

Differences Between Acceptance of Sexual Diversity and Nonheterosexual Sexual Orientation Among Children of Same-Sex Parents

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The possible effects of same-sex parenting on children's sexual attitudes and sexual orientation have been controversial. Some scholars have argued that parental influence might be greater for their children's sexual attitudes, such as greater acceptance of sexual diversity, than for their children's sexual orientations. Our review of the literature yielded nine studies of the children of same-sex parents in which both types of measures were included in measurable formats. We compared the reported percentages of both factors, using weighted and unweighted data, as well as by the use of meta-analysis. Both types of measures were positively associated ($r > .85$) across the studies while a significantly higher percentage of children reported greater

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acceptance of sexual diversity than they did for their own nonheterosexual sexual orientation. Effect sizes were substantial (> 3.0). Future research should test whether greater acceptance of sexual diversity or nontraditional gender role orientations may predispose children, especially adolescents and emerging adults, with same-sex parents, to consider, experiment with, or identify with nonheterosexual sexual orientations. Same-sex parenting may influence acceptance of sexual diversity more than sexual orientation among the children of lesbian, gay, or bisexual parents, even though the two factors were strongly correlated across our studies. More complex theories about same-sex parenting need to be developed and tested in future research.

Keywords: Same-sex parents, acceptance of sexual diversity, sexual orientation of children, family theory, meta-analysis

Stacey and Biblarz (2001) stated that “Virtually all of the published research claims to find no differences in the sexuality of children reared by lesbian parents and those raised by nongay parents. . . . Yet it is difficult to conceive of a credible theory of sexual development that would not expect the adult children of lesbian parents to display a somewhat higher incidence of homoerotic desire, behavior, or identity than children of heterosexual parents” (p. 163). Yet, they noted that “ideological pressures constrain intellectual development in this field” (p. 160) and that “the ideological ‘family values’ of scholars play a greater part than usual” (p. 161) in research. Subsequently, they were severely criticized by other scholars for that suggestion (Ball, 2003; Golombok et al., 2003; Hequembourg, 2007; Hicks, 2005). Ball (2003) went so far as to call Stacey and Biblarz’s conclusion not only essentially unfounded but “both useless and dangerous” (p. 703).

However, Rosky (2013), for example, noted that “it still seems plausible that an openly LGBT teacher” [or parent] “could facilitate a student’s becoming *queer* in the broader sense—for example, in the sense of admitting, accepting, and safely exploring one’s homosexual desires and variance from traditional gender roles” (p. 675). Rosky (2013, p. 678) further indicated some uncertainties about the issue even though he didn’t think there was enough evidence to reject the null hypothesis. Most scholars have sided with the null hypothesis, as explained in more detail elsewhere (Schumm &

Crawford, 2021a; Schumm & Crawford, 2019; Schumm, 2020a), although a recent meta-analysis of six studies found that children of same-sex parents were more likely to report lesbian, gay, or bisexual attractions, behaviors, or identities than were children of heterosexual parents (Schumm & Crawford, 2021b).

If there is no expected association between two variables, then theory development may seem less needed and may be less likely to occur. Schumm (2018, p. 134) suggested linkages might exist or develop among variables such as greater acceptance of sexual diversity and the development of sexual orientation. From our perspective, common sense might suggest that if you accept greater sexual diversity in sexual orientations in general or for others, you might be more accepting of it for yourself—and the reverse might occur as well, leading to a substantial correlation between two such variables, even at the level of group data. Since it might be easier to accept greater sexual diversity for others than for yourself, we might expect a higher rate of approval for sexual diversity in general than for a nonheterosexual sexual orientation for oneself, at both the individual level and the group level. While Stacey and Biblarz (2001) expressed their view that almost all social-psychological theories would support a somewhat higher level of nonheterosexual sexual orientation among the children of same-sex parents, other scholars have suggested that social learning theory and social constructionist theory (Goldberg et al.,

2012) or genetic and environmental theories (Gartrell et al., 2019) as specific sociological/psychological theories that would explain how parents might influence their children in the development of gender roles or sexual orientation.

Our approach would use social learning theory and environmental theory to formally explain how modeling and effects of one's environment in the home and family might influence a child's social development, including the development of their greater acceptance of sexual diversity and of their own sexual orientation. While we think both those theories would predict higher rates of those two factors that is not the key research question here. Rather, our key question here is whether/how those two factors might differ from each other in magnitude, in terms of relative percentages. It might also be reasonable to expect differences between those two variables among the children of heterosexual parents, but that is not within the scope of this report. We also expected a positive correlation between the two variables across our studies.

Research Hypotheses

Our general hypothesis involved comparing the percentages for acceptance of sexual diversity versus the percentages for nonheterosexual orientation across different studies. We expected that the children of same-sex parents would be more likely to accept greater sexual diversity than to identify as nonheterosexual, even if those two variables were positively correlated across our studies. Thus, our two hypotheses were:

*H*₁. Reports of greater openness to sexual diversity will be greater/higher than reports of nonheterosexual sexual orientation among children of same-sex parents across studies that report data on both variables.

*H*₂. Reports of greater openness to sexual diversity and reports of nonheterosexual sexual orientations will be positively correlated across our studies.

Methods

Sample

We located 59 studies that measured some aspect of children's sexual orientation, defined in terms of sexual attraction, sexual behavior, as described in detail elsewhere (Schumm & Crawford, 2021, Appendix, pp. 27–28). To the best of our knowledge, those 59 studies represent all studies, published between 1978 and 2019, that assessed the sexual orientation, in some way, in terms of percentages, of the children of same-sex parents. Nine studies, of the 59, also assessed their acceptance of greater sexual diversity, openness, or questioning in themselves or others (Paul, 1986; Javaid, 1993; Tasker & Golombok, 1995; Saffron, 1996; Sirota, 1997; Kunin, 1998; Jedzinak, 2004; Canning, 2005; Goldberg, 2007a). In three cases, the same results were reported in other sources (Golombok & Tasker, 1996; Saffron, 1998; Goldberg, 2007b), but the two publications were deemed as one research report for purposes of our analyses. Although Sirota (1997) was a dissertation, parts were later published as a refereed journal article (Sirota, 2009). Thus, only four of our nine studies have remained as unpublished dissertations. We conducted a search of Google Scholar to try to find other sources that had assessed both of our key variables for the same participants, but we did not find any additional such studies. Studies that reported having studied similar variables but that did not report their results in terms of percentages were not included in our sample of studies (see also, Schumm, 2018, pp. 113–138).

Measures

Since our first hypothesis involved comparing scores for two variables and since we expected to find significant differences, we developed our measures so as to minimize our chances of rejecting the null hypothesis, so that our approach to measurement would not bias our results in our expected direction, but rather contrarily to it. That approach meant that we attempted to maximize the percentage of LGB children, reduce the percentage of children open to sexual diversity, and to reduce sample sizes, all of which would reduce the chances of rejecting the null hypothesis of no difference between the two variables across our nine studies. For example, if daughters of same-sex parents

reported higher levels of nonheterosexual sexual orientation than did sons of same-sex parents, we would use the smaller sample of daughters and their higher level of nonheterosexual sexual orientation rather than using a larger sample of both genders. One-sample Kolmogorov-Smirnow tests of normality for our two variables yielded no significant deviations from normality ($p \geq .200$).

Study Descriptions

The data for our report are presented in Table 1, but each study is described in more detail, as follows, each study in chronological order of publication date.

Table 1

Data from Nine Studies of the Children of Same-Sex Parents

Authors	Date	N	Minimum Age	Percent	Percent LGB	Percent Open
Daughters						
Paul	1986	34	18	55.88	68.42	84.21
Javaid	1993	26	6	42.31	27.27	63.64
Golombok & Tasker	1995	25	23	68.00	36.00	56.00
Saffron	1996	15	17	73.33	46.67	75.00
Sirota	1997	67	18	100.00	34.33	69.77
Kunin	1998	47	12	51.06	21.28	44.68
Jedzinak	2004	7	18	100.00	42.86	71.43
Canning	2005	11	12	0.00	10.00	36.36
Goldberg	2007a	42	19	83.33	17.14	50.00

Paul (1986) surveyed 15 sons and 19 daughters between the ages of 18 and 28 who had LGB parents. In terms of describing their own sexual fluidity, 27/34 (79.41%) agreed that they had the potential to experience a change in their sexual orientation, a result stronger for the daughters (84.21%) than for sons (73.33%). In terms of having ever questioned their own sexual orientation,

21/34 (61.76%) agreed, more for daughters (73.68%) than for sons (46.67%). Only 8/34 (23.53%) currently defined their sexual identity as LGB, slightly higher for sons (26.67%) than for daughters (21.05%). However, five of the daughters also reported previous same-sex sexual behavior and four others reported strong same-sex sexual attractions (p. 68). Counting those additions,

the nonheterosexual attraction rate for the daughters might have been as high as 68.42% and for the entire sample 50.00%. Paul did not report the correlation between questioning and sexual orientation but said it was minimal (p. 65).

Javaid (1993) interviewed 13 lesbian mothers who had 15 sons and 11 daughters. He also interviewed 15 divorced heterosexual mothers who had 13 sons and 15 daughters. Seven of the thirteen (53.85%) lesbian mothers expressed their acceptance (not preference) if their children became LGB adults. Of the daughters of the lesbian mothers 3 of 11 (27.27%) described themselves as nonheterosexual (i.e., asexual), compared to 1/15 (6.67%) of sons; of the 28 children of heterosexual mothers, all of them described themselves as heterosexuals. In terms of homosexual fantasies, seven of eleven (63.64%) daughters of lesbian mothers had lesbian, bisexual, or asexual fantasies with one other's response as unknown, compared to 7/15 (46.67%) of the daughters of heterosexual mothers. Using all of the children of lesbian mothers as the denominator, the percentages of nonheterosexual children and those with homosexual fantasies were 15.38 and 26.92, respectively. In addition, seven of eleven daughters of lesbian mothers were open to a diversity of gender roles in their own lives. The daughters of heterosexual mothers were 1.4 years older (14.9) on average than the daughters (13.5) of the lesbian mothers; since Javaid (1993) did not provide standard deviations for age, it was not possible to compare that difference statistically.

Tasker and Golombok (1995; Golombok & Tasker, 1996) studied 25 children of lesbian mothers in England, of whom 9/25 (36%) reported same-sex attraction compared to 14/25 (56.0%) who had reported that their parent(s) had wanted them to become involved in LGB relationships or had no preference (Schumm, 2018, p. 128). Only

two of the 24 (8.33%) children identified as lesbian, so we used the more conservative report of 36% to reduce our chance of rejecting the null hypothesis.

Saffron (1996, 1998) interviewed 20 children of LGB parents (3 gay fathers, 14 lesbian mothers, 3 with both gay fathers and lesbian mothers), seven sons and thirteen daughters. However, three sons (Josh, Kieron, Lawrence) and two daughters (Alice, Gretel) were under the age of 16 and their sexual diversity outcomes were not reported. All of the remaining 15 children were at least 17 years old. Among the 11 older daughters, one was heterosexual (Rachel, age 20), one was lesbian (Emily, 21), and two were bisexual (Zoe, 24; Rosie, 20) or mostly heterosexual (Jane, 25) while several appeared to be heterosexual but either had or were questioning their sexual orientation (i.e., open to diversity in their sexual orientation; Kate, 24; Mary, 20; Fiona, 19; Claire, 33; Mandy, 24; Katrina, 17). Of the four older sons, one was heterosexual (Nicholas, 66) and three were gay (Stephen, 23; Rikki, 34; Mark, 29). Thus, for the 15 older children, 7/15 (46.67%) were nonheterosexuals (lesbian, gay, bisexual, mostly heterosexual) with another six questioning (86.67%, questioning or nonheterosexual). However, if we follow Sirota's (1997) approach of basing the questioning percentage on the number of heterosexuals, then we would find 6/8 (75%). To be conservative in our testing, we will use 75% as our measure of sexual openness or diversity. As fits other research (Goldberg, 2007a, 2007b; Golombok & Tasker, 1996), there appeared to be greater sexual fluidity among the daughters (five categories of sexual orientation) than among the sons (two categories).

Sirota (1997, 2009) found that 23/67 (34.33%) of daughters of gay fathers identified as lesbian or bisexual while 30/43 (69.77%) of heterosexual daughters of gay

fathers had questioned their sexual orientation previously. If one counted questioners and lesbian/bisexual daughters together, the total percentage would have been higher (53/67, 79.1%). Our method used the more conservative 69.77% value.

Kunin (1998) surveyed 21 sons and 26 daughters (ages 12 to 17) of lesbian mothers and found that 21/47 (44.68%) of them reported having questioned their sexual orientation and 4/47 reported being LGB with another six reporting “unknown,” so the maximum nonheterosexual orientation rate was 10/47 (21.28%), used to make our analysis more conservative with respect to rejecting the null hypothesis. The Pearson zero-order correlation for children of both the lesbian mothers and a group of 47 children of heterosexual mothers in Kunin’s (1998) study, between degree of questioning and reported sexual orientation was .417 ($p < .001$; Spearman rho was .487, $p < .001$), even including one homosexual child who had never questioned their sexual orientation.

Jedzinak (2004) interviewed seven daughters, ages 18–27, who had lesbian mothers, finding that 42.86% identified as lesbian or bisexual while 57% had engaged in same-sex sexual behavior, with 71.43% having been open to exploring options other than heterosexuality while growing up. Furthermore, 86% defined sexual orientation as a fluid phenomenon (Schumm, 2018, p. 127). To use the most conservative data with respect to testing the null hypothesis, we used 42.86% and 71.43% for our measures of LGB identity and of openness to sexual diversity.

Canning (2005) surveyed eleven sons, of at least 12 years of age, of gay fathers and found 10% (1/10, one missing value) were nonheterosexual while 4/11 (36.36%) had questioned their sexual orientation at some point.

Goldberg (2007a, 2007b) surveyed adult children, ages 19 to 50, of LGB parents. There are differences between her two

articles. In Goldberg (2007a) there were 42 interviews, of 35 daughters and 7 sons; in Goldberg (2007b) there were 46 interviews, of 36 daughters and 10 sons. In Goldberg (2007a) there were six lesbian or bisexual daughters; in Goldberg (2007b) there were seven. For our analyses, we used 6/35 (17.14%) for sexual orientation identity to be more conservative with respect to testing our null hypothesis. In Goldberg (2007a) it was reported that 21/42 (50.00%) of the children (48.57% of daughters, 57.14% of sons) felt intergenerational pride about their parents’ sexual orientation, which we will treat as a measure of openness to sexual diversity.

In summary, we had data from nine empirical studies in which both openness to sexual diversity and the sexual orientation of the children of same-sex parents were available as variables. The dates of the studies ranged from 1986 to 2007, with sample sizes from 7 to 67. The minimum ages of the children ranged from 6 to 23, while the percentage of daughters ranged from zero to 100 percent. The percent of LGB children ranged from 10% to 68.42% while the percent open to sexual diversity ranged from 36.36% to 84.21%. Descriptive data for the nine studies are presented in Table 1.

Analysis

Statistics are useful for comparing numerical values obtained from individuals or groups, usually in terms of rejecting or not rejecting a null hypothesis. In our study, we were concerned with results from group data. We took two approaches for our statistical analyses. First, we used paired samples *t*-tests to compare the relative percentages for our two key variables, using weighted and unweighted data (by sample size). Because our two measures did not diverge significantly from normal distributions, were ratio variables, and were positively correlated, we did not feel uncomfortable using paired samples *t*-tests to evaluate the

null hypothesis. At the same time, some reviewers suggested the use of meta-analysis as a better alternative. Therefore, we invited a meta-analysis expert to perform a meta-analysis for us, and we also used statsdirect.com to perform two further meta-analyses, using one more conservative approach (Table 1) and a less conservative approach (explained below). Most meta-analyses present a PRISMA chart detailing how articles were excluded or included. In our case, we had already performed a literature review of studies that included children’s sexual orientation as a variable (Schumm, 2018) and one that also included studies that included openness to sexual diversity as another variable (Schumm & Crawford, 2021). Our requirement that studies include both variables in their data reduced the available studies to the nine we have described. Studies that did not report both of our variables in terms of percentages

were not included, as explained elsewhere (Schumm & Crawford, 2021).

Results

T-tests

Tables 2 and 3 present the unweighted and weighted results from our t-test analyses. For both weighted and unweighted data, reports of openness to sexual diversity were greater than reports of nonheterosexual sexual orientation, even though we selected our data to minimize the chances of rejecting the null hypothesis of no difference between the two variables. With respect to our second hypothesis, the reports for the two variables were substantially and significantly correlated. Effect sizes for the difference between the two variables were substantial, as well as statistically significant, greater than 3.50 in both analyses.

Table 2

Comparing Percentages of Children of Same-Sex Parents Reporting Greater Acceptance of Sexual Diversity in Themselves or Others versus Those Reporting Some Degree of Nonheterosexuality across Nine Studies Using Unweighted Data

	Mean	SD	<i>r</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
Greater Acceptance of Sexual Diversity	61.23	15.6	0.921				
			(<i>p</i> < .001)	11.89	8	< .001	3.91
Nonheterosexuality	33.77	17.7					

Table 3

Comparing Percentages of Children of Same-Sex Parents Reporting Greater Acceptance of Sexual Diversity in Themselves or Others versus Those Reporting Some Degree of Nonheterosexuality across Nine Studies Using Weighted Data

	Mean	SD	<i>r</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
Greater Acceptance of Sexual Diversity	61.38	14.6	0.894				
			(<i>p</i> < .001)	11.12	8	< .001	3.62
Nonheterosexuality	33.09	17.0					

Meta-Analyses

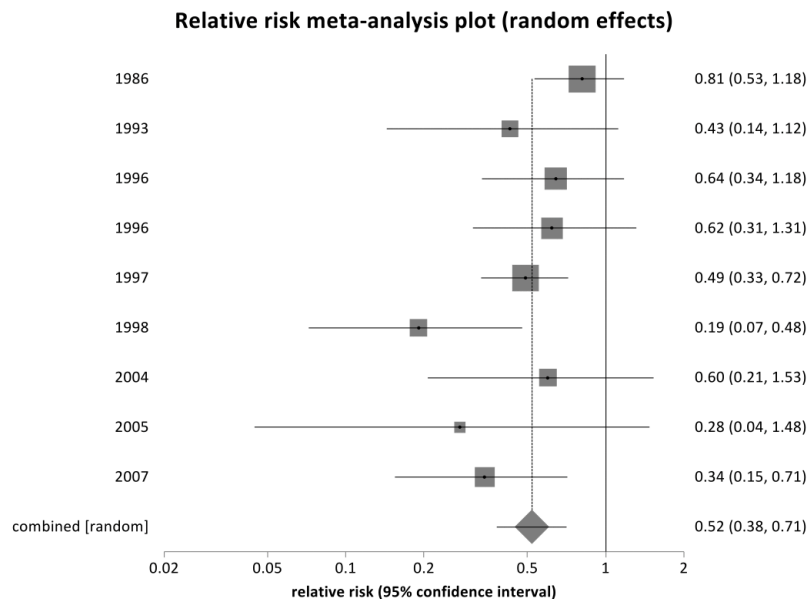
First, we requested assistance from Dr. Chelsea Spencer, who has published several articles using meta-analyses (Kimmes et al., 2019; Love et al., 2018; Spencer & Stith, 2020; Spencer, Stith, & Cafferky, 2019; Spencer, Anders et al., 2020; Spencer, Topham, & King, 2020; Spencer, Keilholtz et al., 2020), for running a meta-analysis on the data from Table 1 using a repeated measures approach. I^2 was 70.74%, high enough to indicate that a random effects model should be used, in which the mean for nonheterosexuality was 33.2% (95% CI, 23.9 to 44.0); while for diversity it was 59.6% (95% CI, 48.3 to 70.0), with a Q statistic for non-combinability of 10.93 ($df = 1$), $p < .001$.

The pooled result was 46.1% (22.7% to 71.3%). By her analysis, the results were similar to the t -test results, with a significant difference between the two variables.

Second, we tried a risk difference meta-analysis on our own, using StatDirect's programming. For our nine studies, in chronological order, from Table 1, the relative risks and 95% confidence intervals were, respectively, 0.813 (0.53 to 1.18), 0.429 (0.14 to 1.12), 0.643 (0.335 to 1.18), 0.622 (0.31 to 1.31), 0.492 (0.33 to 0.72), 0.190 (0.07 to 0.48), 0.600 (0.21 to 1.53), 0.275 (0.04 to 1.48), and 0.343 (0.15 to 0.71), as illustrated in a forest plot, Figure 1, the relative risk meta-analysis plot (random effects).

Figure 1

Forest Plot of Effect Sizes (Random Effects Model) for Each Study and for the Overall Meta-Analysis.



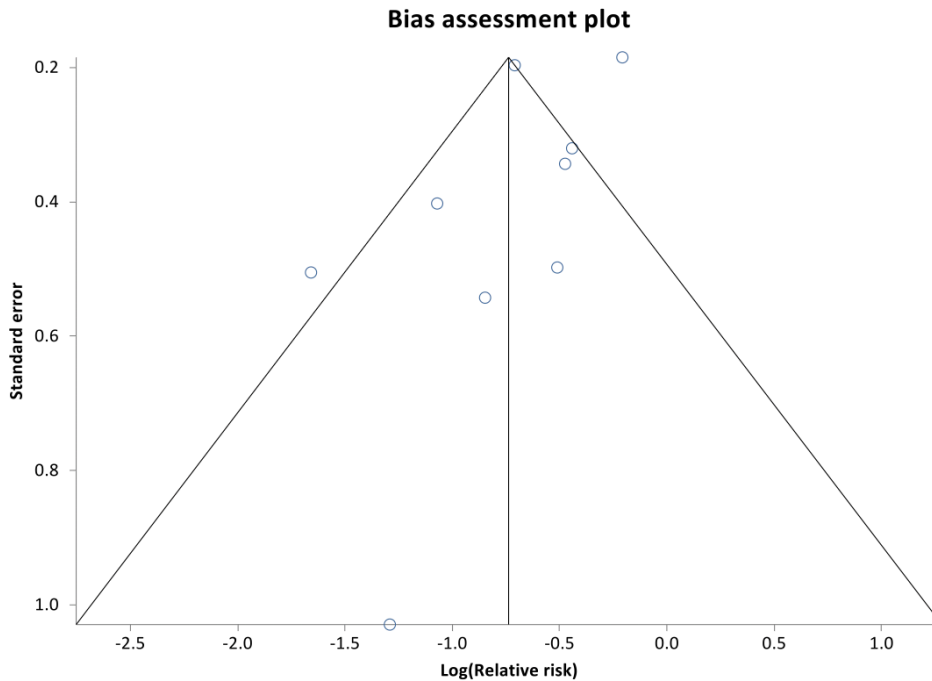
Note: The relative weight used for each study is reflected in the area of the squares for each study while the diamond indicates the mean of the overall effect size. The solid vertical line over 1.0 represents no significant effect size while the horizontal lines represent the 95% confidence intervals for each study or the overall effect size. The vertical line at 0.52 shows the overall effect size compared to the effect size for each of the individual studies.

The weights assigned to the nine studies, respectively, were 20.86, 6.55, 13.25, 12.25, 20.10, 7.30, 7.47, 2.17, and 10.06. The standardized effect sizes determined for the nine studies, respectively, were -.21, -.85, -.44, -.47, -.71, -1.66, -.51, -1.29, and -1.07. For the data in Table 1, we obtained an $I^2 = 43.5\%$ (95% CI, 0.0% to 72.3%), and we used the random effects result (DerSimonian-Laird) with a pooled relative risk of 52.0

(95% CI, 38.2 to 70.9). A chi-square test that the relative risks differed was 17.17 (df = 1), $p < .0001$. None of the three bias indicators (Begg-Mazumdar, Egger, Harbord-Egger) were significant ($p > .05$). A funnel plot (Figure 2) showed a nearly equal distribution of results (4/5) and a L'Abbe plot (Figure 3) showed that sample sizes were not related to relative risk.

Figure 2

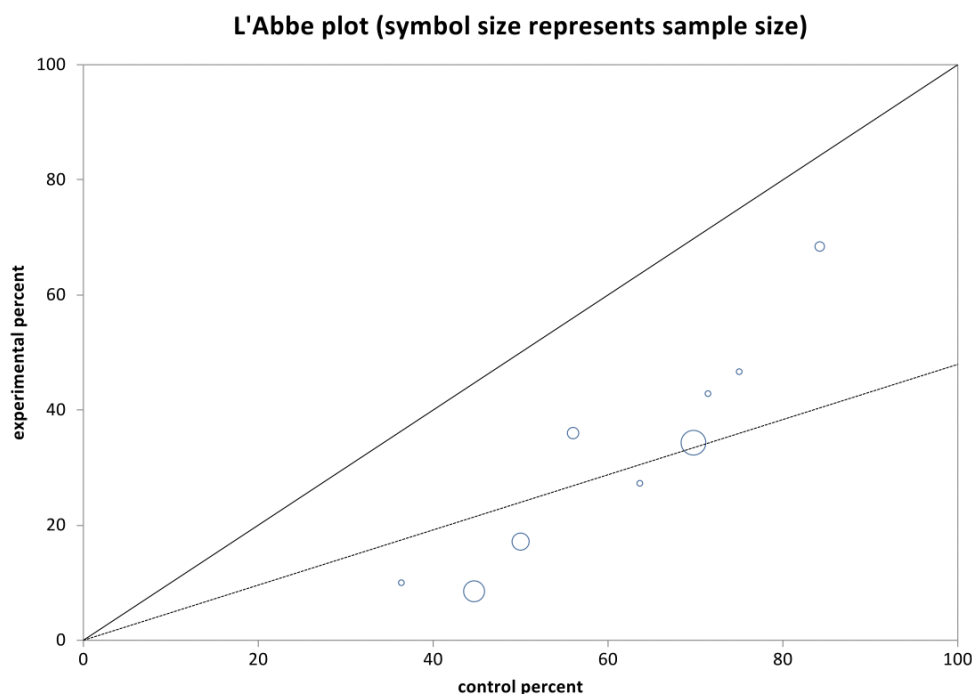
Funnel Plot/Bias Assessment Plot



Note: Funnel plots compare measures of effect size against sample size or standard error (standard errors decrease with larger sample sizes) to detect bias from omission of non-significant smaller samples due to publication or availability bias, as well as other sources of bias such as low methodological quality. In general, smaller samples will yield larger standard errors. Bias is indicated if the pattern of study results are not evenly distributed around the center line for smaller samples/larger standard errors. Little bias appears to be present in this figure.

Figure 3

L'Abbe Plot



Note: The equal line (45-degree angle) represents no effect. The line below the no effect line represents the average effect in the study. The horizontal axis reflects the percent of those open to sexual diversity while the vertical axis represents those children who are lesbian, gay, or bisexual (LGB). The area of each study's circle is proportional to the same size of the study. The results show that in each study, the percent open is higher than the percent LGB. Differences appear to be slightly larger for larger samples.

To respond to critics who might argue that we overestimated nonheterosexuality rates for our first three sources (Paul, 1986; Javaid, 1993; Tasker & Golombok, 1995) we tried using larger sample sizes and more strict definitions of nonheterosexuality, that led to lower rates of nonheterosexuality (8/34, 4/26, 2/24), respectively for those three studies. With this second analysis, $I^2 = 21.3\%$ but we still used the random effects approach, with a pooled relative risk of 40.2 (95% CI, 29.7 to 54.3) and a chi-square test of 35.31, $p < .0001$. The three bias indicators remained non-significant. Even though our relative risk analyses did not assume repeated measures,

making our analyses more conservative with respect to rejecting the null hypothesis of no differences, we retained our significant results by the final two meta-analyses.

Limitations

Because we used single items, no reliability or validity data were available. Our literature search did not yield any studies published after 2007 that included data for both of our key variables. The sample sizes in our studies were small, less than 70 cases. Some of the studies included younger children for whom sexual orientation might have been less

relevant. The studies were not consistent in how they measured sexual orientation or sexual diversity. Our data was limited to that from only nine studies. Because our goal for this study was not to compare the children of heterosexual versus those with same-sex parents, we did not analyze data from children of heterosexual parents. Because of these important limitations, our results should be considered exploratory rather than definitive.

Discussion

Recent research suggests that some children of same-sex parents grow up to report same-sex attractions, to experiment with same-sex sexual behavior, or to identify as nonheterosexual (Gartrell et al., 2019; Saffron, 1996, 1998; Sirota, 1997; Easterbrook, 2019; Zweig, 1999; Schumm, 2018, 2020; Schumm & Crawford, 2021b).³ The specific pathways for their sexual orientation development are not yet known. However, one possibility is that growing up in an environment in which parental or child same-sex sexuality is at least accepted and often celebrated (i.e., acceptance of greater sexual diversity) may give children greater freedom to accept any same-sex sexual attractions they might experience, to explore same-sex sexual behaviors, or to eventually identify as LGBT with less risk of ostracism from their own family compared to a situation of being raised by heterosexual parents.

While the children of same-sex parents may experience adverse situations related to their own or their parents' sexual

orientations, they may also experience many positives, as have been detailed elsewhere (Riggle et al., 2011; Riggle et al., 2008; Rostosky et al., 2010; Saffron, 1998; Schumm, 2020b; Titlestad & Robinson, 2019). Rather than merely hearing about such positives from others, such children may appreciate them by direct and immediate observation. If same-sex attractions are experienced, children of same-sex parents may be more likely to accept those feelings as legitimate and healthy. If such feelings are legitimate, why not engage in same-sex behaviors that would mirror one's own autonomous, authentic self? If such feelings endure, same-sex sexual behaviors are found to be rewarding and fulfilling, a child's identity as LGBTQ+ may be affirmed internally and externally by parents and others.

Our results do not prove any of the suggested pathways, but the high correlations found between our two key variables are consistent with acceptance of greater sexual diversity being a possible mediating variable between having same-sex parents and growing up to be LGBTQ+. Other mediating variables might include perceptions of the positive or negative aspects of LGBT identity, acceptance of same-sex sexual attractions as legitimate feelings, or the child's sense of parental acceptance for the child's sexual orientation (regardless of its nature) or interest in exploring a diversity of sexual partners in terms of partner sexual orientation. Research should also include parallel measures of parental values and attitudes about their children's sexual orientation attractions, interests,

³ Bos, Carone, Rothblum, Koh, & Gartrell (2021) have recently reported that only 5.6% of their children of lesbian parents identified as lesbian or gay and only another 15.2% identified as bisexual. While technically correct, their analysis omits four sons who had been included in previous analyses (e.g., Gartrell, Bos, & Koh, 2019) and overlooks results for same-sex sexual attraction (e.g.,

approximately 70% for daughters) and same-sex sexual behavior, as well as a rate of nonheterosexual (lesbian and bisexual) sexual identification of nearly 30% for daughters (11/37) and 11.4% (4/35) for sons, a difference nearly significant (one-sided Fisher Exact Test, $p = .051$; odds ratio of 3.28, two-tailed test, $p = .064$).

explorations, behavior, and identity. Future theory development should take such pathways into account (Schumm, 2020b). Ideally, future research would assess changes in these variables across the lifetimes of children of same-sex and heterosexual parents in order to identify various longitudinal patterns, which may be diverse, across individual children.

Conclusion

Among the nine studies in which both acceptance of sexual diversity and sexual orientation of the children of same-sex parents were measured, significantly higher percentages of acceptance of sexual diversity were found than for nonheterosexual sexual orientation, although the two measures were strongly correlated for both weighted and unweighted analyses. The results suggest that children of same-sex parents may be more likely to adopt a greater acceptance of sexual diversity than to identify as lesbian, gay, or bisexual. The strong correlation across the two variables may suggest that greater acceptance of sexual diversity might be one of several possible mediating variables between same-sex parenting and a child's later development of an LGB identity. More complex theoretical pathways, with a greater variety of variables, need to be studied in future research with same-sex parents and their children, as well as for heterosexual parents and their children.

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References

Ball, C. A. (2003). Lesbian and gay families: Gender nonconformity and the

- implications of difference. *Capital University Law Review*, 31, 691–749.
- Bos, H., Carone, N., Rothblum, E. D., Koh, A., & Gartrell, N. (2021). Long term effects of homophobic stigmatization during adolescence on problem behavior in emerging adult offspring of lesbian parents. *Journal of Youth and Adolescence*, 50, 1114–1125. <https://doi.org/10.1007/s10964-020-01364-1>
- Canning, T. T. (2005). *Gay and Heterosexual Fathers: A Comparative Analysis of Child Behavior and Well-Being*. Doctoral dissertation, Capella University, Minneapolis, Minnesota.
- Easterbrook, R. (2019). "This is all normal and normal is relative to you": LBBTQ+ parents' experiences discussing sex and sexuality with their children. [Unpublished master's thesis]. University of Guelph, Canada.
- Gartrell, N., Bos, H., & Koh, A. (2019). Sexual attraction, sexual identity, and same-sex sexual experiences of adult offspring in the U.S. National Longitudinal Lesbian Family Study. *Archives of Sexual Behavior*, 48, 1495–1503. <https://doi.org/10.1007/s10508-019-1434-5>
- Goldberg, A. E. (2007a). (How) does it make a difference? Perspectives of adults with lesbian, gay, and bisexual parents. *American Journal of Orthopsychiatry*, 77, 550–562. <https://doi.org/10.1037/0002-9432.77.4.550>
- Goldberg, A. E. (2007b). Talking about family: Disclosure practices of adults raised by lesbian, gay, and bisexual parents. *Journal of Family Issues*, 28, 100–131. <https://doi.org/10.1177/0192513X06293606>
- Goldberg, A. E., Kashy, D. A., & Smith, Z. (2012). Gender-typed play behavior in early childhood: Adopted children with

- lesbian, gay, and bisexual parents. *Sex Roles*, 67, 503–515. <https://doi.org/10.1007/s11199-012-0198-3>
- 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. <https://doi.org/10.1037//0012-1649.39.1.20>
- 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. <https://doi.org/10.1037/0012-1649.32.1.3>
- Hequembourg, A. (2007). *Lesbian Motherhood: Stories of Becoming*. New York, NY: Harrington Park Press.
- Hicks, S. (2005). Is gay parenting bad for kids? Responding to the “very idea of difference” in research on lesbian and gay parents. *Sexualities*, 8, 158–168. <https://doi.org/10.1177/1363460705050852>
- Javaid, G. A. (1993). The children of homosexual and heterosexual single mothers. *Child Psychiatry and Human Development*, 23, 235–248. <https://doi.org/10.1007/BF00707677>
- Jedzinak, J. A. (2004). *Growing up in a lesbian family: A qualitative study of the adult daughter’s experience*. [Unpublished doctoral dissertation]. Alliant International University, San Francisco, California.
- Kimmes, J. G., Mallory, A. B., Spencer, C. M., Beck, A. R., Cafferky, B., & Stith, S. M. (2019). A meta-analysis of risk markers for intimate partner violence in same-sex relationships. *Trauma, Violence, & Abuse*, 20(3), 374–384. <https://doi.org/10.1177/1524838017708784>
- Kunin, J. D. (1998). *Predictors of psychosocial and behavioral adjustment of children: A study comparing children raised by lesbian parents to children raised by heterosexual parents*. [Unpublished doctoral dissertation]. California School of Professional Psychology, San Diego, California.
- Love, H. A., Spencer, C. M., May, S. A., Mendez, M., & Stith, S. M. (2018). Perpetrator risk markers for intimate terrorism and situational couple violence: A meta-analysis. *Trauma, Violence, & Abuse*, 21(5), 922–931. <https://doi.org/10.1177/1524838018801331>
- Paul, J. P. (1986). *Growing up with a gay, lesbian, or bisexual parent: An exploratory study of experiences and perceptions*. [Unpublished doctoral dissertation]. University of California, Berkeley, California.
- Riggle, E. D. B., Rostosky, S. S., McCants, L. E., & Pascale-Hague, D. (2011). The positive aspects of a transgender self-identification. *Psychology & Sexuality*, 2, 147–158. <https://doi.org/10.1080/19419899.2010.534490>
- Riggle, E. D. B., Whitman, J. S., Olson, A., Rostosky, S. S., & Strong, S. (2008). The positive aspects of being a lesbian or gay man. *Professional Psychology: Research & Practice*, 39, 210–217. <https://doi.org/10.1037/0735-7028.39.2.210>
- Rosky, C. J. (2013). Fear of the queer child. *Buffalo Law Review*, 61, 607–697.
- Rostosky, S. S., Riggle, E. D. B., Pascale-Hague, D., & McCants, L. E. (2010). The positive aspects of a bisexual identification. *Psychology & Sexuality*, 1, 131–144. <https://doi.org/10.1080/19419899.2010.484595>
- Saffron, L. (1996). *What about the Children? Sons and Daughters of*

- Lesbian and Gay Parents Talk about Their Lives*. London, UK: Cassell.
- Saffron, L. (1998). Raising children in an age of diversity—Advantages of having a lesbian mother. *Journal of Lesbian Studies*, 2(4), 35–47. https://doi.org/10.1300/J155v02n04_04
- Schumm, W. R. (2018). *Same-Sex Parenting Research: A Critical Assessment*. London, UK: Wilberforce Press.
- Schumm, W. R. (2020a). Changes over the decades in selected LGBTQ research findings. *JSM Sexual Medicine*, 4(2), 1029, 1–8.
- Schumm, W. R. (2020b). Avenues for future LGBT theory and research. *JSM Sexual Medicine*, 4(2), 1031, 1–7.
- Schumm, W. R., & Crawford, D. W. (2019). Scientific consensus on whether LGBTQ parents are more likely (or not) to have LGBTQ children: An analysis of 72 social science reviews of the literature published between 2001 and 2017. *Journal of International Women's Studies*, 20(7), 1–12.
- Schumm, W. R., & Crawford, D. W. (2021a). Can social desirability be detected statistically at the macro-sociological level? *Psychology Research and Applications*, 3(1), 14–28. <https://doi.org/10.22606/pr.2021.31002>
- Schumm, W. R., & Crawford, D. W. (2021b). Sexual orientation differences between children of same-sex parents and children of heterosexual parents: A brief report using a meta-analysis. *Journal of Human Sexuality*, in press.
- Sirota, T. H. (1997). *A comparison of adult attachment style dimensions between women who have gay or bisexual fathers and women who have heterosexual fathers*. [Unpublished doctoral dissertation]. New York University, New York, New York.
- Sirota, T. H. (2009). Adult attachment style dimensions in women who have gay or bisexual fathers. *Archives of Psychiatric Nursing*, 23, 289–297. <https://doi.org/10.1016/j.apnu.2008.08.005>
- Spencer, C. M., Anders, K. M., Toews, M. L., & Emanuels, S. K. (2020). Risk markers for physical teen dating violence victimization in the United States: A meta-analysis. *Journal of Youth and Adolescence*, 49(3), 575–589. <https://doi.org/10.1007/s10964-020-01194-1>
- Spencer, C. M., Keilholtz, B. M., & Stith, S. M. (2020). The association between attachment styles and physical intimate partner violence perpetration and victimization: A meta-analysis. *Family Process*, 60(1), 270–284. <https://doi.org/10.1111/famp.12545>
- Spencer, C. M., & Stith, S. M. (2020). Risk factors for male perpetration and female victimization of intimate partner homicide: A meta-analysis. *Trauma, Violence, & Abuse*, 21(3), 527–540. <https://doi.org/10.1177/1524838018781101>
- Spencer, C. M., Stith, S. M., & Cafferky, B. (2019). Risk markers for physical intimate partner violence victimization: A meta-analysis. *Aggression and Violent Behavior*, 44, 8–17. <https://doi.org/10.1016/j.avb.2018.10.009>
- Spencer, C. M., Topham, G. L., & King, E. L. (2020). Do online parenting programs create change? A meta-analysis. *Journal of Family Psychology*, 34(3), 364–374. <https://doi.org/10.1037/fam0000605>
- Stacey, J., & Biblarz, T. (2001). (How) does the sexual orientation of parents matter? *American Sociological Review*, 66, 159–183. <https://doi.org/10.2307/2657413>
- Tasker, F., & Golombok, S. (1995). Adults raised as children in lesbian families. *American Journal of Orthopsychiatry*, 65, 203–215. <https://doi.org/10.1037/h0079615>

Titlestad, A., & Robinson, K. (2019). Navigating parenthood as two women: The positive aspects and strengths of female same-sex parenting. *Journal of GLBT Family Studies*, *15*, 186–209. <https://doi.org/10.1080/1550428X.2018.142366>

Zweig, R. (1999). *The relationship among psychological androgyny and the well-being of adult children of traditional and nontraditional families of origin*. [Unpublished doctoral dissertation]. Hofstra University, Hempstead, NY.