BEYOND DISPUTE?

BIAS IN SOCIAL SCIENCE RESEARCH

Walter R. Schumm, Ph.D.

Professor of Family Studies

Kansas State University

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In a recent court case, it was deemed beyond dispute that same-sex parenting outcomes were no different than those of heterosexuals, so much so that it would be "irrational" to believe otherwise. People have a right to their opinions but not to the facts. My plan is to discuss the facts, both in terms of biased methods and in terms of specific issues that are being overlooked in the halls of justice and academia.

Methodological Problems

As has been noted before (Schumm, 2012b), assessing the effects of different family structures on children is no easy task. There are numerous methodological concerns that must be taken into account. Here some of them will be reviewed. Specific examples of some of the methodological problems often found in studies of LGBT populations have been detailed elsewhere (Marks, 2012; Schumm, 2004a, 2004b, 2005, 2008, 2010a, 2010e, 2010f, 2011a, 2011b, 2012a, 2012b, 2012c, 2013, 2014).

Sample

Random samples make generalizing one's results to a larger population and the use of statistical tests more appropriate. Without random samples, one cannot be sure that the results will apply to anyone outside the particular group of participants. Samples that are not random are often called convenience samples. Even though many social science studies have involved convenience samples, they are not the "gold standard" for social science research. Despite what some would like to believe (Herek, 2006, p. 610), *a dozen or more small convenience samples are very unlikely to equal the scientific value of even one large random sample*. Crouch, Waters, McNair, Power, and Davis (2014) in their recent study on Australian same-sex families noted that "Studies to date have often relied on small samples. Such sample sizes limit statistical analysis and the wider application of findings to the broader community" (p. 2). Nonrandom or convenience samples also involve the risk of selection biases –

what factors were associated with the particular participants being chosen or volunteering to be part of the nonrandom study? Again, Crouch et al. (2014) affirmed the limitations of convenience samples by stating that "Convenience samples are also commonly used and are often fraught with problems. As participants are self-selecting such studies are open to accusations of bias that might skew results in favour of same-sex parent families and capture only specific subsets of the gay and lesbian community" (p. 2). This, of course, is contrary to claims that numerous weak studies can add up to powerful legally useful evidence (Schumm, 2013, p. 269).

Even random samples may have low statistical power if they are small. As Vanfrauseen et al. (2002) noted, with respect to their study involving 24 lesbian families and 24 heterosexual families that "A further investigation should be carried out using large sample sizes before drawing any conclusions" (p. 250). Cohen (1988) has highlighted the importance of even small effects in psychology. Yet a small sample (e.g., two groups of 44 particpants each) may not be able to detect (in terms of finding a significant result statistically) a large effect where Cohen's *d* is greater than or equal to 0.80. Sometimes the sample is smaller because few of those persons contacted for the study agreed to participate, leading to a low response rate. Low response rates, even for random samples, may mean that those who did participate were substantially different from those who did not, meaning that the results cannot be generalized to the original population and may be biased by selection effects. A common problem is that the response rates of different populations may differ (e.g., those with more of a vested interest in the study are more likely to be identified as possible participants and may be more open to participating if they are selected as possible participants), which can create further selection bias. Even if the sample appears to have a large number of participants or an initially high response rate, often there are large amounts of missing data, where the participants were not eligible or did not answer many of the questions asked of them. One recent study looks impressive (like a random nationally representative sample) until you realize the response rate was only

13%. Those who do not answer questions may be different in systematic ways from those who do, meaning that missing data can bias results. For example, Bos (2004, p. 51) reported results for 100 lesbian parent families and 100 heterosexual families; however, the response rate for lesbian parents was 55.6% compared to 21.4% for the heterosexual families.

The use of convenience samples means that selection bias is an issue. As noted by Golombok et al. (2003), "A genuine limitation of the existing body of research is that the majority of studies have relied on volunteer or convenience samples because it has not been possible to obtain a representative sample of lesbian-mother families. Although it is not known how, or to what extent, the samples studied have been biased, lesbian mothers whose children show atypical gender development or psychological problems may have been unlikely to volunteer, particularly because lesbian-mother families are so often the focus of prejudice and discrimination" (p. 21). Likewise, Gartrell, Banks, Reed, Hamilton, Rodas, and Deck (2000) acknowledged a limitation of their convenience sample, that "The study participants are self-selected and not necessarily demographically representative of the lesbian population as a whole" (p. 547). Power et al. (2010) agreed that "The non-probability sampling methods used in this study potentially creates [sic] some bias in the sample as those more connected to social and support networks are more likely to have been exposed to information about the study. Unfortunately this means people who are more socially isolated and/or who have poorer mental health may be under-represented in the sample" (p. 8). Likewise, many studies on same-sex families seem to attract LGBT respondents with very high levels of education. As Power et al. (2010) have stated, "It is unclear whether this reflects an actual higher level of education among Australians who openly identify as same-sex attracted or whether people from lower socio-economic backgrounds are less likely to participate in research, particularly internet based research" (p. 8). Crouch et al. (2014) found much higher levels of education among their same-sex parents (46% had graduate degrees, 27% had only an undergraduate degree compared to only 29% of

heterosexual mothers (with an undergraduate or graduate degree) from a comparative Australian sample). Likewise, income levels for same-sex parents are often very high compared to levels for the general public. Crouch et al. (2014) reported that median household income in Australia was less than $65,000 while 59% of their same-sex households reported annual incomes of $100,000 or higher. Often surveys online are used to gather data on same-sex families. As Power et al. have noted (2010) using an online survey for data collection "also means it is not possible to determine a response rate as it is not known how many people saw information about the study and declined to participate" (p. 8). Sometimes even the comparison groups of heterosexual families are based on convenience or snowball samples (Vanfraussen, Ponjaert-Kristoffersen, & Brewaeys, 2002, p. 239). Some scholars have tried to combine random and convenience samples together to increase sample size, but as Julien et al. (2008) said, "This strategy raised statistical power, but it also led to comparing a group of heterosexual mothers free of selection bias to a group of lesbian mothers not entirely free of selection bias" (p. 865).

Another issue hidden within the use of convenience samples is the risk of experimenter bias (Wilkinson and Task Force on Statistical Inference, 1999), which can occur whenever those who know the hypotheses or political goals of the research are the same as those who interact with the actual or potential participants prior to or during the study. As Wilkinson indicated "An author's self-awareness, experience, or resolve does not eliminate experimenter bias. In short, there are no valid excuses, financial or otherwise, for avoiding an opportunity to double-blind" (p. 596).

Sampling for lesbian, gay, or bisexual populations is especially challenging (Meyer & Wilson, 2009). Many studies dealing with LGBT participants combine the worst of all of these sampling problems – they do not involve random samples for any of the parent groups, the samples are small, response rates are low or unknown, response rates differ between LGBT and heterosexual groups (e.g., Bos, 2004), participants may be able to determine the goals and values of the

researchers, and there are substantial amounts of missing data. Merely summing the apparent results from many low quality studies (i.e., nonrandom, small, low response rate, different response rates, high levels of missing data) is unlikely to "add up" to the scientific value of a smaller number of well conducted studies.

Statistics and Effect Sizes

Statistics may not mean much in the absence of a random sample. Many think of statistics and probability levels. However, effect size is a more reliable parameter for assessing research findings. By making a sample small enough, almost anyone can "prove" the null hypothesis, regardless of the true effect involved because very few findings will be statistically significant. Cohen (1988) said of any claim that the null hypothesis had been proved that such a "conclusion is always strictly invalid, and is functionally invalid as well unless power is high" (p. 16). Furthermore, Cohen (1994) stated that "I have learned and taught that the primary product of a research inquiry is one or more measures of *effect size*, not *p* values" (p. 1308)[emphasis added]. Likewise, Rosnow and Rosenthal (1996) said years ago that "Just because a *p* value is reported as 'statistically significant' does not mean that the effect was large, nor does a *p* value reported as 'nonsignificant' imply a trivial result" (p. 331). By making a sample large enough, almost anyone can obtain a rejection of the null hypothesis, even if the true effect size is trivial. Rosnow and Rosenthal (1996) also commented that "Many researchers also continue to obsess on *p* values to the exclusion of effect sizes and statistical power; they may pay lip service to Cohen's message but do not seem to have fully absorbed it" (p. 331). Blackwelder (1982) stated that "p is a measure of evidence against the null hypothesis, not for it, and insufficient evidence to reject the null hypothesis does not imply sufficient evidence to accept it" (p. 346). Thus, the effect size becomes, in a real sense, the only "honest arbiter" of research, especially controversial research. When attempting to "prove" the null hypothesis, equivalence testing should be used (Altman & Bland, 1995; Jones, Jarvis, Lewis, & Ebbutt, 1996; Rogers, Howard, & Vessey,

1993; Stegner, Bostrom, & Greenfield, 1996, Tryon, 2001; Tryon & Lewis, 2008; Wellek, 2003).

Perhaps one of the most common measures of effect size is Cohen's (1988, 1992) *d*. In a very approximate manner, Cohen's *d* represents the difference in average scores between two groups divided by the average of the standard deviations of the two groups. Cohen (1992) used d = 0.20 as "small", 0.50 as "medium", and 0.80 as "large", although Amato (2012, p. 772) has recommended using < .20 (weak), .20 - .39 (moderate), .40 - .59 (strong), and .60+ (very strong). In this context, it is very important to remember what Jacob Cohen, one of the leading psychological methodologists of the late 20th century, said: "Many effects sought in personality, social, and clinical-psychological research are likely to be small effects as here defined, both because of the attenuation in validity of the measures employed and the subtlety of the issues frequently involved (1988, p. 13). In some cases, zero-order correlation coefficients can be converted to effect sizes in terms of Cohen's *d* (Cohen, 1988, p. 22). The American Psychological Association (1994, p. 18; 2001, p. 25; 2010, pp. 33-34) has long recommended the reporting of effect sizes in addition to levels of statistical significance, a recommendation often ignored in practice by scholars and courts.

Effect sizes help guard against misinterpretation of results in two situations. First, with a small sample (N < 100) someone might detect a medium effect size of 0.50 but discount its importance because it was not statistically significant, one type of misinterpretation. Second, with a large sample (N > 2,000), someone might detect a trivial effect size of 0.03 but find it to be close to significance (p < .07) and overemphasize its importance, another type of misinterpretation (Hatzenbuehler et al., 2014, p. 53). While moderating or interaction effects are of interest and may require a larger sample than usual, it is uncertain how useful it is scientifically to use huge samples (e.g., N > 55,000) and attempt to put more meaning into main or interaction effects that are barely significant (e.g., confidence intervals from 0.47 to 0.99) especially when there are

statistically significant main effects with more definitive confidence intervals (e.g., 2.31 to 6.04)(Hatzenbuehler, Birkett, van Wangenen, & Meyer, 2014, p. 283).

Data Analysis Wealthy vs non-wealthy
favoring stable vs unstable (single parents)

Some scholars seem to believe that research means predicting one variable from a host of other variables. However, research is supposed to be connected to theory which involves mediating and moderating effects, essentially something more complex than mere prediction. When control variables are used, there should be logic behind their selection, both in terms of theory and in terms of relevance to the particular data set. For example, if two groups of parents differed substantially in terms of income or education and assuming that socioeconomic status is important for parenting success (Lamb, 2012), then it would seem important from both theory and the situation in that particular data set to control for family income (especially on a per capita family member basis) and parental education, as has been done occasionally (Tasker & Golombok, 1998) before drawing much in the way of conclusions about the role of other differences between the two groups of parents. Tasker (2010) reported that lesbian parents "may be relatively affluent and well resourced" (p. 36). Golombok et al. (2003) did attempt to control statistically for pre-existing differences between their heterosexual and nonheterosexual families in terms of chilren's ages and number of siblings; however, even though their study featured educational differences across the families, those differences were not controlled, as noted previously (Schumm, 2008). Controlling for socioeconomic status is especially important in studies where pre-existing differences in socioeconomic status exist between different groups of parents. For example, if same-sex parents have higher levels of socioeconomic status (i.e., education or per capita family income) that would typically correlate positively with child outcomes, meaning that socioeconomic status would likely act as a suppressor variable. If the study found no apparent effect of sexual orientation but socioeconomic status was positively correlated with nonheterosexual sexual orientation and with

child outcomes, then controlling for socioeconomic status by design or statistically would likely yield a result in which nonheterosexual sexual orientation was revealed to have an underlying adverse impact on child outcomes. Analyses should also control for other relevant factors, such as parental relationship satisfaction; in one study (Bos, van Balen, & van den Boom, 2007) the lesbian parents had higher levels of relationship satisfaction than the comparison group of heterosexual couples ($d = 0.51$, $p < .001$) but that difference was not controlled statistically.

It is important to remember that "significant indirect effects can occur in the absence of significant total or direct effects" (Rucker, Preacher, Tormala, & Petty, 2011, p. 362), which can be easily overlooked in the absence of an assessment of intervening or mediating variables. Some studies have overlooked the possible mediating role of parental relationship instability when comparing heterosexual and LGBT families on various child outcomes. For example, the Rosenfeld (2013) and Allen et al. (2013) controversy was really about whether parental instability should have been used as an intervening or mediating variable between parental sexual orientation and child educational outcome. The data suggest that instability did mediate that relationship – in other words, same-sex parents had higher rates of instability and higher rates of instability predicted higher rates of grade retention. While that suggests a strong possibility of a significant mediating effect of instability between parental sexual orientation and child outcomes, it does not appear that either side actually tested for that possible mediating effect. Some studies have obscured such mediating effects by splitting their sample into single parents and two-parent families. Golombok et al. (2003) did so, which obscured the result that same-sex parents had high (presumably higher than heterosexuals) rates of instability and that single parents (i.e., unstable parents) had significantly more adverse child outcomes. Had Golombok et al. (2003) tested a mediating model of parental sexual orientation → relationship instability → child outcomes, they might have found a significant indirect effect of parental sexual orientation on child outcomes.

Seldom have the indirect effects of a child's sexual orientation (given that they had lesbigay parents) been evaluated. One study that did so (Bos & Sandfort, 2010) found that parental nonheterosexual orientation predicted the child's sexual questioning. However, sexual questioning predicted global self-worth (b = -.19, p < .05) and social competence (b = -.24, p < .05), *adversely*. Furthermore, Bos, van Balen, Sandfort, and van den Boom (2006) found that daughters of lesbians were more likely to aspire to masculine occupations (*ES* = 0.53, p < .05) and have a nonheterosexual sexual orientation (*ES* = 0.74, p < .01), both of which predicted *lower* social competence for daughters in their study (Schumm, 2011b, p. 92). In other words, in this one set of parents and children, the child's sexual questioning or nonheterosexual orientation acted as an intervening variable between parental sexual orientation and adverse child outcomes, in terms of self-worth and social competence. More studies need to be done in which models with such indirect pathways are evaluated. Some studies have been done in which as assessment of mediation would have been useful but was not done (Fulcher et al., 2008; Kweskin & Cook, 1982). On the other hand, Sutfin et al. (2008) did assess mediating effects.

Parent ratings of children (e.g., is your child a good child?) or of the parent's love for their child and children's rating of parents (e.g., how much do your parents love you?) are vulnerable to social desirability bias. Social desirability can refer to oneself (individual social desirability, e.g., are you perfect?) or to a relationship (relationship social desirability, e.g., is your marriage perfect?); it is important to match each type of social desirability with the type of outcome – relationship or individual - being assessed. In some cases, authors acknowledge the limitation imposed by not measuring social desirability. Vanfraussen et al. (2002) noted that "the absence of a social desirability scale does not permit us to evaluate whether or not the informants have presented the real situation or an ideal one" (p. 250). Erich, Kanenberg, Case, Allen, and Bogdanos (2009) stated that "Responses of this sort are subject to the effects of social desirability and impression management" (p. 403) in their study of adoptive same-

sex parents. As noted previously in this report, Golombok, MacCallum, Goodman, and Rutter (2002) stated that, "With any investigation that uses parental reports, one must be aware of the social desirability bias whereby parents try to present themselves and their children in the best possible light" (p. 965). Tasker and Golombok (1997) stated that "Interview data are always open to criticisms of bias owing to self-presentation effects. Indeed, it is reasonable to suspect that lesbian mothers may wish to portray an overly positive picture of family life in view of the discrimination they often face in a predominately heterosexual society" (p. 146).

Tasker and Golombok (1998) indicated that in their research study "... the possibility also remains that, compared with the heterosexual mothers in the study, the lesbian mothers may have wished to portray a more positive picture of their partner's involvement in child care given the lack of public recognition of female co-parents" (p. 64). Goldberg (2010, p. 169) has also acknowledged a concern with self-presentation bias by parents, as well as has Raley (2010, p. 188). Gartrell, Hamilton, Banks, Mosbacher, Reed, Sparks, and Bishop (1996) also agreed that lesbian mothers "might wish to present themselves and their families in the best possible light" and thus findings for maternal reports of children's mental health might have been "shaped by self-justification and self-presentation bias" (p. 279). After noting that few studies had been blinded to researchers or participants in their review of the literature on same-sex parenting, Anderssen, Amlie, and Ytteroy (2002) noted that "Particpants or researchers may consciously or unconsciously bias data in one or the other direction, and this bias may become stronger when using self-reported recall data" (p. 348).

Family Backgrounds Can Be Complex

Many scholars aspire to find "pure" family types. They hope, for example, to find nonheterosexual families in which children were not conceived in prior heterosexual relationships and in which there has been no parental instability and in which both parents "parent" full-

time. However, "pure" types may be exceedingly rare, or at least difficult to find for research purposes. Some family types may be even more difficult to locate than others. For example, collecting data from families headed by gay fathers has been very difficult. Fulcher, Sutfin, and Patterson (2008) were able to obtain data from 33 lesbian couples in their study but they had to drop consideration of gay parent couples because they were only able to recruit three for their study (p. 332). Crouch et al. (2014) in an Australian convenience sample found only 18% of same-sex parents were gay fathers but they did note that "there is a lack of research looking at male same-sex parented families, and too often authors extrapolate results from research on lesbian parenting to the whole range of same-sex families" (p. 2).

Parental Sexual Orientation Can be Complex

Measuring parental sexual orientation is no small task, as explained in detail elsewhere (Gates & Sell, 2007; Schumm, 2012b, p. 1358; Schumm, 2014). Although some GLB persons perceive their sexual orientation as fixed, sexual orientation in general varies sufficiently that Hatzenbuehler, Jun, Corliss, and Austin (2014) used sexual orientation as a "time-varying variable" (p. 56) in their analyses of tobacco use among sexual minority and heterosexual youth. Another often overlooked issue in measuring sexual orientation is that at least one study (Gartrell, Banks, Reed, Hamilton, Rodas, & Deck, 2000) that began with lesbian mothers – and has continued to use all of them as lesbian-identified participants – included women who later changed their gender to male or their sexual orientation to heterosexual, at least in terms of later partnering with men (Schumm, 2012b, p. 1360). Sometimes it is not clear whether "same-sex" means lesbian or not; at times Patterson and her colleagues use 44 families from the Add Health study as lesbian-led families (Wainright and Patterson, 2006) while at others, they narrowed their selection to 18 families (Patterson, 2009b) to try to include only truly lesbian families. It is also possible that "same-gender" parents could be mother-daughter, father-son, sister-sister, brother-brother, grandfather-father, grandmother-mother dyads rather than LGB dyads.

Children Often Born from Prior Heterosexual Relationships

Holtzman (2013) has noted that "large proportions of children reared by gay men and lesbians were born into cross-sex marriages" (p. 369). Gershon, Tschann, & Jemerin (1999) found that 67% of their adolescent participants had been "born to mothers who were in a heterosexual marriage" (p. 438). Power, Perlesz, Schofield, Pitts, Brown, McNair, Barrett, and Bickerdike (2010) noted that "A large number of lesbians and gay men have children from previous heterosexual relationships" (p. 2). Brown and Perlesz (2007) noted that "the majority of lesbian-parented families formed with children from previous heterosexual relationships in step- or blended families" (p. 268). Sarantakos (2000, p. 102) studied over 300 same-sex couples from Australia and New Zealand and found that all of the children of gay fathers and more than 75% of the children of lesbian mothers had been born into previous heterosexual relationships. Murray and McClintock (2005) found that nearly all (94%) of their lesbian/bisexual mothers and over half (57%) of their gay fathers had been divorced from previous heterosexual relationships. When Hequembourg (2004, 2007) studied 40 lesbian mothers, she found that 20 of them had children from a previous heterosexual relationship and another five had children from their partner's previous heterosexual relationship. Lick, Tornello, Riskind, Schmidt, and Patterson (2013) found that 83% of the children of gay fathers in their study had been born to heterosexual parents. As early as 1975, Riley observed that "Most lesbian mothers were heterosexually married for at least several years" (p. 859). Later, Tasker and Golombok (1991) observed that "A further limitation to these studies is that most of the children who participated spent the early part of their lives in a heterosexual family" (p. 186). More recently, Rothblum (2009) has noted that ".... many LGBs have been previously heterosexually married" (p. 121) and that "even today, LGBs who are heterosexually married yet partnered with same-sex lovers may be a very large subgroup" (p. 122). Likewise, Perrin (2002) observed that "Most individuals who have a lesbian and/or gay parent were conceived in the context of a heterosexual relationship" (p. 341). Rosenfeld (2013) explicitly recognized such

when he said after the Regnerus research had been published that "Most children raised by same-sex couples are form a prior heterosexual relationship that has to break up before the same-sex couple parenting family is formed" (p. 964). Perrin, Siegel, et al. (2013) also noted that "Same-gender couples, like heterosexual couples, may become parents by having children in previous heterosexual relationships..." (p. e1375). Tasker (2013) stated, even though more recent research was focusing more on planned parenting by lesbian and gay couples (Bos, 2013; Farr & Patterson, 2013b), that "Most of our knowledge about whether or not parental sexual orientation influences children's development is derived from studies of children raised by their lesbian mother and her new female partner after the child's mother and father separated" (p. 3). Even with very recent data, Crouch et al. (2014) found that at least 20% of the children in their study of same-sex parents had been conceived through heterosexual intercourse.

Some studies included participants from mixed-orientation marriages before that term had come into common use (Buxton, 1999; Harris & Turner, 1986; Hays & Samuels, 1989). In particular, Golombok, Spencer, and Rutter (1983) found that of the children of their 27 lesbian mothers, 25 (93%) of those mothers had conceived their children in previous heterosexual relationships, including 21 marriages. As another example, Harris and Turner (1986) surveyed 23 gay or lesbian parents, of whom 19 (83%, p. 106) had been married heterosexually previously; four of their respondents had been previously married heterosexually between two and five times. Huggins (1989) studied 18 lesbian mothers' children; *all* of those mothers had been married heterosexually. Turner, Scadden, and Harris (1990) contacted ten gay fathers and eleven lesbian mothers, *all* of whom had been married previously. Rohrbaugh (1992, p. 467) stated that it had been estimated that almost a quarter of all lesbian women had children from previous heterosexual unions. Javaid (1993) studied 26 children of 13 lesbians mothers, *all* of whose children had been born into previous heterosexual relationships. Bailey, Bobrow, Wolfe, and Mikach (1995) studied the sons of 55 gay fathers and found

that *all* of the fathers had previously been married heterosexually.

Perrin and Kulkin (1996) stated that "The majority of gay men and lesbians who are parents conceived children in the context of heterosexual relationships..." (p. 629) and found that 31% of the 433 children in their study (of whose same-sex parents, 59% had earned a graduate degree) had been conceived in a previous heterosexual relationship. Barrett and Tasker (2001) indicated that "Although, currently, it appears that the majority of children with gay or bisexual fathers will have been conceived within heterosexual relationships, in recent years greater numbers of gay and lesbian people have chosen to form families outside the institution of marriage, through common law, coparenting, or other mutually beneficial arrangements" (p. 63); in their survey of 101 gay fathers, they found that as many as 87% of the fathers had been or were still in sexual relationships with women. At least 82% of the children involved had been conceived within a heterosexual marriage while another 12% appear to have been conceived in nonmarital heterosexual relationships (p. 68). Of those 101 fathers who were actively parenting a child, over 80% of those children had been conceived by their father heterosexually (p. 68). Oswald, Goldberg, Kuvalanka, and Clausell (2008) found that most – over 90% - of the same-sex parents in their study had children from previous heterosexual relationships. Tasker, Barrett, and De Simone (2010) studied 18 sons and 18 daughters of 24 gay fathers, of whom *all* had conceived those children in previous heterosexual relationships. Lytle, Foley, and Aster (2013) interviewed children of same-sex parents, of whom 90% were from previous heterosexual relationships that had dissolved. Crouch et al. (2013) used an online survey in Australia and New Zealand during 2008 to gather data from 434 same-sex parents (85% women, 14% men); 67% of gay fathers and 42% of lesbian mothers had conceived at least one of their children through a heterosexual relationship.

Golombok et al. (2003) found that the children of lesbian mothers had become involved in a lesbian family at an average age of more than four years, even though the target age of the child for the

study for lesbian and heterosexual parents was five to eight years. It appears that at least one child did not enter into a lesbian family until the age of 108 months while being no older than 116 months of age, meaning that the child had spent no more than ten months in a lesbian family, less than 10% of its total life. Yet that child was included with children who had spent their entire lives from birth in a lesbian family, while it appears that at least two other children spent more time outside of a lesbian family than in one (Schumm, 2014). The complexity of this might be better understood if you were comparing homeschooled children and public school children. If children who had attended public school for eleven years but had been homeschooled for just a couple of months were included in with children who had been homeschooled since kindergarten would that be a clear research design? If children who had been homeschooled for eleven years but had started attending public school in their senior year were included with children who had been in public school since kindergarten, would that be a clear research design? If going to one type of school or the other matters, then the duration of time in that school system should matter, not just the technicality of which type of school they happen to be in on any given day. Perhaps the same should be true of assessing family structure in terms of its historical pattern rather than just its immediate situation. Few research studies have taken this issue into account when studying heterosexual and nonheterosexual families. One exception was a study of ADD HEALTH data by Tillman (2007) who studied a variety of pathways of family structural changes as predictors of academic outcomes for adolescents. Most recently, Rosenfeld (2014) claimed to evaluate parental relationship stability among heterosexual and same-sex parents, but he included many same-sex attracted and GLB identified parents within his "different-sex" parent group.

Parents Often Part-Time; Others May be Doing Much of the Actual Parenting → ~~[illegible]~~ Hired governess

Gershon et al. (1999) noted that 54% of their adolescent participants "had fathers who were involved in their lives to the degree that they visited with their father five or more times per year" (p. 438). Henehan, Rothblum, Solomon, and Balsam (2007) surveyed gay and lesbian couples who had obtained civil unions in Vermont, along with gay and lesbian friends who had been referred by the original participants. They found, as noted in Schumm (2011b) that only 18% of the children of gay couples (78% of whom were in civil unions) lived with their parents full-time compared to 62% of the children of heterosexual fathers. For lesbians, the corresponding percentages were 39% and 59% compared to 71% for heterosexual mothers. In terms of actual time spent with children, they found that 39% of the children of gay fathers and 41% of the children of lesbian mothers never or only occasionally visited with the children compared to figures of 11% and 26% for children of heterosexual fathers and mothers. The point is that when comparing different groups of parents, the actual time spent with children should be considered as an important factor, not just the label of "parent". The study may also suggest that simply having a civil union (or perhaps marriage) may not mean actually spending more time with as a parent with one's children. Unless getting married actually translates into spending more time with a child, marriage may do relatively little for the process factors that are so important for children, even if the children gain some legal benefits from a different legal situation. It is also possible that much of a child's parenting is being done by hire (no doubt of varying quality), as Farr, Forssell, and Patterson (2010) reported, "All parents noted that some individual... provided outside care for their child on a regular basis" (p. 168). Another concern is that the associates of gay or lesbian parents may tend to be largely gay or lesbian, providing fewer heterosexual male role models for their children (Schumm, 2011b, pp. 43-44).

From a Life-cycle Perspective, Effects May Be Delayed

Another concern with assessing child outcomes for same-sex families is that "it is conceivable that the effect of father-absence in early infancy may not become apparent until the adolescent years" (MacCallum and Golombok, 2004, p. 1409). Both Amato (2000) and Lansford (2009) have noted that some effects of parental instability might not be apparent until a child enters late adolescence or early adulthood. One study (Leung, Erich, & Kanenberg, 2005) considered this issue and appeared to find that that same-sex parents were doing less well with older adopted children.

Parent, Teacher, and Child Reports May Differ

It has also occurred that the reports of children and/or their teachers (or other professionals) have differed from those of mothers. For example, Golombok et al. (1997) found that lesbian mothers rated themselves as having much more warmth toward their children (d = 1.04, $p < .05$) than did two-parent heterosexual mothers, but the results were reversed when it came to children's ratings of maternal acceptance (d = 0.12 in favor of heterosexual children), this type of reversal possibly being an indirect indication of parental social desirability response bias. As noted before, Vanfraussen et al. (2002) found that "we discovered that teachers evaluate the emotional/behavioural well-being of children from lesbian families less positively than that of children from heterosexual [families]" (p. 248). Teachers also rated the children of gay and lesbian parents less favorably than they rated the children of married or cohabiting heterosexual parents in Sarantakos's (2000) Australian research. Golombok et al. (2014) may not have found major differences between parent and teacher ratings for children from gay, lesbian, and heterosexual households, but on the eight pairwise comparisons reported, the effect sizes had different signs on half (p. 463), indicating that teacher's ratings often differed from parent ratings.

LGB Parents May Face Hostility or Discrimination from LGB Non-Parents

It is also possible that "when lesbians or gay men become parents they may lose some of their connections within the lesbian and gay community" (Power et al., 2010, p. 2). Same-sex parents may even encounter outright hostility toward themselves or toward their children from LGBT persons who are not parents or from heterosexuals. Thompson (2002) noted that "Lesbian mothers thus faced bias from heterosexuals as well as other lesbians and gay men. Lesbian periodical literature is replete with accounts of lesbian animosity toward lesbian mothers" (p. 47). Riggs (2008) has described one case in which a gay man "Paul appeared to hold negative perceptions of lesbian mothers in general" (p. 232). Riggs, McLaren, and Mayes (2009) stated that "What has received no attention to date, however, are the attitudes of lesbian and gay individuals toward lesbian and gay parents" (p. 52). Riggs et al. (2009) discussed a variety of research reports in which gay or lesbian parents had experienced alienation from nonparent gay and lesbian individuals, described in terms of "harsh criticism" or "a rupture" (p. 54) of friend networks. In their analysis of data from 265 gay and lesbian respondents, they found a trend for non-parent gay and lesbian persons to hold more negative views towards gay and lesbian parents compared to gay and lesbian parents (b = -0.13, p < .11, two-tailed). However, discrimination can also occur against heterosexuals for a variety of reasons. Some discrimination may be based entirely on superficial characteristics but some discrimination may also be based on personal behaviors (e.g., illegal drug use, bullying, having multiple sexual partners) that others may deem harmful or damaging to society as well as the individuals concerned.

Limitations and their Implications Should be Acknowledged

Most studies mention some limitations. However, "Confession should not have the goal of disarming criticism" (Wilkinson and Task Force on Statistical Inference, 1999, p. 602). Vague limitations like

"more research is needed" add little of value. For example, if a study was nonrandom and therefore should not be used to generalize results to a larger population, it might be best to indicate that the study had little value for public policy because any policy changes might or might not have their anticipated effects on any known group within the population. Limitations should have "teeth" in terms of limiting the usefulness of the research for applied purposes, including judicial decisions or changes in government policy.

Politicization of Science

Redding (2013a, b) has commented extensively on the politicization of social science. Previously I have commented on the numerous ad hominem attacks on Professor Regnerus from his opponents (Schumm, 2013). Even pro-LGBT scholars can fall prey to attacks if their ideas deviate from expectations. For example, Stacey and Biblarz (2001) were criticized by Golombok et al. (2003) for having "overemphasized the differences that have been reported between children with lesbian and heterosexual parents" (p. 21). Ball (2003) alleged that their conclusion was unwarranted and "both useless and dangerous" (p. 703). Hicks (2005) claimed their ideas were "unproven and disputable" with no basis in fact (pp. 162-163) and later (2013) that they had "problematic notions of gender" (p. 157). Hequembourg (2007) doubted they were entirely correct (p. 132).

Not Asking Too Much

Most of the concerns addressed here are basic scientific guidelines, many of which have been promoted by the American Psychological Association (1994, 2001, 2010), and are not "asking too much" of scholars, as if doing high quality research was simply too much to expect.

Summary on Methodological Issues

All of these concerns with the limitations of research concerning LGBT issues should raise red flags about any attempt to achieve scientific consensus *prematurely*, even if for a good or noble cause. If anyone is motivated to *avoid* a rush to judgment or a rush to consensus, it should be scientists, including social scientists. As Gonsiorek (2006) has argued, "Scientific thought, then, is at its core, evolving and ambiguous" (p. 266). Manzi (2012) argued similarly, that "science never provides Truth with a capital T" because there is always a possibility that any scientific belief, no matter how much it represents a consensus opinion, might be proven to be incorrect. The limitations of science in general may be especially applicable to social science because of the complexity of human social behavior (Manzi, 2012, p. 117).

Current Examples

Intergenerational Transfer of Parental Sexual Orientation

I am well aware that many may not care if parents transfer sexual orientation to their children by genetics or socialization, but the fact is that many scholars claimed for decades before various courts that there was absolutely no such transfer. In my recent article in the International Journal of the Jurisprudence of the Family, I debunk that claim by evaluating something on the order of forty studies. Furthermore, there is evidence that may explain how such transfer tends to occur.

Harmful Outcomes of Same-Sex Parenting

It is often claimed that there is no evidence of harmful effects of same-sex parenting. However, careful evaluation of the evidence does not support such a claim. Here is a table I present in a paper my team is presenting at the National Council on Family Relations in November, using data from the New Family Structures Study (NFSS):

Effect Size Differences between Heterosexual and Most Stable Same-Sex Families' Children's Outcomes

Effect Size	Stable Two-Parent Heterosexual Families	Heterosexual Stepfamilies
Over 1.0	Loving Family of Origin	
Over .50 or 2X percent	Sexual orientation, childhood sexual abuse, having had an STI, health, Bullied on account of sexual orientation, arrested, convicted, time in jail, using marijuana, smoking cigarettes	
.40 to .49	Insecure attachment, educational attainment, use of drugs, sexual cheating, acceptance of pornography	
.30 to .39 or 50% difference	Forced sex, acceptance of cohabitation, enjoyed life	Health, use of marijuana
.20 to .29	Depression	Acceptance of pornography
.00 to .19	Happiness in life, use of pornography, bullied in general, considered suicide	Convicted, arrested, loving family, drug use, use of pornography, smoking cigarettes, sexual cheating, having had an STI
Effect sizes favorable to same-sex families	Self-esteem, impulsivity	Forced sex, self-esteem, impulsivity, considered suicide, spent time in jail

The key thing about the table is that we compared the top ten percent of lesbian families against average heterosexual intact and stepfamilies in order to achieve these effect sizes. Other studies have confirmed the strong associations for childhood sexual abuse and illegal drug use, among other factors.

Parental Relationship Instability

In our NCFR paper I take up several pages discussing the variety of opinions on whether same-sex parents have more or less stable relationships than heterosexual parents. Every side of this debate has proponents. But the evidence is becoming more clear – LGB parents tend to have less stable relationships than heterosexual parents. It appears that Potter (2012) found near zero rates of parental relationship stability for GLB parents from the birth of the focal child to eighth grade. Gartrell and her colleagues have reported a 56% instability rate over 17 years for lesbian mothers who conceived children by donor insemination, a rate higher than found for their own heterosexual sisters. Rosenfeld (2014) in Journal of Marriage and Family blames this on the legal marriage gap and a variety of control factors. But to get there, he includes over 70 dead people in his analysis (well, dead people cannot get a divorce, right?) and includes same-sex attracted and GLB identified couples as part of his "different-sex" group of parents. When I analyzed Rosenfeld's data without the dead folks and without the mixed-orientation relationships, I found that having a child decreased relationship instability for heterosexual couples slightly from 16% to 15% while for lesbian/gay parents, instability increased from 25% to 48% (over 4 years). I am sure someone is salivating over the idea of how much marriage helped same-sex parents but sadly the data set, which started with 474 same-sex couples, ended up with only 4 same-sex parents who were married or in a domestic partnership or civil union (and that was counting marriage as a psychological construct rather than a legal one). For those partners without children, "marriage" reduced instability for lesbians by about half (31% to 16%), for gay couples by more (29% to 6%), but even more for heterosexuals (from 42% to 4%). The

instability rate for married heterosexual parents was about 8% while it was 25% for the few (n = 4) married same-sex parents (combining gay male and lesbian parents). For same-sex parents not in a formal union, the instability rate was about 52%, so it might appear that "marriage" cut the instability rate in half. However, the instability rate for heterosexual parents not married was 43%, cut to 8% for those married. It is not clear why Rosenfeld found so few married same-sex parents; there were far more numbers of same-sex parents who were not married. In particular, if heterosexuals had children they were more likely to be married (80% vs. 66%) but if same-sex couples had a child, they were less likely to be in any kind of a formal or psychological union (13% vs. 26%). Not only were the rates of even "psychological" or formal unions lower for same-sex couples but the apparent impact of having a child on being or getting married was different. Overall, married heterosexuals, with or without children, had very low rates of instability (4-8%) over four years in the Rosenfeld study, a sharp contrast to most other classes of relationships (one exception – gay men in a formal or psychological union without children had only a 6% instability rate compared to 16% for lesbian couples in similar circumstances).

Gender and Gender Roles

Despite many claims to the contrary, my review of the literature finds that a small percentage of the children of same-sex parents are now claiming to be "gender-queer", which suggests that gender effects may be occurring from same-sex parenting. I even read a story recently of same-sex parents who refused to let their child have a gender at all, insisting that the child not make up his/her mind until later in life about his/her gender.

In terms of gender roles, my meta-analyses indicate that same-sex parents tend to prefer less traditional gender roles for their children and that their children pick up on these preferences in the development of their own gender roles.

References

For the sake of killing fewer trees, if you want references, sign up for an email of whatever papers you wish and those papers will include the references cited here.

LIST OF PUBLICATIONS ON GLB ISSUES

As of October 2014

Dr. Walter R. Schumm (Professor of Family Studies, Kansas State University, schumm@ksu.edu)

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Schumm, W. R. (2014) Challenges in predicting child outcomes from different family structures. *Comprehensive Psychology*, 3, 10, 1-12.

Many studies on family structure have relied upon a snap-shot view of structure at the time of the research study. I show how this is common even with large national datasets like ADD HEALTH and with some studies on same-sex parenting. Even when research reports do not specify how family structure has changed over time for their respondents, statistical detective work can ferret out some information on such changes.

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Schumm, W. R. (2013) Intergenerational transfer of parental sexual orientation and other myths. *International Journal of the Jurisprudence of the Family*, 4, 267-433.

Here I list over 170 quotes from over 160 authors and scholars in at least 150 different sources, who dogmatically assert that there is no relationship whatsoever between parental sexual orientation and children's sexual orientation. Then I cite a few who hedged their bets a bit. Finally I show how older research and social science theory and newer research both support the existence of intergenerational transfer of sexual orientation, contrary to the apparent scholarly "consensus" on this issue. Furthermore, I demonstrate how the "no difference" hypothesis has been proven suspect, if not outright wrong, in numerous areas concerning sexual orientation (e.g., drug abuse, lifespan, mental health, sexually transmitted infections, suicide rates, etc.).

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Schumm, W. R. (under revision) Same-sex parenting. Comprehensive Psychology.

I review research that indicates that gay or lesbian parents have lower stability in their relationships than heterosexual couples and that the children of same-sex parents are characterized by higher levels of substance abuse and other problems, including lower levels of educational achievement. Much of the lecture presented here in West Palm Springs is derived from this report.

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Schumm, W. R. (2012) Flawed evidence about gay marriage. In M. Cook (Ed.), *Same-sex marriage: dangers, difficulties, deceptions* (pp. 36-38). Van Nuys, CA: The New Media Foundation (Kindle edition).

This was a reprint of my commentary in Mercatornet.com on 6 August 2010, reflecting upon Judge Walker's decision regarding same-sex marriage in California.

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Schumm, W. R. (2012) Re-examining a landmark research study: a teaching editorial. *Marriage and Family Review*, 48, 465-489.

Demonstrates, with a more complex analysis of data from Evelyn Hooker's original studies, that her sample of homosexual men was different statistically from her sample of heterosexual men on her projective test and that, given the limited data available, those who scored more poorly on her projective test also tended to score more poorly in terms of overall mental health, as rated by independent judges. In other words, those homosexual men who were most "gay" in terms of the Rorschach tests, had the worst mental health ratings.

This editorial was critiqued subsequently by:

Cameron, P., & Cameron, K. (2012) Re-examining Evelyn Hooker: Setting the record straight with comments on Schumm's (2012) editorial. *Marriage and Family Review*, 48, 491-523.

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Schumm, W. R. (2012) Methodological decisions and the evaluation of possible effects of different family structures on children: The New Family Structures Survey (NFSS). *Social Science Research*, 41, 1357-1366.

Demonstrates that the methodological decisions made by Professor Regnerus were "in line" with those made by many other researchers. Notes that three of his findings replicate much previous research. I have since done a more detailed analysis looking at heterosexual stepfamilies and same-sex families, controlling for parental stability.

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Schumm, W. R. (2012) Lessons for the "devilish statistical obfuscator" or how to argue for a null hypothesis: A guide for students, attorneys, and other professionals. *Innovative Teaching*, 1, 2 (online, 13 pages).

Demonstrates how even an obviously false null hypothesis (e.g., tobacco use is harmless to one's health) can be "proven" with inappropriate use of theory and statistics, paralleling approaches used in much of the research on GLBT issues. The article takes the stance of how tobacco companies might twist data in order to prove the harmlessness of using tobacco products. Then I provide examples of how research on LGBT issues has done exactly the same sorts of data cooking.

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Schumm, W. R. (2011). Are two lesbian parents are better than a Mom and Dad? Logical and methodological flaws in recent studies affirming the superiority of lesbian parenthood. *Ave Maria Law Journal*, 10, 79-120.

A review of differences between gay/lesbian parents and heterosexual parents and with respect to child outcomes with a look at some additional findings reported since Schumm (Journal of Human Sexuality, 2011).

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Schumm, W. R. (2011) Child outcomes associated with lesbian parenting: comments on Biblarz and Stacey's (2010) report. *Journal of Human Sexuality*, 3, 35-80.

A review of differences between gay/lesbian parents and heterosexual parents and with respect to child outcomes. A discussion of many of the methodological problems with "no difference" studies.

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Schumm, W. R., & Canfield, K. R. (2011). Statistically evaluating multiple comparisons among correlated measures: A practical example. *Psychology and Education*, *48*(3/4), 51-55.

This paper demonstrates that it is possible to conduct multiple t-tests and find little of significance statistically and yet – when using several other statistical approaches – to find far more of significance. Previous research has often merely used multiple t-tests to compare groups of heterosexual and LGBT parents, often claiming proof for the null hypothesis. These results say "not so fast" and that better statistical methods should be used in addition or instead of mere t-tests.

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Schumm, W. R. (2010) Criminal-justice sanctions minor and mostly against bisexual youth. *Pediatrics* (December 8), http://pediatrics.aapublication.org/cgi/eletters/127/1/49.

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Schumm, W. R. (2010) Comparative relationship stability of lesbian mother and heterosexual mother families: a review of evidence. *Marriage and Family Review*, 46, 499-509.

At the Prop 8 trial in California, experts for the gay plaintiffs testified under oath that there were no differences whatsoever between gay/lesbian and heterosexual parents or with respect to child outcomes. Here it is shown that lesbian parents have far less stable relationships than heterosexual married parents, among other differences. No scholar has yet criticized this article in that journal.

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Schumm, W. R. (2010). Children of homosexuals more apt to be homosexuals? A reply to Morrison and to Cameron based on an examination of multiple sources of data. *Journal of Biosocial Science*, 42(6), 721-742.

For decades there has been a 'counter-myth' that it is a myth that gay/lesbian parents are more likely to raise GLB children. This article, which so far has not been rebutted, shows how social factors can explain at least patterns of open homosexuality so that biology is not all there is in its expression. Female gender in either parent or child or both is associated with greater intergenerational transmission of sexual orientation. Despite the controversy surrounding an AOL News report of this article on the internet, no scholar has even submitted a criticism of this paper to the journal.

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Schumm, W. R. (2010) Statistical requirements for properly investigating a null hypothesis. *Psychological Reports*, 107, 3, 953-971.

Even though advocates of gay marriage often cite support from the American Psychological Association and other professional associations, it is shown that most of the recent research since 2001 has not complied with APA requirements for the conduct of research. Thus, the position of the APA itself and of many advocates is based on research that does not even meet the APA's scientific standards.

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Schumm, W. R., & Crow, J. R. (2010). Statistically evaluating multiple comparisons among correlated measures. *Psychology and Education*, 47(3/4), 27-30.

Many of the "no difference" studies on homosexual parenting have relied upon multiple t-tests using correlated outcome measures. Here an assessment is made of the chance of having statistically significant overall outcomes with such situations even when none of the individual t-tests appear to be significant statistically. It is quite possible for there to be a significant result overall even when many individual tests are not significant statistically.

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Schumm, W. R. (2009) Gay marriage and injustice. *The Therapist*, 21(3), 95-96.

This was an invited two-page comment on the injustice and inequity of gay marriage which was later recanted by the journal because of pressure from gay advocacy groups even though the pro-gay marriage reports were not recanted. I argue that granting equivalence and formal social approval to gay marriage is actually creating an inequality because mixed-gender relationships assume greater risks to the participants (overcoming gender differences, costs of having children) but provide a greater benefit to society (socialization of children by two, mutually and biologically related parents).

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Schumm, W. R. (2011) Complexities of the social environment. *Pediatrics* (18 April).

http://pediatrics.aapublications.org/cgi/eletters/peds.2010-3020v1). (accessed April 19, 2011).

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Schumm,W. R. (2010) Lesbian parents. *Pediatrics* (June 8), http://pediatrics.aspublications/org/ cgi/126/eletters/e01 (accessed June 8, 2010).

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Schumm, W. R. (2004) Differential risk theory as a subset of social exchange theory: implications for making gay marriage culturally normative and for understanding stigma against homosexuals. *Psychological Reports*, 94, 208-210.

Here I explained why making gay marriage equivalent to heterosexual marriage was, in effect, creating an inequity, rather than establishing equity.

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Schumm, W. R. (2010) How science is done. *Marriage and Family Review*, 46, 323-326.

Here I detail how science has been somewhat corrupted in the service of political correctness, with research on gay parenting being the background context specifically.

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Schumm, W. R. (2010). "Adult attachment style dimensions in women who have gay or Bisexual fathers": Response to Sirota. *Archives of Psychiatric Nursing*, 24, 371-372.

Sirota's research had found that daughters of gay fathers were far more likely to abuse illegal drugs, become lesbian or bisexual, to have insecure attachments to their fathers, and to have difficulty with romantic relationships than were daughters of heterosexual fathers. Here I pointed out the large effect sizes involved in her research, which were not mentioned in her original papers. These results were not "just" significant but were substantial in magnitude.

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Schumm, W. R. (2010) Evidence of pro-homosexual bias in social science: citation rates and research on lesbian parenting. *Psychological Reports*, 106, 374-380.

Three articles were published about 1980 by pro-gay scholars; one article found material derogatory towards lesbian parents while the other two found more favorable information. The former was cited far less often than the other two, even though the former was probably methodologically superior. This suggests a bias in social science to promote pro-gay results.

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Schumm, W. R. (2010) A comparison of citations across multi-disciplinary psychology journals: case study of two independent journals. *Psychological Reports*, 106, 314-322.

Psychological Reports is often criticized in court cases for being a pay journal. It does have page charges but it is peer reviewed and rejects numerous submissions. Here I showed that my articles in Psychological Reports have been cited (citation being a measure of scientific impact) as often as for many other non-page charge journals, not significantly different from even prestigious journals such as Journal of Marriage and Family. In other words, having page charges does not truthfully imply that a journal publishes non-scientific material.

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Schumm, W. R., Bosch, K. R., & Doolittle, A. (2009) Explaining the importance of statistical variance for undergraduate students. *Psychology and Education – An Interdisciplinary Journal*, 46(3/4), 1-7.

The concept of statistical variance and risk is discussed, which on rare occasions has implications in the assessment of gay parenting research.

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Schumm, W. R. (2008) Re-evaluation of the "no differences" hypothesis concerning gay and lesbian parenting as assessed in eight early (1979-1986) and four later (1997-1998) dissertations. *Psychological Reports*, 103, 275-304.

This research found that the worse a dissertation was methodologically in the area of gay parenting, the more likely it was to be cited ($p < .05$), the very opposite of what should be happening if sound scientific practices were being followed. This demonstrates severe bias in the application of science in this controversial area.

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Schumm, W. R. (2005) Empirical and theoretical perspectives from social science on gay marriage and child custody issues. *St. Thomas Law Review*, 18, 2, 425-471.

This review examined methodological problems with research on gay parenting, presented some research on sexual abuse by foster parents in Illinois, and discussed theory regarding the inequity of gay parenting. Unless GLBT fosters parents make up more than 20% of the foster parents in Illinois, then it would appear that sexual abuse of foster children is more likely by GLBT foster parents than by heterosexual parents.

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Schumm, W. R. (2005) Making statistics come alive: a methods spotlight. Pp. 599-600 in V. L. Bengston, Acock, A. C., Allen, K. R., Dilworth-Anderson, P., & Klein, D. M.(Eds.), *Sourcebook of Family Theory and Research*. Thousand Oaks, CA: Sage.

I cited some issues in the area of gay parenting that needed careful statistical interpretation.

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Schumm, W. R. (2004). Response to Kirkpatrick (2004): Differential risk theory and lesbian parenthood. *Psychological Reports*, 95, 1203-1206.

Here I focused on equity theory in responding to Kirkpatrick's (2004) comments.

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Schumm, W. R. (2004). What was really learned from Tasker and Golombok's (1995) study of lesbian and single parent mothers? *Psychological Reports*, 94, 422-424.

Among other things, I found that lesbian parents were more likely to raise daughters to become lesbian or bisexual than were heterosexual parents, even if the daughters did not report same-sex attractions.

COMMENTED ON: Kirkpatrick, M. (2004) Comments on Dr. Walter R. Schumm's paper "What was really learned from Tasker and Golombok's (1995) study of lesbian and single parent mothers?" *Psychological Reports*, 94, 1185-1186.

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Schumm, W. R. (2000) Psychology of the scientist: LXXXIII - An assessment of Herek's critique of the Cameron group's survey studies. *Psychological Reports*, 87, 1123-1132.

RESPONSE: Cameron, P., & Cameron, K. (2003) Psychology of the scientist: LXXXV. Research on homosexuality: a response to Schumm (and Herek). *Psychological Reports*, 92, 259-274.

Here I critiqued the research of Paul Cameron and the comments of Professor Herek regarding Cameron's research.

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Schumm, W. R., Akagi, C. A., & Bosch, K. R. (2008) Relationship satisfaction for heterosexual women compared to lesbians and heterosexual men in a sample of faith communities from Topeka, Kansas. *Psychological Reports*, 102, 377-388.

Here, with a small sample, it was found that relationship satisfaction was slightly higher for lesbians than heterosexuals, as predicted by equity theory.

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Schumm, W. R. (2004) A reply to Belkin's argument that ending the "gay ban" will not influence military performance. *Psychological Reports*, 95, 637-640.

Here I expressed concerns with the repeal of DADT, even though I recognized that the policy had its own limitations. Although I haven't published it yet, more recent data from a 2009 survey of active duty personnel found that there are radically different splits in the military on DADT depending on demographics (i.e., enlisted heterosexual males in combat units are adamantly opposed to changing DADT while female officers who are lesbians, among others, are adamantly in favor of changing DADT).