6\% \( (p < 0.05) \) and 39.2\% \( (p < 0.001) \), respectively, were non-heterosexual. In contrast to a comparison sample of 120 children, evenly divided by parent and child gender, with 10\% being LGB, all three comparisons were significant \( (p < 0.05) \) by one-sided Fisher’s Exact tests. The strongest influence occurred for daughters of lesbians \( (15/31, 48.4\%, p < 0.002) \). Eliminating the heterosexual cases that had merely been assumed to be heterosexual yielded stronger results, 44.9\% non-heterosexual \( (p < 0.001) \) for all 69 children, 55.6\% for daughters of both gay fathers \( (5/9, p < 0.01) \) and lesbians \( (15/27, p < 0.001) \) and 33.3\% \( (11/33, p < 0.01) \) for sons of gay fathers and lesbian mothers combined.

Examining the children from gay father families in more detail, there were 22 families with one daughter (seven were non-heterosexual), 3 with two daughters,
16 with one son, 3 with one son and two daughters (one lesbian daughter), 9 with one son and one daughter (3 gay sons), 5 with two sons, 3 with two sons and one daughter (one gay son), and one family with three sons. The only gay father families with gay sons were families that included both sons and daughters.

**Discussion**

The consensus among the authors of the ten books and among most scholars was remarkable as to the lack of any expected relationship between parental and offspring sexual orientation. Saffron (1997), for example, after her conversations with each of these children and her review of published research, concluded that, ‘The studies done so far indicate that lesbian and gay parents are not more likely to produce more lesbian and gay children than heterosexual parents,’ (p. 203). Results here differed from that previous scholarly consensus.

A total of eighteen statistical tests were performed in the analysis of hypothesis one. Only five of those tests were not significant \((p<0.05)\). All of the results for the ‘clear evidence’ subgroup, despite its smaller sample size and lower statistical power, were significant \((0.01<p<0.001)\). All of the odds ratios exceeded 1.66, regardless of their statistical significance. Odds ratios were greatest for daughters, lesbian mothers and the daughters of lesbian mothers. Even with as many as 20 coding errors, including many children too young to even have a sexual orientation, and defining at least one (and probably more) cases as heterosexual that were probably homosexual, the overall rate of child non-heterosexuality featured an odds ratio between 1.8 and over 4.0, depending on the clarity of the data, for children of gay and lesbian parents (as opposed to a hypothetical heterosexual sample).

When the data from the ten books were re-analysed at the family level, percentages of families with non-heterosexual children remained higher for families with daughters and for families led by lesbian mothers, generally confirming the results obtained from the individual-level analyses. When evidence was restricted to narratives that clearly specified the sexual orientation of daughters, a majority of such families included a non-heterosexual daughter, whether the parent was a gay father or lesbian mother. This result may challenge Tasker’s (2005, p. 233) claim that, ‘The large majority of sons and daughters of lesbian or gay parents grow up to identify as heterosexual.’

There appeared to be a tendency for children of the same gender rather than for children of the opposite gender as their gay or lesbian parent to adopt that parent’s sexual orientation. Female gender, of either parent or child, appeared to be associated with higher rates of non-heterosexual sexual orientation. Rates of intergenerational transfer appeared to be lower for gay fathers or sons of gay parents than for combinations of families with a female parent or female child.

If there is nothing morally deficient with homosexual behaviour, then the reproduction of homosexual attraction, behaviour or identity should not be a problem. For example, Falk noted that it was a ‘questionable value judgment that having a child become homosexual [was] a negative consequence,’ (p. 136). As noted previously, Herek (2006) and Redding (2008) have made similar arguments.
Other research perspectives

Since it has been argued recently that science has proven that sexual orientation is not subject to the influence of any social factors (Wilson & Rahman, 2005, p. 145), other research perspectives might be useful in corroborating a hypothesis that societal or family social factors might influence sexual orientation. After all, many types of bias could be involved in the selection and analysis of ten popular books on gay and lesbian parenting. It could be argued that between the bias of the books’ authors and bias in the interpretation and analysis of the books, little of merit might remain. Is there any other evidence to support the outcomes of the analysis of these ten books? In other words, how would the results presented here fit within the larger context of other types of research, including ethnographic research or meta-analysis of research on lesbigay parenting?

Ethnographic evidence. If sexual orientation is entirely genetic in origin, then there should be little effect of societal factors on sexual orientation. Likewise, if one assumes that the family is a microcosm of society, it would be logical to argue that if society can influence the expression of homosexual orientation, it should be possible for parents/families to do so. Broude & Greene (1976) had previously reported ethnographic data in which they had classified cultures in terms of whether homosexuality was rare or not rare and in terms of whether it was culturally accepted or not accepted. In five cases (Lepcha, Lesu, Alorese, Trukese, Pukapuka), it was not recognized as having a definition (no concept of it); in all of those cultures it was rare (not included in the analysis below). One culture accepted homosexuality but it was rare (Siriono). Eight cultures accepted homosexuality and it was not uncommon (Hottentots, Azande, Amhara, Tanala, Iban, Chukchee, Yurok, Papago). Fourteen cultures did not accept homosexuality but it was rare (Kikuyu, Mbuti, Rwala, Abkhaz, Badjau, Kwoma, Manus, Trobrianders, Marshallese, Gilyak, Kutenai, Comanche, Cuna, Nambicuara). Eleven cultures did not accept homosexuality but it was not uncommon (Mbundu, Fon, Konso, Hebrews, Babylonians, Punjabi, Burmese, Kaska, Goajiro, Haitians, Havasupai). There were three other cultures (Chiricahua, Yahgan, Lebanese) that disapproved of homosexuality but information was not provided on the extent of homosexual practice. Thus, it appears that a majority of cultures listed by Broude & Greene (1976) did not approve of homosexuality (28/37, 76%). Furthermore, of those cultures that accepted homosexuality, 89% (8/9) featured higher rates of homosexual behaviour compared to 44% (11/25) of cultures that did not approve of homosexuality (risk ratio=2.02; two-sided Fisher’s Exact test, p<0.05; r=0.40, p<0.05; odds ratio=10.2, p<0.05, two-sided). It is notable that homosexual behaviour was reported even in some cultures that were very disapproving of it. Using more recent data from two national US surveys, Butler (2005) found that respondents were more likely to report same-sex sexual partnering when they lived in areas that were more accepting of such partnering; she concluded that, ‘Changes in normative climate accounted for the increase in same-sex sexual partnering among men and for a portion of the increase among women,’ (p. 421). Therefore, it appears reasonable to conclude that sociological factors, such as general societal acceptance, could be associated with rates of expression of homosexual
behaviour and that therefore it is plausible that such effects might also operate at the family level. Such findings do not rule out genetic effects – rather they merely contradict the null hypothesis that social variables have nothing to do with expression of sexual orientation.

Previous LGB parenting research. In addition to Morrison’s (2007) concerns about the generaliseability of narrative studies, critics might ask, ‘What about all those studies that showed no intergenerational transfer?’ Data from 26 studies (Green, 1978; Miller, 1979; Rees, 1979; Bozett, 1980, 1987, 1988; Lewis, 1980; Kuba, 1981; Javaid, 1983, 1993; Harris & Turner, 1985/1986; Paul, 1986; Hays & Samuels, 1989; Huggins, 1989; Turner et al., 1990; O’Connell, 1993; Bailey et al., 1995; Cameron & Cameron, 1996; SirotA, 1997, 2009; Tasker & Golombok, 1997; Kunin, 1998; Ng, 1999; Barrett & Tasker, 2001; Bennett, 2001; Jedzinak, 2004; Canning, 2005; Goldberg, 2006, 2007; Goldberg & Sayer, 2006; Goldberg & Perry-Jenkins, 2007; Kuvalanka, 2007; Rivers et al., 2008) that considered the issue of the intergenerational transfer of sexual orientation were compiled into one database that included data from 2847 children, including 1356 males and 1318 females of 373 fathers and 2423 mothers. The data included 2197 children with heterosexual parents and 650 children with gay, lesbian or bisexual parents. Four hundred and twelve of the children were over 17 years of age. For the children of LGB parents, 20.3% were non-heterosexual in identity or behaviour compared with 4.3% of the children of heterosexual parents, yielding an odds ratio of 5.70 (p<0.001; 95% CI, 4.30 to 7.55). When age was restricted to over 17 years, the percentages were 28.0% versus 2.3% (p<0.001), yielding an odds ratio of 16.5 (p<0.001; 95% CI, 4.0 to 68.6). Intergenerational transfer appeared to be stronger for daughters (24.6% versus 3.6%; 31.4% versus 2.6% for older daughters) than for sons (14.3% versus 4.6%; 22.0% versus 0.0% for older sons), though the role of parental sexual orientation was statistically significant by two-sided Fisher’s Exact test for both daughters and sons except for the analysis for older sons. Parental gender appeared to have little influence on outcomes but interactions between parent and child gender were difficult to assess due to smaller cell counts. In consideration of an argument that some of the data came from dissertations, the percentages were 16.4% versus 4.2% for data from only journal articles and book chapters (omitting all dissertation data), yielding an odds ratio of 4.48 (p<0.001; 95% CI, 3.2 to 6.3); for children over 17, the results were 22.7% and 0.0% (p<0.02, two-sided Fisher’s Exact test; odds ratio not calculable). Thus, data from 26 previous studies, depending on the analysis, yielded substantial odds ratios, between 4.5 and 16.5, predicting child sexual orientation or behaviour from parental sexual orientation. The extreme width of some of the confidence intervals for significant odds ratios (e.g. 4.0 to 68.6) is a concern but reflects both smaller sample sizes (when age was restricted) and the large size of the odds ratio (e.g. a significant odds ratio of 5.0 cannot have such a large range of confidence intervals since a lower range below 1.0 would mean the odds ratio was not significant).

Pathways for intergenerational transfer. How might intergenerational transfer occur? The ten books reviewed do offer suggestions. For example, Rosier & Hauschild
(1999, pp. 74–75) cite their interview with the heterosexually married daughter of a lesbian mother where the daughter said:

Having a gay mother has made me aware that that option was open to me. I was aware that it wasn’t weird or bizarre and you didn’t lead a strange life because you were like that. I’ve always been pretty sure of what my sexuality was, but you do go through that experimentation time and it’s good to know you have that option. It gives you more choice. I think my mother would have liked me to be gay. There are nice women out there and I’ve had my share of crushes on women. . . .

Another daughter of a lesbian mother noted that, ‘I guess I have choices about my sexuality,’ (Rosier & Hauschild, 1999, pp. 20–21). A daughter of a gay father said, ‘I think there were points for me when I questioned my sexuality, particularly because everything at home was open and I realized that I had options,’ (Rosier & Hauschild, pp. 112–113). A heterosexual daughter of a lesbian mother noted that, ‘Because homosexuality was such a part of my upbringing, it’s not something that was foreign or mysterious or forbidden so I was always able to see that that was an option. . . .’ (Rosier & Hauschild, p. 129). Saffron (1997) admitted that, ‘Some parents actively promoted homosexuality to their children (p. 199),’ that some ‘did tease and urge their children to consider same-sex partners,’ (p. 201) and admitted that, ‘The sons and daughters I interviewed were accepting of homosexuality, open-minded about sexual diversity and often questioning of their own sexual identity,’ (p. 208). Rafkin (1990) featured a son of a lesbian mother who said, ‘We grew up with an option about our sexuality that most people didn’t have,’ (p. 165) as well as a daughter of a lesbian mother who said that, ‘I think that my mother showed me that lesbianism is a possibility,’ (p. 141). Such stories are interesting but only anecdotal; what about research?

Research on pathways. In terms of research on what gay or lesbian parents might want their children to be, Flaks (1993, p. 136; Flaks et al., 1995) noted that of the 30 lesbian mothers in his study, 20 said they had no preference for the sexual orientation of their children while ten said they would prefer their child to be heterosexual (so life would be easier for the child, fear of AIDS, and desire for grandchildren were reasons given). Among the 30 heterosexual parents, only eight said they had no preference while 22 said they would prefer their child to be heterosexual (two-sided Fisher’s Exact test, $p<0.005$; odds ratio=5.50, $p<0.004$; risk ratio=2.5). Golombok et al. (1983) reported that 70% of 27 lesbian mothers had no preference for their children’s sexual orientation while only 27% preferred that their children grow up to be heterosexual; compared with Flaks’ heterosexual parents with 27% no preference, an odds ratio of 6.53 ($p<0.002$; 95% CI, 2.06 to 20.76) would have resulted. Javaid (1993) also found that 54% of lesbian mothers would accept homosexuality in their children compared with none of his heterosexual mothers ($p<0.02$). Tasker & Golombok (1997, p. 124) assessed young adults’ perceptions of their mother’s preferred sexual orientation for them and found that 43% of children of lesbian mothers versus none of the heterosexual mothers ($p<0.0001$) thought that their parent would prefer for them to be gay or lesbian, an effect that was stronger for daughters of lesbians (56%, $p<0.001$) than for sons of lesbians (14%).
Lewis (1992) interviewed ten males and eleven females from eight lesbian families from the Boston area; she reported that, ‘Several girls thought they might turn to women if they did not have a satisfying relationship with a man. One added, “That’s what my mother did.”’ She said, in regard to her dating, if she complained to her mother about boys, “she would tell me to try girls’,’ (p. 89), a remark similar to that made by a lesbian mother in the Tasker & Golombok (1997) study, ‘Why don’t you try and see if you get on better with women?’ (p. 124). Several of the seventeen British adolescents and adults interviewed by Saffron (1998) reported their own perceived greater acceptance of same-sex attractions and behaviour; as one bisexual daughter said, ‘I have experimented sexually, and my parents have created a supportive environment for that,’ (p. 40).

The National Lesbian Family Study has followed 78 lesbian families from the birth of a child through that child’s tenth year. Among lesbian mothers of toddlers, only 28% indicated a heterosexual preference for their children while 50% had no preference (Gartrell et al., 1999). Gartrell et al. (2000) reported that only 21% of lesbian mothers hoped their 5-year-old children would become heterosexual while 65% had no preference. If compared statistically with the preferences reported by heterosexual parents by Falk (1993), both comparisons would be significant ($p<0.001$). Gartrell et al. (2005) found that some lesbian mothers (10%) thought that their 10-year-old children would become non-heterosexual, while only 37% of the lesbian mothers expected their child to become heterosexual ($p<0.002$, compared with the preferences of Flak’s heterosexual parents). Thus, it appears that lesbian mothers are far more inclined to accept, if not encourage, non-heterosexual sexual orientation among their children, especially their daughters.

Patterson et al. (1998) found that 33–42% of adult contacts with children of lesbians were LGB, suggesting a high concentration (relative to heterosexual parents) of LGB role models for such children. Partnered lesbians (25% to 34%, depending on the sample) appear to be far more likely than partnered gay fathers (2.5% to 5.2%) to have children (Carpenter & Gates, 2008); for LGB parents who want grandchildren (e.g. Rafkin, 1990, p. 85; son said that his mother ‘wants grandchildren’ and she did not encourage him to become gay) that difference in the odds of same-sex partners having a child may tend to discourage intergenerational transfer of sexual orientation for sons relative to daughters. Thus, while further research on the pathways involved in the intergenerational transfer of sexual orientation is much needed, at least five pathways seem possible: parental modelling of sexual orientation, parental preference for child’s sexual orientation, child’s greater questioning of their sexual orientation, parental desire for grandchildren, and non-parental adult modelling of sexual orientation.

Conclusion

In the foreword to Bigner (2006), Doherty observed that researchers must not be afraid to publish research that could be used or misused by political opponents, noting that, ‘If those of us who value GLBT families are not willing to ask difficult questions and follow the evidence where it leads us, you can be sure that others will
do so...’ (p. xxii). He warns against GLBT family researchers censoring credible research, even if it might not fit preconceived notions.

Here, the evidence appears to support Cameron’s (2006) hypothesis regarding the intergenerational transfer of sexual orientation, from a number of different directions, using narrative data, ethnographic data, and data from over two dozen previous studies on gay and lesbian parenting. Not only were these results statistically significant but the percentages and odds ratios indicated substantive or clinical significance. It was surprising that Cameron’s estimate of 35–47% of children of a homosexual parent becoming homosexual themselves was not as outrageous as some might have thought, given the percentages presented here, which ranged as high as 61% when data were restricted to lesbian mothers’ older daughters whose sexual orientations had been clearly discussed or reported. Results from the 26 previous studies on gay and lesbian parenting confirmed higher rates for gay and lesbian parents but at lower percentages (14–31%) than observed in the ten narrative sources. The higher rates of transfer observed for daughters of mothers may corroborate research by Bos et al. (2006) in which daughters of lesbian mothers were more likely than their sons to adopt more of a same-sex sexual orientation even before the age of 13.

Further research is needed to assess the mechanisms by which parental sexual orientation may be influencing child sexual orientation. Parental preference and modelling may play an important role, among many other possible factors. Another area of research is whether the apparent gender-linkage of transfer of sexual orientation is related to genetic or to social influences. Are women more responsive to social factors? Are genetic influences tied to (female) gender? Either possibility might account for the apparently larger intergenerational transfer observed for mothers and for daughters than was observed for fathers and for sons. This study cannot determine the relative likelihood of either possibility.

The evolution of scholarly thinking in this issue may illustrate a quote often attributed (it is debated) to the German philosopher Arthur Schopenhauer (Larson & Micheels-Cyrus, 1986, p. 244):

All truth passes through three stages.  
First, it is ridiculed.  
Second, it is violently opposed.  
Third, it is accepted as being self-evident.

Clearly, the intergenerational transfer of sexual orientation is an idea that, in the past, has been vigorously opposed, even ridiculed. However, it appears that as our scientific theory and research have improved and continue to evolve, research in this area may be moving into Schopenhauer’s third phase.

Acknowledgment

The author served as an expert witness for the State of Florida in an October 2008 trial concerning adoption by homosexual parents. Some of the material in this report was prepared in his role as an expert witness for that trial. An appeals court heard evidence on this case in August 2009 prior to the submission of the final revision for this report. As of April 2010, the case was still on appeal.
References


