

Nontraditional Families and Childhood Progress through School

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Abstract:

I use U.S. census data to perform the first ever large sample nationally representative tests of outcomes for children raised by same-sex couples. The results show that children of same-sex couples are as likely to make normal progress through school as the children of most other family structures. Heterosexual married couples are the family type whose children have the lowest rates of grade retention, but the advantage of heterosexual married couples is mostly due to their higher SES. Children of all family types (including children of same-sex couples) are far more likely to be making normal progress through school than children living in group quarters.

Nontraditional Families and Childhood Progress Through School

What types of outcomes can be expected for children raised by same-sex couples, relative to children in other types of families? The answer is vitally important both for public policy relating to same-sex marriage and adoption (Eskridge 2002; Koppelman 2002), and for theories of how family structure matters. Supporters and opponents of same-sex marriage rights agree that the legal issue of same-sex marriage rights should revolve around the question of childhood outcomes for children raised by same-sex couples (Alvaré 2005; Patterson 2002). In this paper I examine progress through school, i.e. normal progress versus grade retention, for children of same-sex couples compared to children of other family types, using data from the 2000 U.S. census.

The debate over same-sex unions and their children draws from and informs a more general literature concerning family structure's effect on children. The literature on family structure has generally focused on structural variations within heterosexual parented families, contrasting heterosexual married couples, heterosexual remarried couples, and (presumably heterosexual) single mothers (Cherlin 1992; McLanahan and Sandefur 1994). Even though same-sex couples are a small minority of all couples (1% of all couples in census 2000 were same-sex couples), the inclusion of same-sex couples can provide researchers with more leverage over the key question of how family structure matters in general.

Studies of family structure and children's outcomes nearly universally find at least a modest advantage for children raised by their married biological parents. The question which has bedeviled researchers, and which remains essentially unresolved, is *why* (Cherlin 1999). Some results have indicated that socioeconomic status explains most or all of the advantage of children raised by married couples (Biblarz and Raftery 1999; Gennetian 2005; Ginther and Pollak 2004), while other scholars find that family structure has an enduring effect on children net of all other factors (McLanahan and Sandefur 1994; Zill 1996). Married couples tend to be the most prosperous type of family unit, and this economic prosperity undoubtedly has certain advantages for children (but also see Mayer 1997).

LITERATURE REVIEW

Same-Sex Parenting

The modern reality of same-sex couples raising children long postdates the classical psychological theories of child development (for example, Freud [1905] 1975). Recent research on childhood socialization to gender roles has emphasized peer groups and genetics as much as direct parental influence (Harris 1998; Maccoby 1990). In-depth studies of the psychosocial development of children raised by lesbians or by same-sex couples has found that these children are normal and well-adjusted (Chan, Raboy and Patterson 1998b; Flaks et al. 1995; Golombok et al. 2003), though as I discuss below, there are also critics of the small-N literature on same-sex couples and their children.

Same-sex couples become parents in three main ways. First, through one partner's (generally prior) heterosexual relationship; second, through adoption; third, through donor insemination or surrogate parenting (Stacey 2006). Same-sex couples cannot become parents

through misuse or failure of birth control, the way heterosexual couples can. Parenthood is more difficult to achieve for same-sex couples than for heterosexual couples, which implies a stronger selection effect for same-sex parents. If gays and lesbians have to work harder to become parents, it could be the case that the gays and lesbians who do become parents are on average more dedicated to the hard work of parenting than their heterosexual peers, and this could be beneficial for their children.

In Judith Stacey's (2006 p. 39) discussion of gay adoption, she describes the gay men of Los Angeles as having to search through the state's "...overstocked warehouse of 'hard to place' children, the majority of whom... have been removed from families judged negligent, abusive, or incompetent. Most of the state's stockpiled children... are children of color, and disproportionately boys with 'special needs.' " If it is the case that same-sex couples who adopt mainly have access to 'special needs' children, the special needs of these children could exert a downward bias on the average outcomes for children of same-sex couples. Fortunately, the census distinguishes between the head of household's "own children," adopted children, step children, and foster children.

Nearly all children of gay and lesbian parents attend schools and live in neighborhoods whose other children come overwhelmingly from families with heterosexual parents. In other words, children of same-sex couples share a common peer and school environment with children of heterosexual couples. To the extent that peer environment is a primary socializing environment for children (Harris 1998; Maccoby 1990; for a survey see Rutter 2002), whatever differences sexual orientation of parents makes within the home may well be mediated and diffused by the common peer and school environments that children share regardless of the gender or sexual orientation of their parents.

[Table 1 here]

How the Census Complements the Existing Literature

Table 1 lists 45 empirical studies of outcomes of children of same-sex couples, comprising all of the journal articles listed in Fiona Tasker's (2005) comprehensive survey which examined childhood outcomes, plus several more recent studies listed by Wald (2006), and all four studies listed by Meezan and Rauch (2005) as the highest quality studies in this field¹, and all the more recent studies which cite the earlier ones. None of the studies cited in Table 1 find statistically significant disadvantages for children raised by gay and lesbian parents compared to other children.

The uniform finding of no significant disadvantage for children raised by gay or lesbian parents has been convincing to some scholars (Ball and Pea 1998; Meezan and Rauch 2005; Stacey and Biblarz 2001; Wald 2006), though others remain unconvinced (Lerner and Nagai 2001; Nock 2001; Wardle 1997). Several points are worth commenting upon. First, as the critics have noted, convenience sampling dominated this literature in the past (Nock 2001). More recent scholarship has answered this criticism by using nationally representative probability samples derived from the National Longitudinal Study of Adolescent Health (Add Health, see Wainright and Patterson 2006, 2008; Wainright et al. 2004), as well as studies constructed from a hybrid of probability sampling and convenience sampling (Golombok et al. 2003; Perry et al. 2004).

A second critique of the literature, that the sample sizes of the studies are too small to allow for statistically powerful tests, continues to be relevant. The mean number of children of

¹ The four articles featured in Meezan and Rauch are: Wainright, Russell, and Patterson (2004); Golombok et al (2003); Chan, Raboy, and Patterson (1998b); and Brewaeys et al (1997).

gay or lesbian parents in these studies is 39, and the median is 37, and both numbers would be slightly lower if studies without comparison groups were excluded. The nationally representative studies in the series found only 44 children who were raised by lesbian couples in the Add Health survey. Golombok et al (2003) found only 18 lesbian mothers out of 14,000 mothers in the Avon Longitudinal Study of Parents and Children, which is why they supplemented this sample with snowball sampling and their own convenience sample. The universally small sample sizes of the studies in the existing literature has left room for several critiques, including the critique that small sample studies would not have the statistical power to identify the effects of homosexual parents on childhood outcomes, even if such effects did exist (Lerner and Nagai 2001; Nock 2001). A third potential weakness of this literature is the narrowness of family structures under study (Tasker 2005). Of the 45 studies listed, only seven examined the children of gay fathers, and only two of these seven studies had a more traditional family control group built into the study.

Among the convenience sample studies, several of the most important have been based on samples of women who became parents through assisted reproductive technology (ART- Brewaeys et al. 1997; Chan et al. 1998b; Flaks et al. 1995). Because individuals who become parents through assisted means can be identified through the reproductive clinic and are therefore easier to recruit than the general population of same-sex couple parents, the literature on same-sex couple parenting has tended to feature studies of the kind of women who can afford ART: white upper middle class women. Nationally representative data tends to paint a different picture: in the U.S. census, same-sex couple parents tend to be more working class and are much more likely to be racially nonwhite compared to heterosexual married couples.

The debate over same-sex marriage and gay and lesbian adoption rights revolves around many competing sets of assumptions with political, religious, and ideological axes which cannot be resolved or even fully addressed in this paper. To the extent the debate is an empirical debate, that is to the extent that disagreement remains over the meaning of the empirical literature on the development of children of same-sex couples, this paper offers a new perspective.

To supplement the existing small-scale studies, I offer a large sample study of children from the U.S. Census, including 3,502 children of same-sex couples who had been living with both parents for at least five years (2,030 children living with lesbian mothers and 1,472 children living with gay fathers, see Table 2), and more than 700,000 children in grades 1-8 from other family types. This sample size more than satisfies Nock's (2001) criteria of 800 as the minimum number of gay and lesbian couples required for statistically useful study.

The U.S. census has several major disadvantages: normal progress through school is the only available children's outcome, and even this outcome is measured with less precision than one would hope for. Although the census data have several important limitations for the research questions considered here, the strengths of the census data (large sample, national representativity, and a full array of family structures) address important lacunae in the literature and as such this study offers a potentially useful new perspective on how family structure matters to children. Although the census data are far from ideal for the subject under study here, better data are nowhere on the horizon.²

² The 2010 census will reportedly not include the long form which was used to produce census microdata in the past (U.S. Bureau of the Census 2002). The American Community Surveys (ACS), which are supposed to replace the census long form, have not included the 5 year mobility question which I use in this paper to determine family stability.

Grade Retention

Grade retention (the opposite of normal progress through school) has been increasing in U.S. schools since U.S. President Bill Clinton proposed ending social promotion in schools in his State of the Union Address in 1998 (Alexander, Entwisle and Dauber 2003:viii; Hauser 2001). Grade retention is an important childhood outcome because retention in the primary grades is a strong indicator of a lack of childhood readiness for school, and we know that effective parenting is a crucial ingredient in school readiness (Brooks-Gunn and Markman 2005). Brooks-Gunn and Markman argue that the lower school readiness of racial minority children is due, in part, to parenting practices which differ from the authoritative parenting style favored in middle class white homes (Baumrind 1966; Lareau 2003).

Guo, Brooks-Gunn and Harris (1996) studied grade retention among urban black children and found that some indicators of parental stress such as unemployment and welfare use were associated with increased grade retention for children; in other words, they found childhood grade retention to be a useful measure of difficulties the students were experiencing at home. Guo, Brooks-Gunn, and Harris (1996:218) identify three potential sources of grade retention: “weak cognitive ability, behavioral problems, and lack of engagement in school.” Of these three causes of childhood grade retention, the second two might be partly associated with the quality of the home environment. Students with learning disabilities or physical disabilities which impact learning are also at risk of grade retention, and this type of grade retention would not be indicative of parenting deficits.

Grade retention is closely associated with more serious problems later in the life course. Students who are held back at least once are at much higher risk for eventually dropping out of high school (Alexander, Entwisle and Horsey 1997; Guo et al. 1996; Moller et al. 2006;

Roderick 1994; Rumberger 1987; Tillman, Guo and Harris 2006). Failure to graduate from high school is associated with low earnings, high unemployment, low self-esteem, and high mortality rates (Guo et al. 1996; McLanahan 1985; Tillman et al. 2006). Even when grade retention takes place in the early grades, the ‘crystallization’ of behaviors and academic abilities implies that difficulties a child experiences when he or she is 7 or 8 carry forward (more so for girls than for boys) into adolescence and young adulthood (Kowalesi-Jones and Duncan 1999).

There are several theoretical reasons for supposing that children of same-sex couples might have lower school readiness (and therefore higher rates of grade retention) than own children of heterosexual married couples, net of race, parental income, and parental education. First, the legal privileges of marriage are numerous and have direct consequences for the well being of children (Eskridge 1996; Pawelski et al. 2006). Second, evolutionary theory suggests that parents invest more in their own biological children (Wilson 2002; but see also Hamilton, Cheng and Powell 2007), and same-sex couples (absent a prior sex change) cannot both be the biological parents of any one child. Third, the large majority of children of same-sex couples from the 2000 census were children from prior heterosexual relationships (only 11% were step children, adopted children, or foster children of the head of household), meaning that most of the children being raised by same-sex couples at the time of the 2000 census had previously lived through divorce or parental break-up, which research has shown to be traumatic for some children (Amato and Cheadle 2005; Chase-Lansdale, Cherlin and Kiernan 1995; McLanahan and Sandefur 1994; Wallerstein and Kelly 1980; Wallerstein, Lewis and Blakeslee 2000).

The Benefits of Legal Marriage

Legal marriage confers a host of protections and advantages both to the couples who

marry, and also to their children. Married couples generally share joint legal custody of their coresident children. In a system of employer-based health care insurance, either spouse in a married couple can usually provide health insurance for both spouses and all their children. Marriage is a long-term contract which allows and encourages parents to make long-term investments in their children (Waite and Gallagher 2000). Divorce rights, which are a corollary to marriage rights, provide guarantees for child support and visitation that are intended to minimize the damage of a breakup to a couple's children. Given the many practical, legal, economic, and social advantages of marriage as a child rearing family structure, it should come as no surprise that children of long term married couples have the best outcomes (McLanahan and Sandefur 1994). The various benefits of marriage extend far beyond income, so one would generally expect children in married couples to have advantages even after SES is accounted for in regressions.

The moral claim for same-sex marriage rests in part on the many practical and psychological benefits of marriage, benefits which conservative family scholars have made the most careful and enthusiastic case for (Waite and Gallagher 2000; Wilson 2002). The benefits of marriage, combined with the exclusion of gays and lesbians (and their children) from those benefits, together form one cornerstone of the case for same-sex marriage (Eskridge 1996).

Relevant Comparison Sets for Same-Sex Couples

Along with the standard comparison to heterosexual married couples, heterosexual cohabiting couples are a second logical comparison group for same-sex cohabiting couples. Both heterosexual cohabiters and same-sex cohabiters are two parent families living without the rights and benefits of marriage. Certainly, there are differences: heterosexual cohabiting couples can

marry if they want to, whereas in the United States at the time of the 2000 census, same-sex couples could not marry. The comparison between children of same-sex cohabiting couples and children of heterosexual cohabiting couples allows for a more specific test of the effect of same-sex parenthood on children, while holding constant legal rights and the number of parents.

A third relevant comparison for children of same-sex couples are the children living in group quarters, since these are the children presumably available for adoption, and because same-sex couples are more likely than heterosexual couples to participate in the adoption market. Some of the difference between children in group quarters and children living with parents and guardians must be due to selection effects- the most troubled children available for adoption may not be adopted and may do poorly in school as a result of emotional or physical disabilities. On the other hand, if gay and lesbian adoptive parents are choosing from the middle or the bottom of the adoptive pool (Stacey 2006), rather than from the population of the most desirable potential adoptees, then the selection effect will be less important. In either case the census, as a cross-sectional survey, is poorly suited to the analysis of selection effects. Nonetheless, census 2000 does provide strong controls for individual student disabilities, and any comparison between children living with families and children living in group quarters will be made after individual disabilities have been controlled for.

DATA AND MEASURES

I use age and current grade (variable GRADEATT) from the 2000 U.S. census (obtained from the Integrated Public Use Microdata Series, or IPUMS, see Ruggles et al. 2004) to create a measure of prior grade retention.³ Delayed progress through school (also known as age-grade

³ Later educational milestones such as college attendance cannot be used in this analysis because college students do not generally live with (and therefore cannot be associated with) their parents in a household survey such as the U.S.

retardation) is a widely used proxy for prior grade retention (Hauser 2001; Hauser, Pager and Simmons 2001). There is a strong correlation between being older than one's classmates, and having been retained a grade in the past, which can be documented using the October supplements to the Current Population Survey, which has more precise questions about childhood grade retention (though unfortunately much smaller sample size). For example, for 8th grade students in October 2004 (author's tabulation), 2% of the 13 year olds had ever been held back a year in school, but 31% of the 14 year olds had ever been held back. The census survey, which occurs 6 months later in the school year (April rather than October), requires a later age cutoff, so I use age 15 as the cutoff age at which 8th graders are considered too old to be making normal progress through school.⁴

The census 2000 question about current grade for students collapsed grades 1-4 into a single category, and grades 5-8 into a single category. Students attending grades 1-4 can only be identified as over age if they are too old to be in the 4th grade (i.e. age at least 11) and students attending grades 5-8 can only be identified as over age if they are too old to be in the 8th grade (i.e. age at least 15).

The 2000 census did not include a question about the number of times respondents had been married, so married coresident couples cannot in general be distinguished from remarried couples. This problem is mitigated somewhat by the census' ability to distinguish the head of household's "own children" from the head of household's "step children." The census provides

census. Even secondary school students (especially students who are over age for their grade) are old enough to live apart from their parents, which is why my analysis focuses on the primary grades.

⁴ Children ready to start kindergarten as young 5 year olds are sometimes held back from school for one year by affluent parents so that their child might be one of the oldest students when they start kindergarten at 6 rather than one of the youngest students in the class, a process known as "redshirting." The late age cutoff I use to define grade retention- 11 years old for 4th grade (and correspondingly 7 years old for Kindergarten) places the redshirted children among those making normal progress.

only a cross-sectional snapshot of family structure, which fails to capture the way in which family changes over time can affect children (Wolfe et al. 1996; Wu and Martinson 1993).

Children's tenure within their current family structure can be reasonably assured by limiting the analysis to children and parents who all have at least 5 years of co-residential stability. If the child and both parents all lived at the same address in 2000 as they did 5 years earlier, it is likely that the family structure which was current at the time of the 2000 census was also in place 5 years earlier. For children living in group quarters, 5 years at the same address indicates long term residence rather than a brief stay at a shelter. Five years with the same family structure at the same address is long enough to imply that all of the child's primary school career through grade four, and most of the child's primary school career through grade eight are likely to have been undertaken within the family structure reported to the census in 2000. For children living with single parents, 5 year residential stability of child and parent is a bit more ambiguous, because we do not know if or when a partner or ex-spouse moved out of the home.

Unmarried partners were first distinguished from roommates in the 1990 census. For census 2000, the Census Bureau changed its long standing policy by counting self-reported same-sex "married" couples as unmarried partners (Rosenfeld and Kim 2005; U.S. Bureau of the Census 2001). The recoded "married" couples accounted for roughly half of the same-sex partners in the 2000 census, and 80% of the children of same-sex couples. The inclusion of the self-reported "married" couples among the same-sex partnered couples is thought to yield a more accurate population count of same-sex couples (U.S. Bureau of the Census 2001; but see also O'Connell and Gooding 2006).

In the U.S. census same-sex couple cohabiting data, the self-reported married and the self-reported partnered same-sex couples differ in some systematic ways. Not only do the self-

reported same-sex married couples have more children than the self-reported same-sex partnered couples, but the self-reported same-sex married couples are more similar to heterosexual married couples along several other key dimensions. The self-reported same-sex married couples are more likely to be white, less likely to be geographically mobile, more likely to have high incomes, and so on (Rosenfeld and Kim 2005). Because the same-sex partner population in the 2000 census is composed of two rather distinctive subgroups, every table which includes statistics on same-sex couples and their children includes alternative versions of the same statistics calculated with the dual marital status recoded couples (and their children) excluded, to indicate whether the results are robust with respect to this underlying diversity.

In the census data, all married couples are heterosexual married couples by Census Bureau definition. Since the 2000 census, however, several U.S. states and other countries have married same sex couples, so I add the modifier “heterosexual” to married couples for clarity.

[Table 2 here]

First Order Predictors of Childhood Grade Retention

Because denominator school populations cover four years (grades 1-4, grades 5-8), but the students who can be identified as over age for their grade come only from the last grade of each four year span (grades 4 and 8)⁵, the implied grade retention rate is four times higher than the observed grade retention rate. Table 2 shows both the observed grade retention rate and the implied grade retention rate, for primary school students using weighted data from the 2000 census.

⁵ This assumes that no children are held back more than one year in the primary grades, which is a fairly safe assumption based on October, CPS data.

Table 2 suggests that childhood grade retention is correlated with family type. Children of heterosexual married couples had the lowest implied rate of grade retention, 6.8%. Children of lesbian mothers and gay fathers had grade retention rates of 9.5% and 9.7%, respectively. Children of heterosexual cohabiting parents had a grade retention rate of 11.7%, while children of single parents had grade retention rates between 11.1% and 12.6%

The differences in childhood grade retention between all types of non group quarters households were dwarfed by the high grade retention rates of children living in group quarters. According to Table 2, children living in group homes, many of them awaiting adoption or foster parents, had an implied grade retention rate of 34.4%. Children who were incarcerated had a grade retention rate of 78.0%. Later in the paper, I show that the enormous difference in grade retention between children raised in families and children living in group quarters remains even after individual level student disabilities are accounted for.

One way to gauge the advantage of living with families is to note that adopted children (10.6% grade retention) who spent the five years prior to the census living with their adoptive parents, and foster children (20.6% grade retention) with five years of residential stability performed considerably better than children who spent the same 5 years living at a single group quarters address (34.4% grade retention for non-inmates). The performance hierarchy which favors own children, and then (in declining order of school performance) adopted children, then foster children, then children in group quarters confirms the long standing research finding that children do best when living with parents who make a long term commitment to the children's development (Bartholet 1999). Selection bias (wherein the children with the most severe disabilities or children who have suffered the worst abuse are the least likely to be adopted) must also play a role, which unfortunately cannot be quantified with these data.

The rest of Table 2 shows implied grade retention along several other dimensions. Asian children had the lowest rates of grade retention, while black children had the highest. Girls were less likely to be held back in the primary grades than boys were. Suburban schools had lower rates of grade retention than city schools, which in turn were lower than rural schools. Household socioeconomic status (SES) was a crucial predictor of childhood school performance. In households with income less than \$25,000, 12.6% of the primary school students were left back, compared to only 5.3% for children in households with incomes over \$100,000. Householder's education had an even stronger effect on children's progress through school: parents who had less than a high school degree had primary school children who were retained 14.3% of the time, whereas householders with college degrees had children who were retained only 4.4% of the time.

Table 2 shows that the strongest factor in making normal progress through elementary school is living with a family rather than living in group quarters. For children living in a family, whether the family is headed by a heterosexual married couple or by some less traditional parenting arrangement, the second most important factor in childhood progress through school appears to be parental educational attainment.

Consistency with Prior Findings

Although the U.S. census data have some limits for the purpose of studying grade retention, the first order predictors of grade retention from the census are reassuringly consistent with the published research on normal progress through school using other sources. The gender and racial gradients for normal progress through school in Table 2 are similar to the gender and racial gradients found by the Census Bureau in their analysis of progress through school using

data from the educational supplement of the October Current Population Surveys, or CPS (Heubert and Hauser 1999: 147-154; U.S. Bureau of the Census 1999:3, Table A; 2003:7, Table C). Table 2's gradients of normal progress through school (versus grade retention) by family type (specifically single parent versus married parents), household income, student gender, and parental education are entirely consistent with the broad existing literature on grade retention from other sources. The literature on grade retention includes Dawson's (1991) study using the 1988 National Health Interview Survey, Tillman et al's (2006) study using the Panel Study of Income Dynamics and the National Longitudinal Study of Adolescent Health, Moller et al's (2006:171) results using the National Educational Longitudinal Study, Bianchi's (1984) analysis of the CPS, and Zill's (1996) analysis of the National Household Education Survey. I show (in an extended analysis available from the author) that the multivariate analysis of grade retention from this same literature is consistent with my multivariate analysis of grade retention using U.S. census data. In all of the studies, family SES plays a crucial role in shaping children's educational experience.

[Table 3 here]

Socioeconomic Status by Family Type

Table 3 shows that gays and lesbians had a higher than average educational attainment of 13.6 years (i.e. 1.6 years of college) compared to 13.4 years for heterosexual married heads of household. Across family types, gay couples had the highest median household income at \$61,000 per household. It should also be noted that men have higher earnings than women, and gay male couples are the only household type that relied on the earnings of two men. The second

four family types are all single parent (i.e. single income) families, so their household incomes were roughly half as high as the household incomes of the first four family types.

Despite the fact that the cost of becoming parents may be higher for gays and lesbians than for heterosexual couples, Table 3 shows that gay and lesbian couples who did have children had substantially lower income and educational attainment than gay and lesbian couples in general. While gay and lesbian cohabiters had relatively high household incomes, gay and lesbian parents had lower SES than heterosexual married parents (\$50 thousand per household for gay parents compared to \$58 thousand for heterosexual married parents). Excluding marital status recodes, the income and educational level of gay and lesbian parents was even lower. Among gay and lesbian couples, those with lower incomes are more likely to be raising children.

Not only were heterosexual married parents economically advantaged, the heterosexual married couples were also racially advantaged. Only 22.9% of children of heterosexual married couple were black or Hispanic, whereas 41.6% of children of gay men were black or Hispanic, and this percentage rose to 53.7% when dual marital status recodes were excluded. The children of lesbians were similarly likely (37.1%) to be black or Hispanic. Never married mothers were the most likely parenting family type to have black or Hispanic children. The racial breakdown of parents was similar to the racial breakdown of children described in Table 3. Among heterosexual married heads of household, 22.2% were black or Hispanic, while 40.4% of gay fathers were black or Hispanic, and 36.1% of lesbian mothers were black or Hispanic (not shown in Table 3).⁶

Among all family types, children of lesbian mothers were the most likely (more than 12%) to be adopted children, step children, or foster children. Because economic disadvantage,

⁶ Rosenfeld and Kim (2005) showed that same-sex couples were also more likely than heterosexual couples to be interracial.

minority racial status, and experience with the adoption or foster care system are all challenges for children, a careful analysis of the school performance of children of gay and lesbian parents must take these disadvantages into account.

[Table 4 here]

MULTIVARIATE ANALYSES

Comparisons with Children of Heterosexual Married Couples

Table 4 presents a series of multivariate logistic regression coefficients (for normal progress through primary school versus grade retention), of the following type:

$$\text{Log} \left(\frac{P_i}{1-P_i} \right) = \alpha + \beta_k X_{k,i}$$

Where P_i is the predicted probability that the i th primary school student was making normal progress through school.⁷ The constant term is α and β_k represents a column of k coefficients in the model.⁸ Positive coefficients imply better outcomes (i.e. higher probability of making normal progress through school) for the students. Negative coefficients imply higher rates of grade

⁷ Because of the 4-year categories for current grade, only 1/4 of the actual cases of grade retention are identified in the dataset. In the data, the category of "over-age" includes only students who were demonstrably over-age, but the category "making normal progress" is a mixed category whose components include 91%-95% (depending the grade retention rate by family type) students who truly were making normal progress through school, and the remainder are students who were over-age but are misclassified as making normal progress because of the 4 year wide categories in the census question GRADEATT.

⁸ Coefficients are based on weighted census microdata, with weights re-normed to average 1, so that model likelihoods and coefficient standard errors reflect the real unweighted sample size. In general children of same-sex cohabiting parents appear to do slightly better in these multivariate tests when the models are run without taking the census weights into account.

retention. The sample in Table 4 includes only “own children,” (excluding step children, foster children, and adopted children) to reduce the number of children who are the result of previous relationships, and to minimize the potential selection bias that adopted children or other “chosen” children might introduce (Stacey 2006). This narrowing of the sample of children, along with the inclusion of household income and parental education (in Models 2-5), excludes children living in group quarters (by far the worst performers in school) from the analysis. See below for an analysis which includes the group quarters children.

Model 1 of Table 4 shows the raw log odds ratios of normal progress through school for children of all the less traditional family types, compared to heterosexual married couples. Similar to the result from Table 2, Model 1 shows that children from all the nontraditional family types were less likely to be making good progress through school, with coefficients varying from -.267 for children of same-sex couples (the most modest disadvantage among the nontraditional family types), to -.675 for children living with never married men.

Model 2 introduces controls for household SES, including the natural logarithm of household income, and a categorical variable for the head of household’s educational attainment. The presence of these controls for household SES reduces the magnitude of the negative coefficients for children of all types of nontraditional families, compared to Model 1. For children of same-sex parents, the introduction of household SES in Model 2 reduces the grade retention gap (compared to children of heterosexual married couples) by 58% (from .267 in Model 1 to .112 in Model 2) which renders the contrast with children of heterosexual married couples statistically insignificant in Model 2 and all subsequent models.

Model 3 introduces student gender (girls were more likely to be making good progress), U.S. nativity, student race, and four dichotomous measures for disabilities among the students.

The most influential type of disability was memory deficits, which reduced the odds of making good progress through school by more than half ($e^{-.911}=0.40$). Model 4 adds controls for urban, rural, or suburban residence, for grade attending, and for private school versus public school. Model 5 adds dummy variables for the 50 U.S. states (plus the District of Columbia) to account for differences in social promotion policy between states.

Table 4 does not nullify the importance of family structure. Family structure remains a significant predictor of childhood progress through school, even after every available sociodemographic control is applied, as other scholars have found with other outcomes and other datasets (McLanahan and Sandefur 1994). What Table 4 does show, however, is that the gap in one particular children's outcome (normal progress through school) is small between family types, and that the apparent disadvantage of children of same-sex couples (compared to children of heterosexual married couples) is especially small. After parental SES has been accounted for, the disadvantage of children of same-sex couples (when compared to children of the most advantaged family group) is too small to be statistically significant.

When examining small minority populations, such as children raised by same-sex couples, sample size and statistical power are fundamental limitations of empirical research. The relatively large sample size of children raised by same-sex couples is the fundamental advantage of the census data in this case, but the question remains: is the sample size large enough to provide sufficient statistical power? There are several ways of addressing the question of statistical power.⁹ One approach is to randomly reduce the sample of children from all the other

⁹ If the odds of making normal progress through school were twice as high for children of heterosexual married couples as for children of same-sex couples, the existing census sample from Table 4 would provide a power of 0.999 (near certainty) to reject the null hypothesis of no difference. None of the family types in any of the models of Table 4 had a disadvantage this large. If the odds of grade retention were 1.5 times higher for children of heterosexual married parents than for children of same-sex couples, the power to detect the difference would be lower, but still substantial at 0.83. Children raised by divorced single mothers or divorced single fathers had this

family types to 3,174 children, the sample size of children of same-sex couples used in Table 4, and see whether other relationships in the data remain significant (Cheng and Powell 2005).

These results (available from the author) show, reassuringly, that the 3,174 sample size is large enough to retain most of the important statistically significant predictors of grade retention in the data. The difference between children raised by same-sex couples and children raised by heterosexual married couples in making normal progress through school remains statistically insignificant.

It is also useful to compare the smaller group (children of same-sex couples) to the part of the larger group (other children) they are most similar to. The process of finding and comparing the most similar subpopulations is known as propensity score matching (Lechner 2002; Lundquist 2004; Rubin 1979). In the first stage, children of same-sex couples are matched to the most similar children of heterosexual married parents via probit regression on a set of covariates, with ties randomly resolved. The resulting two groups, with equal N , are compared on grade retention by means of a two sample t test. The t tests are nonparametric because no assumptions are made about how the control variables affect grade retention, and whether the shape of those effects might be different across family types.¹⁰

[Table 5 here]

great a disadvantage, across several models. The main reason that the coefficients for children raised by same sex couples were not significantly different from zero in models 2-5 of Table 4 is that their estimated disadvantage was relatively small. Power calculations assume alpha of 0.05, two-tailed tests, and Bernoulli distributions (for normal progress versus grade retention) with variance of $p(1-p)$.

¹⁰ In fact, the effect of parental education on children's grade retention does differ across family types. Among same-sex couples, parental education has little effect on children's grade retention, whereas among heterosexual married couples there is a strong positive correlation between parental education and children's normal progress through school. At low parental educational levels, children of same-sex couples make better progress in school than children of heterosexual married couples. Among children raised by highly educated parents, the children of heterosexual married couples make better progress in school than the children of same-sex couples.

Model 1 of Table 5 matches the samples without using any covariates, which means that the sample of children raised by heterosexual married parents is a random sample, so this reflects the unadjusted means of both groups. As expected, the unadjusted means show that own children of heterosexual married couples are significantly less likely to be left back in school than own children of same-sex couples. Once the samples are matched on household income and householder educational attainment (Model 2), children of same-sex couples actually are less likely than their most similar peers among children of heterosexual married couples to be held back in school (9.07% compared to 9.45%), though the difference is not significant. Introduction of additional controls into the matching process in Models 3-5 results in no significant differences in grade retention between children of same-sex couples and children of heterosexual married couples. The comparisons after propensity score matching, reported in Table 5, are entirely consistent with the large sample regressions reported above in Table 4. After taking parental income and education into account, the differences between children of same-sex couples and children of heterosexual married couples are small enough to be indistinguishable from zero.

Comparisons with children of unmarried heterosexual couples

Table 6 revisits the regressions from Table 4 (with the same models, covariates, and summary statistics), comparing children raised by same-sex couples to children raised by heterosexual cohabiting couples. Table 6 shows that children raised by same-sex couples are more likely to make normal progress through school compared to children raised by heterosexual cohabiting couples, but the difference is statistically significant only in Model 1, before parental SES has been accounted for. If children living with dual marital status recoded couples are

excluded, the signs are reversed (meaning children raised by heterosexual cohabiting couples do better), but none of the coefficients are statistically significant. These results suggest that (for the outcome of normal progress through school) children raised by same-sex cohabiting couple parents are no different, and perhaps slightly advantaged compared to children being raised by heterosexual cohabiting couples. The similarity in school performance between children of same-sex couples and children of heterosexual cohabiting couples fails to support the gender essentialist theories of parenting, which argue that child development depends on having parental role models from both gender groups (Alvaré 2005; Popenoe 1996; Wardle 1997).

[Table 6 Here]

Comparisons with Children in Group Quarters

Table 7 represents a different variation on the type of analysis from Tables 4-6. In Table 7, the sample of children includes children in group quarters, and these children are the comparison category for the analysis. Because neither household income nor parental education can be associated with children in group quarters, these variables are dropped from the analysis. The sample of children in Table 7 includes own children, adopted children, step children, group quarters children, and foster children. Since the children in group quarters have no head of household to have a relationship with, it seemed appropriate to use the broadest definition of ‘children’ for children who were living with families. Furthermore the adopted and foster children probably include some children who formerly lived in group quarters.

[Table 7 Here]

Table 7 confirms the robustness of a previous finding from Table 2, that children who live with parents regardless of family type are much more likely to make normal progress through school than children living in group quarters. Even after student disabilities (more common among group quarters children than among children living with families) are taken into account, the difference remained between children raised by families and children living in group quarters. Children living at least five years with same-sex couples and children living at least five years with unmarried heterosexual cohabiting couples had odds of making good progress through school that were twice as high as non-inmate children who had spent the previous five years in group quarters. Using coefficients from Model 2 of Table 7, which controls for children's race and disabilities, children raised by same-sex couples had odds of making good progress through school that were 2.43 times higher than children living in group quarters ($e^{.886}=2.43$). Children raised by heterosexual cohabiting couples were similarly advantaged compared to children in group quarters ($e^{.810}=2.25$, coefficients from Model 2). The advantage of children raised by same-sex couples over children living in group quarters remains positive and statistically significant across all four models even after marital status recoded couples are excluded.

DISCUSSION

Children raised by same-sex couples are one of the most difficult populations in the United States to study systematically, because of their small numbers and their geographic dispersion. The census data are far from ideal, and better data would, of course, be welcome. However, until such time as better nationally representative data are available, the U.S. census is

the only nationally representative dataset with a large enough sample of children raised by same-sex couples to allow for statistically powerful comparisons with children of other family types.

To the extent that normal progress through primary school is a useful and valid measure of child development, the results confirm that children of same-sex couples appear to have no inherent developmental disadvantage. Heterosexual married couples are the most economically prosperous, the most likely to be white, and the most legally advantaged type of parents; their children have the lowest rates of grade retention. Parental SES accounts for more than half of the relatively small gap in grade retention between children of heterosexual married couples and children of same-sex couples. When one controls for parental SES and characteristics of the students, children of same-sex couples cannot be distinguished with statistical certainty from children of heterosexual married couples.

Children of all non-group quarters family types, including households headed by same-sex couples, are dramatically more likely to make normal progress through school than students living in group quarters. Any policy that would deny gay and lesbian parents the right to adopt or foster children would force some children to remain in group quarters. A longer stay in group quarters would seem to be contrary to the best interest of the children. In recent years scholars have arrived at a consensus that moving children out of group homes and into adoptive families should be the goal of public policy. Families, even suboptimal families, are better equipped than the state to raise children (Bartholet 1999; Goldstein, Freud and Solnit 1979).

Historical restrictions against interracial adoption in the United States represent one relevant historical precedent for the current debate over the adoption rights of same-sex couples. Randall Kennedy (2003) argues that even though restrictions against interracial adoption have been proposed as a way of protecting children, such restrictions have victimized children by

taking them away from loving homes or by forcing children to remain in group quarters for too long. Policies which limit the kinds of families that can adopt or foster children ignore the enormous advantages of personal attention that families have (even single parents and other nontraditional family types) over the state in raising children well.

The prior literature has found no evidence that children raised by same-sex couples suffer any important disadvantages (Chan et al. 1998b; Patterson 1995; Stacey and Biblarz 2001; Wald 2006). Yet this same literature has been heavily criticized on the methodological grounds that universally small sample sizes prevent the studies from having the statistical power to identify differences that might actually exist (Alvaré 2005; Lerner and Nagai 2001; Nock 2001). The analysis in this paper, using large sample nationally representative data for the first time, shows that children raised by same-sex couples have no fundamental deficits in making normal progress through school. The core finding here offers a measure of validation for the prior, and much debated, small sample studies.

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Table 1: Studies of Children of Same-Sex Couples

	Sampling Frame	N of children of same-sex couples	parental structure, test group	parental structure, comparison group
Bailey et al (1995)	cs	82	gf	none
Bos et al (2004); Bos et al (2007)	cs	100	lc	none
Brewaeys et al (1997)	cs	30	lm	hm
Bozett (1987)	cs	19	gf	none
Chan, Raboy, Patterson (1998b)	cs	55	lm	hm
Chan et al (1998a)	cs	30	lc	hc
Chrisp (2001)	cs	13	lm	none
Crosbie-Burnett and Helmbrecht (1993)	cs	48	gf	none
Dundas and Kaufman (2000)	cs	20	lm	none
Flaks et al (1995)	cs	15	lc	hc
Fulcher et al (2002)	cs	55	lm	hm
Gartrell et al (2000)	cs	85	lm	none
Gartrell et al (2005)	cs	74	lm	none
Gershon, Tschann, and Jemerin (1999)	cs	76	lm	none
Golombok and Tasker (1996); Tasker and Golombok (1997)	cs	39	lm	hsm
Golombok et al (2003)	ps+ cs	39	lm	hc + hsm
Golombok, Spencer, and Rutter (1983)	cs	37	lm	hsm
Golombok, Tasker, and Murray (1997)	cs	30	lm	hm
Gottman (1990)	cs	35	lm+gf	hm
Green (1978)	cs	37	lm+ts	none
Green et al (1986)	cs	56	lm	hsm
Hoeffler (1981)	cs	20	lm	hsm
Huggins (1989)	cs	18	lm	hsm
Javaid (1993)	cs	26	lm	hsm
Kirkpatrick et al (1981)	cs	20	lm	hsm
Leung et al (2005)	cs	68	lm+gf	hc
Lewis (1980)	cs	21	lm	none
MacCallum and Golombok (2004)	cs	25	lm	hm
McCandlish (1987)	cs	7	lm	none
Miller (1979)	cs	14	gf	none
Patterson (1995)	cs	26	lc	none
Patterson, Sutfin, and Fulcher (2004)	cs	33	lc	hc
Perry et al (2004)	ps+ cs	38	lm	hm
Rivers et al (2008)	ps	18	lc	hc
Scheib et al (2005)	cs	12	lc	hc+hsm
Stein et al (2004)	cs	1	hc	none
Sutfin et al (2008)	cs	29	lc	hc
Vanfraussen et al (2002; 2003)	cs	37	lm	hm
Wainright, and Patterson (2006); Wainright, Russell, and Patterson (2004); Wainright and Patterson (2008)	nr, ps	44	lc	hc
Wyers (1987)	cs	66	lm + gf	none

Sampling frame: cs=convenience sample; ps=probability sample; nr=nationally representative. Family structure gf=gay fathers lm=lesbian mothers lc=lesbian couples; ts=transsexuals; hm=heterosexual mothers; hc=heterosexual couples; hsm=heterosexual single mothers.

Table 2: Selected First order Predictors of Childhood Grade Retention for Children with 5 year Residential Stability

	A Unweighted N of Children in grades 1-8	B Pct over age at grades 4 or 8	C=4B Implied Pct retained in grades 1-8
<i>Family Type</i>			
Heterosexual Married	612,790	1.71 (reference)	6.8
Lesbian Cohabit	2,030	2.38 *	9.5
Gay Male Cohabit	1,472	2.42 *	9.7
Separated, Divorced, Widowed Women	81,876	2.78 ***	11.1
Separated, Divorced, Widowed Men	21,019	2.86 ***	11.4
Heterosexual Cohabit	14,199	2.92 ***	11.7
Never Married Women	28,242	2.93 ***	11.7
Never Married Men	2,365	3.15 ***	12.6
Group Quarters Non-Inmates	436	8.59 ***	34.4
Group Quarters Inmates	352	19.50 ***	78.0
<i>Child's Relationship to Householder</i>			
Own Child		1.86 (reference)	7.4
Adopted Child		2.64 ***	10.6
Step Child		3.47 ***	13.9
Foster Child		5.15 ***	20.6
<i>Child's Race</i>			
Asian American		1.44 **	5.8
Non Hispanic White		1.70 (reference)	6.8
Hispanic		2.24 ***	9.0
Non Hispanic Black		3.14 ***	12.6
<i>Household Income (1999 \$)</i>			
>100,000		1.33 (reference)	5.3
50,000-99,999		1.53 ***	6.1
25,000-49,999		2.17 ***	8.7
<25,000		3.15 ***	12.6
<i>Metro Status</i>			
Suburban		1.49 (reference)	6.0
Urban		2.15 ***	8.6
Rural		2.58 ***	10.3
<i>Child's Gender</i>			
Female		1.63 (reference)	6.5
Male		2.25 ***	9.0
<i>Householder's Education</i>			
BA+		1.10 (reference)	4.4
Some College		1.58 ***	6.3
HS degree		2.18 ***	8.7
<HS		3.58 ***	14.3

* P<.05, ** P<.01, *** P<.001, two sided tests. Significance compared to reference category, determined by logistic regressions separately for each variable.

Source: U.S. Census 2000 microdata, via IPUMS, coefficients reflect census weights. Children include own children, adopted children, step children, foster children plus children in group quarters where appropriate, all parents and children with at least 5 years of residential stability.

With dual marital status recoded couples excluded, children of same-sex couples were more likely to be over-age (3.7%) and had a significantly higher implied grade retention rate of 14.8%.

Table 3: Characteristics of Households With and Without Children

	Number of households	Head of Household Mean Education	Median Household Income (1999\$)	Head of Household mean Age	Pct HH have children		
<i>All Households</i>							
Heterosexual Married	55,477,124	13.4	57,640	48.7	44.8		
Heterosexual Cohabit	4,566,338	13.0	44,200	36.0	37.2		
Gay Male Cohabit	331,747	13.6	61,000	44.6	22.7		
Lesbian Cohabit	328,406	13.6	55,000	42.8	35.4		
Separated, Divorced, Widowed Men	9,071,563	12.7	30,500	54.3		10.7	
Separated, Divorced, Widowed Women	20,626,824	12.4	22,200	59.6		20.3	
Never Married Men	7,456,114	13.7	30,500	36.7		2.6	
Never Married Women	7,700,852	13.7	24,500	37.3		26.0	
<i>Households With Children</i>					Pct Children who were adopted, step, or foster	Pct Children who were black or Hispanic	
Heterosexual Married	24,862,111	13.4	58,000	39.0	8.9	22.9	
Heterosexual Cohabit	1,699,954	12.0	36,600	33.2	11.4	44.5	
Gay Male Cohabit	75,414	12.2	50,000	37.6	10.2	41.6	
Lesbian Cohabit	116,329	12.8	47,000	37.0	12.4	37.1	
Separated, Divorced, Widowed Men	973,714	13.0	37,000	41.5	5.2	24.6	
Separated, Divorced, Widowed Women	4,180,122	12.8	23,000	38.0	3.4	40.3	
Never Married Men	191,988	11.9	28,600	34.3	9.8	54.9	
Never Married Women	2,002,598	12.1	14,000	31.4	2.6	75.1	

Source: Weighted census microdata via IPUMS

In families with children, mean education, median household income, and mean age of householder are weighted by number of children. Children include own children, adopted children, step children and foster children.

With dual marital status recodes excluded, 11% of gay couples and 26.6% of lesbian couples had children, and median household income for gay fathers was \$42,000, and for lesbian mothers income was \$43,350. For children of gay fathers: pct children who were adopted, step, or foster=13.7% pct black or Hispanic=53.7%; for children of lesbians mothers pct adopted etc=18.0%, pct minority=42.0%..

Table 4: Predictors of Making Normal Progress Through Primary School, for Residentially Stable Own Children, Family Types Compared to Heterosexual Married Couples, Selected Coefficients from Logistic Regressions

	Model 1	Model 2	Model 3	Model 4	Model 5
Family type (Heterosexual Married)					
Same-Sex Couple Cohabit	-0.267*	-0.112	-0.116	-0.128	-0.142
Sep, Div, Widowed women	-0.529***	-0.422***	-0.321***	-0.312***	-0.311***
Heterosexual Cohabit	-0.547***	-0.271***	-0.202***	-0.207***	-0.236***
Sep, Div, Widowed men	-0.558***	-0.467***	-0.427***	-0.402***	-0.397***
Never Married Women	-0.623***	-0.319***	-0.088*	-0.116**	-0.145***
Never Married Men	-0.675***	-0.400***	-0.274*	-0.308*	-0.354**
Ln of household Income		0.035***	0.026***	0.021***	0.013*
Householder's education (<HS)					
HS degree		0.507***	0.518***	0.515***	0.511***
Some College		0.828***	0.839***	0.804***	0.767***
College degree+		1.118***	1.105***	1.026***	0.988***
Student U.S. born			0.622***	0.599***	0.629***
Student gender- Female			0.283***	0.282***	0.280***
Student Disabilities					
difficulty with memory			-0.911***	-0.899***	-0.893***
physical disability			-0.376***	-0.363***	-0.362***
hearing or vision disability			-0.401***	-0.394***	-0.377***
Personal care limitation			-0.207**	-0.235***	-0.244***
Student Race (NH white)					
NH Black			-0.342***	-0.371***	-0.270***
Hispanic			0.181***	0.111***	0.009
Asian			0.275***	0.199***	0.006
Metropolitan Status (rural)					
City				0.301***	0.152***
Suburbs				0.377***	0.235***
Grade attending- 5th-8th Grade				-0.248***	-0.248***
School Type- Private School				0.154***	0.172***
State Dummy Variables					YES
Constant	4.094***	3.092***	2.524***	2.532***	2.723***
Unweighted N	716,764	716,764	716,764	716,740	716,740
df	7	11	21	27	77
Log Likelihood	-65,352	-64,284	-63,315	-63,080	-62,561

Source: Weighted census microdata via IPUMS. Comparison categories in parentheses. Some categories of metro status and race excluded for clarity. * p<.05, ** p<.01, *** P<.001

With dual marital status recodes excluded, combining gay and lesbian couples, coefficients for children of same-sex couples (models 1-5) would be: -0.691*; -0.452; -0.361; -0.392; -0.427 statistically significant only in Model 1.

Table 5: Grade Retention Comparisons Between Own Children of Same-Sex Couples and Own Children of Heterosexual Married Couples, Matched by Propensity Score

	M1	M2	M3	M4	M5
Controls	None	household income, householder education	M2+child U.S. born, child gender, child disabilities, child race	M3+ Metro status, grade, school type	M4+ state
Implied Grade Retention Rate (pct)					
Children of Same-Sex Couples	9.07	9.07	9.07	9.07	9.07
Children of Heterosexual Married Couples	6.81	9.45	8.95	8.57	7.94
Difference in Implied Grade Retention Rate	-2.27**	0.38	-0.12	-0.50	-1.13

Source: Weighted census microdata via IPUMS. N=3174 for own children of same-sex couples with 5 years of residential stability, and N is the same for comparison group. Propensity score matched comparison set varies across models. Actual measured grade retention is 1/4 as large as implied grade retention, see text. With dual marital status couples excluded, N=412, and implied grade retention rate difference would be: -5.82**, -1.94, -2.92, 1.94, -1.94 in models 1-5 respectively, significantly different only in Model 1. * p<.05, ** p<.01, *** P<.001

Table 6: Normal Progress Through School Comparison of Children of Same-Sex Couples to Children of Heterosexual Cohabiting Couples (Coefficients Adapted from Table 4).

	Model 1	Model 2	Model 3	Model 4	Model 5
Family type (Heterosexual Cohabit)					
Same-Sex Couple Cohabit	0.281*	0.159	0.085	0.079	0.094

Source: Data source, models, covariates, and summary statistics identical to Table 4. Model 1 includes no covariates. Model 2 adds parental income and education. Model 3 adds student U.S. nativity, student gender, student disabilities, and student race. Model 4 adds metropolitan status, student grade level, and public (versus private) school. Model 5 adds variables controlling for 50 states plus the District of Columbia. With dual marital status recodes excluded, the coefficients are reversed in sign but remain insignificant; Models 1-5 respectively: -0.138; -0.175; -0.155; -0.181; -0.186

* p<.05, ** p<.01, *** P<.001

Table 7: Predictors of Making Normal Progress Through Primary School, for Residentially Stable Children compared to Children Living in non-Inmate Group Quarters
Selected Coefficients from Logistic Regressions

	Model 1	Model 2	Model 3	Model 4
Family type (Group Quarters)				
Same-Sex Couple Cohabit	1.321***	0.886***	0.888***	0.988***
Heterosexual Married	1.676***	1.191***	1.194***	1.302***
Sep, Div, Widowed women	1.181***	0.851***	0.880***	0.998***
Heterosexual Cohabit	1.141***	0.810***	0.844***	0.932***
Sep, Div, Widowed men	1.142***	0.698***	0.746***	0.864***
Never Married Women	1.115***	0.983***	0.991***	1.088***
Never Married Men	1.058***	0.785***	0.785***	0.851***
Group Quarters (Inmates)	-0.948***	-0.801***	-0.732**	-0.657***
Student U.S. born		0.675***	0.654***	0.678***
Student gender- Female		0.278***	0.276***	0.275***
Student Disabilities				
difficulty with memory		-0.944***	-0.929***	-0.922***
physical disability		-0.407***	-0.388***	-0.385***
hearing or vision disability		-0.403***	-0.384***	-0.364***
Personal care limitation		-0.187***	-0.218***	-0.231***
Student Race (NH white)				
NH Black		-0.512***	-0.524***	-0.398***
Hispanic		-0.175***	-0.221***	-0.318***
Asian		0.240***	0.151**	-0.032
Metropolitan Status (rural)				
City			0.376***	0.218***
Suburbs			0.531***	0.372***
Grade attending- 5th-8th Grade			-0.245***	-0.245***
School Type- Private School			0.271***	0.285***
State Dummy Variables				YES
Constant	2.365***	2.219***	2.305***	1.716***
Unweighted N	764,781	764,781	764,757	764,757
df	8	18	24	74
Log Likelihood	-72,171	-70,885	-70,454	-69,788

Source: Weighted census microdata via IPUMS. Comparison categories in parentheses. Sample includes own children, step children, adopted children, foster children, and children living in group quarters. All children and all present parents have 5 year residential stability. Some categories of metro status and race excluded for clarity. * p<.05, ** p<.01, *** P<.001

With dual marital status recodes excluded, coefficients for children of same-sex couples (models 1-4) would be: 0.895**; 0.595*; 0.595*; 0.661*