

Psychosocial Adjustment among Children Conceived via Donor Insemination by Lesbian and Heterosexual Mothers

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This study examined the relations among family structure (e.g., number of parents, parental sexual orientation), family process (e.g., parents' relationship satisfaction, interparental conflict), and the psychological adjustment of children who had been conceived via donor insemination. The 80 participating families, all of whom had conceived children using the resources of a single sperm bank, included 55 families headed by lesbian and 25 families headed by heterosexual parents. Fifty families were headed by couples and 30 by single parents. Participating children averaged 7 years of age. Results showed that children were developing in normal fashion, and that their adjustment was unrelated to structural variables such as parental sexual orientation or the number of parents in the household. These results held true for teacher reports as well as for parent reports. Variables associated with family interactions and processes were, however, significantly related to indices of children's adjustment. Parents who were experiencing higher levels of parenting stress, higher levels of interparental conflict, and lower levels of love for each other had children who exhibited more behavior problems.

INTRODUCTION

Children's development has generally been examined within the context of families formed via traditional means of conception. With advances in reproductive technologies, pathways to parenthood are more numerous than was the case even 20 years ago. Increasingly, lesbian as well as heterosexual women have been utilizing donor insemination and other reproductive technologies to conceive children. Pioneering studies of children conceived by new reproductive technologies have been conducted by Golombok and her colleagues in the United Kingdom (Golombok, Cook, Bish, & Murray, 1993, 1995; Golombok & Tasker, 1994), but little work has been conducted in the United States, and much remains to be learned about child development in families formed via donor insemination.

The study of children conceived via donor insemination allows examination of questions about psychosocial development that relate both to family structure and to family process. How important are structural variables, such as the number of parents in the home (Weinraub & Gringlas, 1995) and the sexual orientation of parents (Patterson, 1992, 1995b), as predictors of children's development? And how important are variables associated with family processes and interactions, such as relationships between parents (Cowan, Cowan, & Kerig, 1993), parental depression (Downey & Coyne, 1990) and parenting stress (Abidin, 1995; Abidin, Jenkins, & McGaughey, 1992)? Our expectations were based on the view that

family interactions and processes serve as final common pathways through which the impact of other variables upon children's development will be felt (e.g., McLoyd, 1990; Weinraub & Gringlas, 1995). Thus, our central hypothesis was that variables related to family processes and interactions would be more strongly associated with child outcomes than those related to family structure.

It has often been assumed that children in nontraditional families are dissimilar to children in conventional families in their psychological health, but research has frequently failed to support this view (e.g., Eiduson, 1983; Eiduson & Weisner, 1978). For instance, although considerable research has focused on children of lesbian mothers, and although popular belief has often suggested that these children might be expected to experience various problems (Baumrind, 1995), existing studies have provided no evidence of significant disadvantages suffered by children of lesbian mothers as compared with those of heterosexual mothers (see reviews by Patterson, 1992, 1995b). Most studies have, however, focused on children of lesbians who gave birth in the context of heterosexual relationships and identified as lesbians later in life. Information on children born to lesbian couples or single lesbian women is still quite limited (Flaks, Ficher, Masterpasqua, & Joseph, 1995; Hand, 1991; Huggins, 1989; Kirkpatrick, Smith, & Roy, 1981;

McCandlish, 1987; Osterweil, 1991; Steckel, 1987) and has often been based on very small samples or involved nonstandard assessment techniques.

Patterson's Bay Area Families Study (e.g., Patterson, 1994, 1995a) added to earlier findings by studying 37 lesbian-headed families with preschool and elementary school aged children who had been born to or adopted early in life by lesbian mothers. A variety of standardized assessments was used to gather information on the psychological well-being of parents and children in these families. The Bay Area Family Study has, however, been criticized for its use of snowball sampling techniques, and for its failure to collect data from sources outside the family (Baumrind, 1995).

The present study was designed to contribute to understanding of psychological functioning among a sample of children who were conceived via donor insemination. The sample was drawn from a known population of lesbian and heterosexual parents, both single and in couples, who conceived and gave birth to a child using the services of The Sperm Bank of California (henceforth, TSBC). Families formed via donor insemination provide a unique opportunity to examine family functioning among lesbian- and heterosexual-headed families while controlling for the effects of biological relatedness or "ownness" across families. Traditional comparisons between lesbian-headed families with nondivorced heterosexual families necessarily confound issues of ownness with those related to family functioning, and previous research has shown that ownness by parents affects parenting as well as children's outcomes (Henderson, Hetherington, Mekos, & Reiss, 1996). In our sample, we are able to examine questions related to family structure and family process in families where all of the children are genetically related to their biological mother and not to the nonbiological parent (if one is present) for both the lesbian- and the heterosexual-parented families.

For each of four family structures (i.e., heterosexual couples, single heterosexual mothers, lesbian couples, and single lesbian mothers), we assessed both parents' and children's adjustment. Information about children's adjustment was collected from children's teachers as well as from parents. Consistent with the results of earlier work (e.g., Flaks et al., 1995), we expected no overall differences between children in lesbian- versus heterosexual-parented families, or in single- versus two-parent families, in this predominantly upper-middle-class sample.

Although we did not anticipate effects of family structure in this sample, we did expect significant as-

sociations between family processes, on the one hand, and child outcomes on the other. For example, among heterosexual parents and their children, parental relationship quality has been found to exhibit significant associations with child outcomes (Cowan et al., 1993; Emery, 1982; Emery & O'Leary, 1984; Erel & Burman, 1995). In families characterized by interparental conflict and marital discord, outcomes for children are less favorable (Cummings, 1994; Fincham, 1994; Fincham, Grych, & Osborne, 1994; O'Brien, Margolin, & John, 1995). As another example, Abidin and colleagues (Abidin et al., 1992) have identified parenting stress in heterosexually parented families as a correlate of disrupted parent-child relationships and less favorable outcomes for children. We were also interested in parental symptoms of depression (Downey & Coyne, 1990) as a variable affecting parent-child interactions, and expected that children with parents exhibiting greater depressive symptoms would experience less favorable adjustment.

Overall, then, we had three main hypotheses. First, consistent with the findings of Golombok and her associates (1993, 1995), we expected that the psychosocial adjustment of children born via donor insemination would be comparable to that of children in the general population. Second, we expected few differences to emerge between families headed by lesbian mothers when compared with families headed by heterosexual parents. Similarly, we expected few differences to emerge in this sample between families headed by couples when compared with families headed by single mothers. Third, we expected significant associations between family processes, such as parenting stress, conflict, and relationship satisfaction, on the one hand, and child outcomes on the other.

METHOD

Participants

Participating families were selected from among the former clients of The Sperm Bank of California (TSBC). This sperm bank is a provider of reproductive technologies that has been supplying services to clients regardless of sexual orientation or relationship status for more than 15 years. From TSBC files, clients who conceived and gave birth to children prior to July 1990 (and who thus had children at least 5 years of age at the beginning of data collection) were selected and invited to participate in the current study. From this pool, six families who had already partici-

pated in the Bay Area Families Study (e.g., Patterson, 1994) were excluded to maintain independence of data between the two studies. In addition, two families headed by women who self-identified as bisexual were also excluded. After these exclusions, 195 families were considered eligible to participate. Using letters and telephone calls, TSBC was successful in contacting 108 (55.4%) of the 195 eligible families.

To evaluate the degree to which families who were successfully contacted were representative of the population from which they were drawn, we conducted logistic regression analyses. When relevant identifying information was missing, we deleted such cases from these analyses; as a result, *ns* vary somewhat from analysis to analysis. Results showed that there were no differences in rates of contact as a function of children's age, $\chi^2(1, N = 195) = 0.01$, *ns*, or gender, $\chi^2(1, N = 195) = 1.32$, *ns*. Differences in rates of successful contact did emerge, however, as a function of parental sexual orientation, $\chi^2(1, N = 187) = 5.60$, $p < .05$, and mothers' relationship status, $\chi^2(1, N = 186) = 15.03$, $p < .01$. Families headed by lesbian mothers and by couples were more likely to have been successfully contacted than were those headed by heterosexual or single parents. Because we were unable to locate some families, we have no further information on them, and hence cannot determine why we were unable to contact them.

Out of the pool of 108 families we were able to contact, 80 families (74.1%) agreed to participate in the research. To evaluate the degree to which families who agreed to participate were representative of those who had been contacted, we conducted logistic regression analyses. Results revealed that there were no differences in rates of participation as a function of children's age, $\chi^2(1, N = 108) = 1.71$, *ns*, or gender, $\chi^2(1, N = 108) = 0.06$, *ns*. Differences in rates of participation did emerge, however, as a function of parental sexual orientation, $\chi^2(1, N = 108) = 4.33$, $p < .05$, and mothers' relationship status, $\chi^2(1, N = 108) = 6.18$, $p < .01$. Families headed by lesbian mothers and by couples were more likely to participate than were those headed by heterosexual or single parents.

Among those who chose not to participate, we also tabulated reasons for nonparticipation. The most common reason given by families who did not participate was lack of time; 16 families described themselves as too busy to take part in the study. The next most common reason given for nonparticipation (six families) was concern over privacy. Three families gave no reason for nonparticipation, and three families declined to participate because they objected to specific items on the questionnaires.

In summary, out of the pool of 195 eligible families, 34 were headed by lesbian couples, 70 by lesbian single mothers, 51 by heterosexual couples, 30 by heterosexual single mothers, and 10 families had missing information regarding the mother's sexual orientation and/or relationship status. Out of this pool, we were successful in contacting 108 families (58.4%): 34 families (100% of the eligible pool) headed by lesbian couples, 34 (48.6%) by lesbian single mothers, 27 (52.9%) by heterosexual couples, and 13 (43.3%) by heterosexual single mothers. From the pool of families we contacted, 80 families (74.1%) agreed to participate in our study. The final sample, then, consisted of 34 (100% participation) families headed by lesbian couples, 21 (61.8%) by lesbian single mothers, 16 (59.3%) by heterosexual couples, and 9 (69.2%) by heterosexual single mothers. Mothers were classified as lesbian versus heterosexual and as coupled versus single based on their self-reported identity at the time of data collection.

The final sample included 80 families, and their demographic characteristics are shown in Table 1. As can be seen in Table 1, there were 55 lesbian-headed and 25 heterosexual-headed families. There were 50 families headed by couples and 30 headed by single mothers.¹ Initial analyses revealed no significant difference as a function of children's gender among the variables of interest; thus, all analyses reported in this article are collapsed across children's gender. Children averaged 7 years of age, and biological mothers averaged 42 years of age. Parents were mostly well educated, and most were employed at least part-time. The families were, on average, quite affluent, with family incomes well above national averages (see Table 1).

We explored the possibility that demographic differences existed among the four family types. We found that, as a group, lesbian biological mothers had completed more years of education than had heterosexual mothers, $t(77) = 3.1$, $p < .05$, and lesbian nonbiological mothers had completed more years of education than had nonbiological fathers, $t(56) = 3.3$, $p < .05$. As one would expect, families headed by couples reported higher annual household incomes than did families headed by single parents, $t(74) = 3.40$, $p < .05$. Otherwise, no significant demographic differences among the four family types emerged from these analyses (see Table 1).

1. Subsample sizes presented in Table 1 represent our complete sample. We did encounter some missing data as parents and teachers participated on a completely voluntary basis; the actual numbers of completed cases for analyses are reflected in Tables 2 through 5.

Table 1 Demographic Characteristics as a Function of Family Type

Variable	Sexual Orientation		Lesbian versus Heterosexual	Relationship Status		Couple versus Single
	Lesbian	Heterosexual		Couple	Single ^a	
Number of families	55	25		50	30	
Number of boys (girls)	37 (18)	17 (8)		33 (17)	21 (9)	
Child's age in years	7.5 (1.8)	7.8 (1.9)	$t(78) < 1$ <i>ns</i>	7.3 (1.7)	8.1 (1.8)	$t(78) = 2.0$ <i>ns</i>
Biological mothers:						
Age in years	41.7 (4.1)	41.3 (4.4)	$t(76) < 1$ <i>ns</i>	40.8 (3.7)	43.0 (4.7)	$t(76) = 2.3$ <i>ns</i>
Educational attainment ^b	4.0 (1.1)	3.2 (1.2)	$t(77) = 3.1$ $p < .05$	3.9 (1.2)	3.5 (1.1)	$t(77) = 1.5$ <i>ns</i>
Hours per week in employment	34.9 (13.8)	35.5 (13.5)	$t(78) < 1$ <i>ns</i>	33.2 (13.2)	38.1 (14.0)	$t(78) = 1.6$ <i>ns</i>
Annual income in thousands	45.9 (21.8)	31.7 (16.7)	$t(63.9) = 2.7$ <i>ns</i>	40.2 (26.5)	44.4 (25.5)	$t(74) < 1$ <i>ns</i>
Nonbiological parents:						
Age in years	42.9 (5.2)	40.9 (4.0)	$t(50) < 1$ <i>ns</i>	42.2 (5.0)		
Educational attainment ^b	3.9 (1.2)	3.1 (.7)	$t(56.3) = 3.3$ $p < .05$	3.7 (1.1)		
Hours per week in employment	36.9 (11.1)	40.2 (12.4)	$t(63) < 1$ <i>ns</i>	38.3 (11.7)		
Annual income in thousands	46.5 (29.4)	43.3 (18.6)	$t(56) < 1$ <i>ns</i>	48.8 (25.6)		
Annual household income ^c	82.0 (43.3)	63.2 (32.4)	$t(78) = 1.8$ <i>ns</i>	88.0 (40.3)	56.9 (25.4)	$t(74) = 3.4$ $p < .05$

Note: Standard deviations are given in parentheses. Bonferroni corrections were applied to all t tests to protect alpha levels against inflation caused by multiple comparisons. Given that there were 16 comparisons, results were considered statistically significant at the .05 level only when $p < .003$ (.05/16).

^a Includes families that were once headed by couples who have since separated.

^b Educational attainment: 1 = no high school, 2 = high school graduate, 3 = college graduate, 4 = some graduate school, 5 = graduate degree.

^c May include income other than each parent's individual income (e.g., child support).

Materials

We collected data in each of the following three categories: child adjustment, parental adjustment, and parental relationship satisfaction.

Child adjustment. Children's social competence and behavioral adjustment were assessed using the Child Behavior Checklist (CBCL; Achenbach, 1991a) as well as the Teacher Report Form (TRF; Achenbach, 1991b). The CBCL uses parent reports and yields scores for three broad-band scales (social competence, internalizing, externalizing) and a total behavior problem score (total problems). Social competence is measured by a series of questions about the frequency of the child's participation and performance in various social arenas (e.g., sports, hobbies, friendships, sibling relationships, and school). Internalizing, externalizing, and total behavior problems are assessed using 118 items rated on a scale from 0 to 2 (0 = not true; 1 = somewhat or sometimes true; 2 = very true

or often true). The internalizing scale score summarizes the child's withdrawn behaviors, somatic complaints, anxiety, and depression. The externalizing scale score summarizes aggressive, disruptive, and delinquent behaviors. Finally, the total behavior problems score computed takes into account internalizing and externalizing behaviors, as well as social, thought, and attention problems (Achenbach, 1991a).

The TRF is similar to the CBCL, but designed to utilize reports by a teacher or child-care provider. Although 22 symptoms that appear on the TRF are specific to the classroom situation (e.g., afraid to make mistakes; fails to finish; talks out of turn), the broad-band scales (i.e., internalizing and externalizing) are the same as those in the CBCL. In addition, on the TRF, an academic performance and adaptive functioning scale (e.g., how happy is the child) replaces the social competence scale on the CBCL (Achenbach, 1991b; McConaughy, 1993). The TRF and CBCL were

chosen for use in the present study because they are standard child assessment instruments for which national age and sex norms are available; norms are also available for clinical and nonclinic populations. Furthermore, sex and age specific raw scores can be converted to standard *T* scores that allow comparisons across age and gender groups (Patterson, 1994).

Parental adjustment. Parenting stress was assessed using the Parenting Stress Index—Short Form (PSI/SF; Abidin, 1995). The PSI/SF is the 36 item derivative of the full Parenting Stress Index. Respondents indicate agreement or disagreement on a five point scale (1 = strongly agree to 5 = strongly disagree) in response to each of the 36 items. The PSI/SF assesses three main components of the parent-child dyad: parental distress (PD; e.g., "I feel trapped by my responsibilities as a parent"), parent-child dysfunctional interactions (P-CDI; e.g., "I expected to have closer and warmer feelings for my child than I do and this bothers me"), and difficult child (DC; e.g., "My child turned out to be more of a problem than I had expected"), with 12 items on each subscale. A total stress (TS) score provides an indication of the overall level of parenting stress. This score indexes stresses directly related to the role of parenthood by excluding other life roles or events that may contribute to a parent's overall stress level. Each of the three subscales, PD, P-CDI, and DC measure different aspects of stresses related to parenting. PD assesses a person's experiences in her or his role as a parent, P-CDI assesses the extent to which a parent perceives that her or his child does or does not meet the parent's expectations in relationship to the parent, and DC measures the child's behavioral difficulties. The PSI/SF TS score has test-retest reliability of .84 over 6 months (Abidin, 1995). We used TS, PD, and P-CDI scores in this study. Data were also collected on parents' experiences of recent stressful life events using the Life Stress (LS) scale from the Abidin PSI (1995). The LS scale consists of 27 life event items that participants can endorse based on their experiences within the past 12 months. The LS scale provides an index of the stresses outside of the parent-child relationship (e.g., "moved to a new home"); higher scores indicate greater stress (Abidin, 1995).

Parental depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20 item self-report measure designed to assess depressive symptoms in the general population (e.g., "I felt fearful"). Respondents indicate on a scale of 0 to 3 how often they felt or behaved as indicated by the item during the past week (0 = Rarely or none of the time [less than 1 day] to 3 = Most or all of the time [5–7

days]). Scores on the CES-D range from 0 (no depressive symptoms) to 60 (severe depressive symptoms), with 4 week test-retest correlation of .67 (Radloff, 1977).

Parents' self-concepts were assessed using the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1977), a 10 item self-report measure on global self-esteem (e.g., "I take a positive attitude toward myself"). Respondents indicate agreement or disagreement on a four point scale (1 = Strongly agree to 4 = Strongly disagree) in response to each of the 10 items. The RSE has been shown to have high test-retest reliability ($r = .88$ over 3 months; Savin-Williams, 1990, 1995) and significant correlations with other self-report self-esteem instruments such as the Coopersmith Self-Esteem Inventory (Demo, 1985). Following Savin-Williams (1990, 1995), the 0–30 sum scoring system is used, with higher scores representing higher self-esteem.

Parental relationship satisfaction. For families that were headed by couples, information was collected on interparental relationship satisfaction. To provide a global assessment of relationship quality, we employed the Locke-Wallace Marital Adjustment Test (LWMAT; Locke & Wallace, 1959). The LWMAT (also commonly referred to as the Short Marital Adjustment Test [SMAT; Emery & O'Leary, 1984]) is a 15 item self-report test designed to measure marital adjustment of spouses in heterosexual marriages. Minor semantic adjustments were required to make the LWMAT suitable for use in same-sex as well as different-sex couples (Patterson, 1995a). Possible scores on the LWMAT range from 2 to 158; higher scores indicate greater satisfaction.

For ratings on more specific aspects of the parents' relationship, we administered the Braiker and Kelley Partnership Questionnaire (Braiker & Kelley, 1979). The Braiker and Kelley is a 25 item questionnaire that assesses components of a close relationship; in this study we used two scales: (1) *love* (i.e., caring and emotional attachment, 10 items); and (2) *conflict* (i.e., problems and arguments, 5 items). Each partner indicates agreement or disagreement on a 9 point scale (1 = Not at all or Very little to 9 = Very much or Very often) in response to each item; higher scores indicate more love and more conflict (Braiker & Kelley, 1979; Burger & Milardo, 1995).

Procedure

Each eligible family was initially contacted by a letter from the executive director of TSBC. The letter gave a brief explanation of the study and asked each client to consider participation. Telephone calls from

TSBC staff members followed these letters to describe the study more fully and to request each family's participation. When a client agreed to participate, a brief structured telephone interview about family background and current family status was conducted. Materials for the remainder of the study were then mailed to the client, with instructions to fill them out privately (i.e., partners were asked not to discuss their responses to the research material until they had completed the questionnaires) and to return all material in self-addressed, stamped envelopes that were provided. In consenting families, a parent asked the child's teacher or day-care provider to fill out the Teacher's Report Form and return it in a self-addressed, stamped envelope. Follow-up phone calls were employed as necessary to encourage timely return of research materials.

RESULTS

Data analyses proceeded in two principal stages. In the first stage, scores on major assessments of parents' stress, parents' adjustment, and children's adjustment were submitted to two-way analyses of variance that compared the influence of parental sexual orientation (lesbian versus heterosexual) and household composition (one parent versus two parent homes) on these variables. In the second stage, we explored the power of variables associated with family processes (e.g., parenting stress, depression, interparental conflict) in explaining children's adjustment.

Structural Comparisons

Data screening revealed unexpectedly unequal cell sizes among the four family types. Due to some small cell sizes, we did not have sufficient statistical power to examine interaction effects between mothers' sexual orientation and mothers' relationship status. We had not expected any such interactions, and examination of individual cell means revealed no evidence of mean differences among the four family types. For these reasons, in this article we present means and standard deviations for main effects but not for interactions.²

Results revealed that, when compared with available norms, parents in this sample scored as well adjusted. Means and standard deviations for parents' individual adjustment and couples' relationship ad-

justment scores as a function of family type (lesbians versus heterosexuals and couple versus single) are presented in Table 2. No significant differences emerged from biological mothers' reports of well-being as a function of relationship status (i.e., single or coupled) or as a function of sexual orientation. Furthermore, among families headed by couples, the data revealed no significant differences in nonbiological parents' reports of well-being or of couples' reports of relationship satisfaction as a function of sexual orientation.

Children's psychosocial adjustment as reported on the CBCL by parents and on the TRF by teachers revealed that, when compared with means for a large group of normal children, children in the present sample were well adjusted. Means and standard deviations for children's adjustment scores are presented in Table 3. Children in our sample scored significantly higher on social competence and significantly lower on behavior problems than did children in the clinical population. This was true for reports of biological parents, nonbiological parents, and teachers.³ There were no significant differences in child adjustment as a function of parental sexual orientation or number of parents in the home.

On average, all reporters (i.e., biological mothers, nonbiological parents, and teachers) agreed that children in all family types were functioning well. As expected, average scores on the internalizing, externalizing, and total behavior problems scales were substantially and significantly below clinical cut-offs (Achenbach, 1991a, 1991b). In addition, the average social competence and adaptive functioning scores for all children were substantially and significantly above the clinical cut-offs (Achenbach, 1991a, 1991b) (see Table 3).

Thus, structural factors such as household composition or parental sexual orientation were not associated with significant outcomes for children or for their parents. According to the assessments we conducted, children conceived via donor insemination were reported by teachers as well as by parents as being well adjusted.

Family Processes

To explore the role of family processes in children's adjustment, we examined associations be-

2. Detailed tables showing means and standard deviations for all major variables, and all other results for lesbian single mothers, lesbian couples, heterosexual single mothers, and heterosexual couples, are available upon request from the first author.

3. To ensure that results were not spuriously affected by the relatively high socioeconomic status of the present sample, we also compared children's CBCL and TRF scores with means for middle- and upper-SES norming groups provided by Achenbach and Edelbrock (1983). Consistent with Achenbach and Edelbrock's finding that SES accounted for less than 5% of the variance in CBCL scores, results of these comparisons were essentially identical to those presented here.

Table 2 Parental Self-Report of Individual and Relationship Adjustment as a Function of Family Type and Reporter

Variable	Sexual Orientation		Lesbian versus Heterosexual	Relationship Status		Couple versus Single
	Lesbian	Heterosexual		Couple	Single ^a	
Biological mothers' individual adjustment:						
Number of reporters	51	24		47	28	
Parenting Stress Index: Total Score	66.8 (16.5)	65.0 (14.8)	$t(73) < 1, ns$	66.9 (16.9)	65.1 (14.2)	$t(47) < 1, ns$
Parenting Stress Index: Life Stress	2.6 (1.6)	2.0 (1.2)	$t(73) = 1.8, ns$	2.3 (1.3)	2.6 (1.8)	$t(47) < 1, ns$
Rosenberg Self-Esteem	24.1 (4.2)	24.5 (4.8)	$t(73) < 1, ns$	24.6 (4.2)	23.7 (4.7)	$t(47) < 1, ns$
CES—Depression	8.6 (6.1)	8.3 (7.1)	$t(73) < 1, ns$	8.6 (6.6)	8.4 (6.1)	$t(47) < 1, ns$
Biological mothers' relationship adjustment:						
Number of reporters (couples only)	27	13		40		
Locke-Wallace Marital Adjustment Test	113.5 (20.1)	110.2 (22.6)	$t(38) < 1, ns$	112.4 (20.7)		
Braiker-Kelley: Love	7.4 (.9)	7.3 (1.1)	$t(38) < 1, ns$	7.4 (1.0)		
Braiker-Kelley: Conflict	5.0 (1.3)	4.5 (1.0)	$t(38) = 1.3, ns$	4.8 (1.2)		
Nonbiological parents' individual adjustment:						
Number of reporters	33	14		28		
Parenting Stress Index: Total Score	71.5 (18.3)	73.0 (20.4)	$t(45) < 1, ns$	71.9 (19.8)		
Parenting Stress Index: Life Stress	2.4 (1.6)	1.3 (1.4)	$t(45) = 2.2, ns$	1.9 (1.6)		
Rosenberg Self-Esteem	24.0 (3.9)	23.6 (4.7)	$t(45) < 1, ns$	24.4 (3.9)		
CES—Depression	8.5 (6.5)	8.2 (10.4)	$t(45) < 1, ns$	8.2 (7.7)		
Nonbiological parents' relationship adjustment:						
Number of reporters (couples only)	23	12		35		
Locke-Wallace Marital Adjustment Test	118.5 (17.7)	113.6 (19.4)	$t(33) < 1, ns$	116.8 (18.2)		
Braiker-Kelley: Love	7.3 (.9)	7.4 (1.0)	$t(33) < 1, ns$	7.3 (.9)		
Braiker-Kelley: Conflict	4.5 (1.2)	3.9 (1.4)	$t(33) = 1.3, ns$	4.3 (1.3)		

Note: Standard deviations are given in parentheses. Bonferroni corrections were applied to all t tests to protect alpha levels against inflation caused by multiple comparisons. Given that there were 18 comparisons, results were considered statistically significant at the .05 level only when $p < .003$ (.05/18).

^a Includes families that were once headed by couples who have since separated.

tween parental and child adjustment. First, we computed correlations between parental adjustment variables and children's adjustment variables. In particular, we focused on the internalizing, externalizing, and total behavior problems T scores as our dependent variables. Second, simultaneous multiple regression analyses were conducted to evaluate the contribution of relevant parental adjustment variables to the prediction of child adjustment, while controlling for the impact of family structure. Simultaneous regression analyses were conducted separately for each of the behavior problems scores as reported by each source. For each analysis, parental sexual orientation (lesbian or heterosexual), parents' relationship status (couple or single), and any parental adjustment variables that showed significant relationships with children's behavior problem T scores were included as independent variables. Results are shown in Table 5.

As can be seen in Table 4, children's behavioral problems as reported by parents were significantly correlated with parents' own adjustment. As predicted, children exhibited more behavior problems when parents reported more parenting distress and

more dysfunctional parent-child interactions. Surprisingly, parents' self-esteem and other life stresses were not significantly related to parents' reports of child behavior problems. The best predictor of teachers' reports of child behavior problems was nonbiological parents' parenting distress.

Predictions of biological mothers' reports of child behavior problems based on measures of parental adjustment are shown in Table 5A. Biological mothers' reports of dysfunctional parent-child interactions were significantly associated with children's internalizing behavior problems. Biological mothers' reports of parenting distress and dysfunctional interactions were both significantly associated with children's externalizing and total behavior problems. As expected, parents' sexual orientation and relationship status were unrelated to children's behavior problems as reported by the biological mother. The overall variance accounted for by these variables was $R^2 = 24\%$, $F(4, 69) = 5.54$, $p < .001$ for internalizing problems, $R^2 = 31\%$, $F(4, 69) = 7.65$, $p < .001$ for externalizing problems, and $R^2 = 42\%$, $F(4, 69) = 12.68$, $p < .001$ for total behavior problems. Additional simultaneous multiple regression analyses showed

Table 3 Average T Scores from Child Behavior Checklist (CBCL) and Teacher Report Form (TRF) as a Function of Family Type and Reporter

	Achenbach Means ^a		Sample versus Normal	Sample versus Clinical	Sexual Orientation		Lesbian versus Heterosexual	Relationship Status		Couple versus Single
	Normal	Clinical			Lesbian	Heterosexual		Couple	Single ^b	
Biological mothers' report:										
Number of reporters	800	800			51	24		47	28	
Social competence	51.2	37.7	$t(74) = -3.8$ $p < .05$	$t(74) = 7.9$ $p < .001$	47.0 (10.4)	46.6 (9.5)	$t(73) < 1$ ns	46.2 (9.8)	48.0 (10.6)	$t(73) < 1$ ns
Internalizing BP	51.2	66.2	$t(73) = -2.5$ ns	$t(73) = -15.8$ $p < .001$	47.9 (9.8)	49.5 (9.4)	$t(72) < 1$ ns	48.8 (9.7)	47.8 (9.8)	$t(73) < 1$ ns
Externalizing BP	50.8	66.4	$t(74) = -1.8$ ns	$t(74) = -16.0$ $p < .001$	48.9 (10.6)	48.5 (6.9)	$t(65.7) < 1$ ns	48.5 (9.4)	49.4 (10.0)	$t(73) < 1$ ns
Total BP	50.1	68.3	$t(74) < 1$ ns	$t(74) = -16.5$ $p < .001$	49.0 (10.5)	50.0 (9.0)	$t(73) < 1$ ns	49.5 (10.1)	49.0 (10.0)	$t(73) < 1$ ns
Nonbiological parents' report:										
Number of reporters	800	800			32	15		37		
Social competence	51.2	37.7	$t(46) = -3.1$ ns	$t(46) = 6.0$ $p < .001$	46.1 (10.6)	47.7 (9.6)	$t(45) < 1$ ns	46.5 (10.0)		
Internalizing BP	51.2	66.2	$t(46) = -2.5$ ns	$t(46) = -13.1$ $p < .001$	49.3 (9.7)	44.1 (8.9)	$t(48) = -1.8$ ns	47.6 (10.4)		
Externalizing BP	50.8	66.4	$t(46) = -1.3$ ns	$t(46) = -12.0$ $p < .001$	50.3 (10.4)	45.7 (8.6)	$t(45) = -1.5$ ns	48.9 (11.0)		
Total BP	50.1	68.3	$t(46) < 1$ ns	$t(46) = -12.2$ $p < .001$	50.6 (10.9)	45.1 (10.3)	$t(45) = -1.7$ ns	49.0 (11.9)		
Teachers' report:										
Number of reporters	713	713			32	16		30	18	
Adaptive functioning	50.0	40.5	$t(46) = 3.5$ $p < .05$	$t(46) = 11.5$ $p < .001$	53.7 (7.9)	55.3 (9.1)	$t(45) < 1$ ns	55.5 (8.2)	52.0 (8.0)	$t(45) = 1.4$ ns
Internalizing BP	50.3	57.9	$t(47) = -1.6$ ns	$t(47) = -6.9$ $p < .001$	48.0 (9.6)	48.1 (10.9)	$t(45) < 1$ ns	46.9 (10.2)	49.9 (9.5)	$t(45) = 1.0$ ns
Externalizing BP	50.5	60.1	$t(47) = .9$ ns	$t(47) = -6.0$ $p < .001$	52.3 (10.7)	50.6 (7.5)	$t(45) < 1$ ns	51.5 (9.8)	52.2 (9.8)	$t(45) < 1$ ns
Total BP	50.2	62.0	$t(47) = .4$ ns	$t(47) = -7.1$ $p < .001$	51.0 (11.3)	50.7 (10.1)	$t(45) < 1$ ns	50.2 (10.9)	52.1 (10.8)	$t(45) < 1$ ns

Note: Standard deviations are given in parentheses. Bonferroni corrections were applied to all t tests to protect alpha levels against inflation caused by multiple comparisons. Given that there were eight comparisons per reporter, results were considered statistically significant at the .05 level when $p < .006$ (.05/8).

^a Taken from Achenbach and Edelbrock (1983).

^b Includes families that were once headed by couples who have since separated.

Table 4 Pearson Correlations of Child Adjustment and Parental Adjustment Variables

Parents' Adjustment	Children's Adjustment								
	Biological Mothers' Reports (CBCL)			Other Parents' Reports (CBCL)			Teachers' Reports (TRF)		
	Int ^a	Ext	TP	Int	Ext	TP	Int	Ext	TP
Biological mothers' report:									
Parenting distress (PSI: PD)	.35** (74)	.47*** (75)	.52*** (75)	.06 (44)	.22 (44)	.14 (44)	.00 (46)	-.23 (46)	-.13 (46)
Parent-child dysfunctional interactions (PSI: P-CDI)	.45*** (74)	.49*** (75)	.59*** (75)	.34* (44)	.42** (44)	.40** (44)	.14 (46)	-.16 (46)	.01 (46)
Life stress (PSI: LS)	.12 (74)	.15 (75)	.17 (75)	.08 (44)	.12 (44)	.12 (44)	-.11 (46)	-.05 (46)	-.22 (46)
Depressive symptoms (CES-D)	.24* (74)	.26* (75)	.35* (75)	-.11 (44)	.09 (44)	.00 (44)	.05 (46)	.16 (46)	.07 (46)
Self-esteem (Rosenberg)	-.11 (74)	-.18 (75)	-.19 (75)	.12 (44)	-.09 (44)	.05 (44)	.00 (46)	.10 (46)	.03 (46)
Locke-Wallace Marital Adjustment Test	-.35* (39)	-.37* (40)	-.38* (40)	-.23 (34)	-.38* (34)	-.35* (34)	.17 (26)	-.03 (26)	.06 (26)
Braiker-Kelley: Love	-.11 (39)	-.07 (40)	-.10 (40)	-.01 (34)	-.35* (34)	-.29 (34)	-.11 (26)	-.16 (26)	-.19 (26)
Braiker-Kelley: Conflict	.30 (39)	.62*** (40)	.54*** (40)	.13 (34)	.25 (34)	.20 (34)	-.34 (26)	-.12 (26)	-.28 (26)
Nonbiological parents' report:									
Parenting distress (PSI: PD)	.14 (44)	.37* (45)	.28 (45)	.26 (46)	.48*** (46)	.39** (46)	.12 (35)	.33* (35)	.22 (35)
Parent-child dysfunctional interactions (PSI: P-CDI)	.28 (44)	.40** (45)	.36* (45)	.27 (46)	.51*** (46)	.44** (46)	-.06 (35)	.03 (35)	.08 (35)
Life stress (PSI: LS)	.11 (44)	.05 (45)	.20 (45)	.10 (46)	.10 (46)	.16 (46)	.15 (35)	.02 (35)	.04 (35)
Depressive symptoms (CES-D)	.23 (44)	.32* (45)	.37* (45)	.01 (46)	.10 (46)	.12 (46)	.04 (35)	.12 (35)	.07 (35)
Self-esteem (Rosenberg)	-.14 (44)	-.33* (45)	-.29 (45)	.03 (46)	-.09 (46)	-.07 (46)	.19 (35)	-.11 (35)	.09 (35)
Locke-Wallace Marital Adjustment Test	-.27 (34)	-.45** (34)	-.42* (34)	-.45** (34)	-.58*** (34)	-.54*** (34)	-.15 (25)	-.22 (25)	-.11 (25)
Braiker-Kelley: Love	-.07 (33)	-.24 (34)	-.27 (34)	-.24 (34)	-.63*** (34)	-.52** (34)	-.31 (25)	-.31 (25)	-.39* (25)
Braiker-Kelley: Conflict	.08 (33)	.35* (34)	.25 (34)	.35* (34)	.55*** (34)	.45** (34)	.23 (25)	.34 (25)	.26 (25)

Note: ns are given in parentheses.

^a Int = Internalizing, Ext = Externalizing, TP = Total Problems.

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

that after controlling for biological mothers' adjustment, the addition of nonbiological parents' adjustment variables did not account for significantly more variance in children's adjustment.

Predictions of nonbiological parents' reports of child behavior problems based on measures of parental adjustment are shown in Table 5B. Nonbiological parents' reports of dysfunctional parent-child interactions were significantly associated with children's externalizing and total behavior problems. The overall variance accounted for by these variables was

$R^2 = 25\%$, $F(3, 32) = 3.47$, $p < .05$ for internalizing problems, $R^2 = 44\%$, $F(3, 32) = 8.21$, $p < .001$ for externalizing problems, and $R^2 = 32\%$, $F(3, 32) = 5.00$, $p < .01$ for total behavior problems. Unexpectedly, nonbiological parents' reports of internalizing and externalizing behavior problems were related to parents' sexual orientation in these analyses. This finding may be associated with the reporters' gender (male versus female) rather than parental sexual orientation (heterosexual versus lesbian); fathers generally tended to describe their children in more

Table 5 Summary of Simultaneous Multiple Regression onto Reports of Child Behavioral Problems

Variable	Internalizing Behavior Problems				Externalizing Behavior Problems				Total Behavior Problems			
	B	SE(B)	β	<i>t</i>	B	SE(B)	β	<i>t</i>	B	SE(B)	β	<i>t</i>
A. Biological mothers' report:												
Parents' sexual orientation	-1.0	1.09	-.10	<1	-.14	1.03	-.01	<1	-.77	.98	-.07	<1
Parents' relationship status	.62	1.06	.06	<1	-.59	1.00	-.06	<1	.00	.95	<.01	<1
Biological mothers' report of parenting distress (PSI: PD)	.32	.19	.20	1.72	.48	.18	.31	2.73**	.53	.17	.32	3.13**
Biological mothers' report of parent-child dysfunctional interaction (PSI: P-CDI)	.64	.21	.36	3.06**	.60	.20	.34	3.06**	.81	.19	.44	4.32***
<i>R</i> ²			.24				.31				.42	
<i>F</i> (4, 69)			5.54***				7.65***				12.68***	
B. Nonbiological parents' report:												
Parents' sexual orientation	4.22	1.86	.38	2.27*	3.72	1.70	.32	2.19*	3.94	2.02	.31	1.95
Nonbiological parents' report of parenting distress (PSI: PD)	.07	.36	.04	<1	.41	.33	.22	1.25	.28	.39	.14	<1
Nonbiological parents' report of parent-child dysfunctional interaction (PSI: P-CDI)	.62	.33	.38	1.87	.80	.30	.47	2.66**	.80	.36	.43	2.22*
<i>R</i> ²			.25				.44				.32	
<i>F</i> (3, 32)			3.47*				8.21***				5.00**	
C. Teachers' report:												
Parents' sexual orientation	-1.83	2.09	-.17	<1	-2.04	1.85	-.20	-1.1	-3.22	2.1	-.28	-1.53
Nonbiological parents' report of parenting distress (PSI: PD)	.53	.34	.31	1.27	.83	.30	.50	2.77**	.87	.34	.47	2.55**
<i>R</i> ²			.09				.24				.22	
<i>F</i> (2, 25)			1.33				3.90*				3.60*	

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

favorable terms than did mothers. To assess the significance of this tendency, we compared fathers' ratings of child behavior problems against mothers' and teachers' ratings using paired *t* tests. These comparisons revealed that heterosexual fathers reported fewer behavior problems on average than did biological mothers or teachers; however, the difference in ratings did not reach statistical significance when Bonferroni corrections were applied to account for inflated alpha levels. Additional simultaneous multiple regression analyses showed that after controlling for nonbiological parents' adjustment, the addition of biological mothers' adjustment variables did not significantly account for more variance in children's adjustment.

Predictions of teachers' reports of child behavior problems based on measures of parental adjustment are shown in Table 5C. Nonbiological parents' reports of parenting distress were significantly associated with teachers' reports of children's externalizing and total behavior problems. When nonbiological parents reported greater distress in the parenting role, teachers described their children as having more

behavior problems. As expected, parents' sexual orientation was unrelated to teacher reports of children's behavior problems. The overall variance accounted for by these variables was $R^2 = 9\%$, $F(2, 25) = 1.33$, *ns* for internalizing problems, $R^2 = 24\%$, $F(2, 25) = 3.90$, $p < .05$ for externalizing problems, and $R^2 = 22\%$, $F(2, 25) = 3.60$, $p < .05$ for total behavior problems.

In summary, biological mothers' experience of parenting stress was significantly related to her own report of children's behavior problems. Similarly, nonbiological parents' experience of parenting stress significantly predicted her or his reports as well as those of teachers. Specifically, nonbiological parents who reported greater parenting distress had children who were described by teachers as experiencing more externalizing and total behavior problems. As expected on the basis of earlier analyses, family structure variables were not consistently associated with reports of children's behavior problems. Because we observed differential educational attainment between lesbian and heterosexual parents (see Table 1), we performed these regression analyses again, this

time controlling for parents' educational attainment. The results were nearly identical to those presented here; after controlling for parents' educational attainment, seven out of the eight regression models remained the same. No significant interactions were found among predictors in these regression models. In summary, parenting stress, but not parents' sexual orientation, relationship status, or educational attainment, showed significant relationships with children's adjustment as reported by their parents.

Among families headed by couples, better relationship adjustment within the couples was associated with fewer behavior problems among the children (see Table 4). Specifically, biological mothers who reported higher global relationship satisfaction on the LWMAT had children with fewer behavior problems as reported by herself ($r(40) = -.38, p < .05$ with externalizing problems, $r(39) = -.35, p < .05$ with internalizing problems, $r(40) = -.38, p < .05$ with total behavior problems) and by her partner ($r(34) = -.38, p < .05$ with externalizing problems, and $r(34) = -.35, p < .05$ with total behavior problems). Similarly, nonbiological parents who reported higher global relationship satisfaction had children who were better adjusted ($r(34) = -.45, p < .01$ with internalizing problems, $r(34) = -.58, p < .001$ with externalizing problems, and $r(34) = -.54, p < .001$ with total behavior problems). Higher global relationship satisfaction as reported by nonbiological parents was also correlated with biological mothers' reports of lower externalizing problems, $r(34) = -.45, p < .01$, and total behavior problems, $r(34) = -.42, p < .01$. In sum, better global adjustment in parental relationships was related to reports of fewer behavior problems among children.

Love between parents was also associated with children's adjustment. Biological mothers who reported more love in their couple relationships had children who exhibited fewer externalizing problems, $r(34) = -.35, p < .05$, based on nonbiological parents' reports. Similarly, nonbiological parents who reported more love had children who exhibited fewer externalizing problems as reported by the nonbiological parent, $r(34) = -.63, p < .001$, and by the teacher, $r(25) = -.39, p = .05$, and fewer total behavior problems as reported by the nonbiological parent, $r(34) = -.52, p < .01$.

Finally, consistent with previous findings, conflict between parents was associated with difficulties in child adjustment. Biological mothers who reported more relationship conflict also reported that their children exhibited more externalizing problems, $r(40) = .62, p < .001$, and total behavior problems, $r(40) = .54, p < .001$. Similarly, nonbiological parents

who reported more relationship conflict also reported that their children exhibited more internalizing problems, $r(34) = .35, p < .05$, externalizing problems, $r(34) = .55, p < .001$, and total behavior problems, $r(34) = .45, p < .01$.

In summary, among families headed by couples, children were rated as better adjusted when their parents reported greater relationship satisfaction, higher levels of love, and lower interparental conflict.

DISCUSSION

Consistent with the findings of Golombok and her colleagues (Golombok et al., 1995), we found that children born via new reproductive technologies such as donor insemination were developing in a normal manner. For instance, both parents and teachers described the children we studied as socially competent. Neither parents nor teachers saw children in our sample as evincing unusual behavior problems. The participating children were regarded by both parents and teachers as well adjusted. Our findings thus contribute to emerging debates about the impact of new reproductive technologies upon children (Golombok & Tasker, 1994). As we had anticipated (Patterson, 1992, 1995a), children's outcomes were unrelated to parental sexual orientation. On the basis of assessments of children's social competence and behavior problems that we collected, it was impossible to distinguish children born to and brought up by lesbian versus heterosexual parents. Consistent with the results of earlier research (Golombok, Spencer, & Rutter, 1983; Golombok & Tasker, 1996; Patterson, 1992, 1994; Tasker & Golombok, 1995), then, lesbian as well as heterosexual parents apparently had provided home environments that supported children's positive development. These results contribute much-needed empirical evidence relevant to controversies surrounding the meaning of parental sexual orientation for children (Patterson, 1992; Patterson & Redding, 1996).

In this sample, no significant differences among children's adjustment emerged as a function of the number of parents in the home. Although this may, at first glance, appear surprising in light of the extensive literature on single parenting as a risk factor in children's development (e.g., Furstenberg, 1991; McLanahan & Sandefur, 1994), a closer inspection makes the result more comprehensible. In contrast to the characteristics of single-parent homes in which children may be at risk, mothers in the present sample were fully adult, well educated, and relatively affluent. Thus, educational and financial disadvantages that often characterize single-parent families, and

that are responsible for much of the variation in children's outcomes (McLanahan & Sandefur, 1994), did not characterize the present sample. Our results thus provide information about a rarely studied segment of the diverse population of families headed by unmarried mothers (Weinraub & Gringlas, 1995).

Inasmuch as our findings revealed no impact of structural factors on children's development, and given that our sample was modest in size, one set of concerns in the interpretation of these data focuses on issues related to statistical power. Was the statistical power of our analyses sufficient to detect possible differences between groups? Using the techniques recommended by Cohen (1988), we calculated the probability that, given our sample of 80 families, we would be able to observe effects of different sizes. The calculations revealed that, for each comparison, the probability of observing a medium-sized effect (i.e., at least 10% of the variance) was .80, and the likelihood of observing a large effect (i.e., 30% of the variance) was .99. Only for small effect sizes (i.e., 3% of the variance) would the statistical power of our analyses have fallen short. Thus, although the possibility of small effects cannot conclusively be ruled out, we conclude that our methods had sufficient statistical power to detect medium and large effects. Of course, the null hypothesis can never conclusively be proven (Cohen, 1988). However, our results suggest that the influence of structural factors in the present sample must have been either small or nonexistent.

In contrast with the lack of significant differences among children attributable to structural variables such as number of parents and parental sexual orientation, children's development was significantly related to variables associated with family process. For example, reports of parenting stress were significantly associated with children's externalizing behavior problems. Consistent with results of research with heterosexual families (Abidin et al., 1992), we found that both parents and teachers reported higher levels of externalizing behaviors for children of parents who reported experiencing heightened parenting stress. This association accounted for between 22% and 42% of the variance in children's total behavior problem scores.

As expected, we also found associations between parents' relationship satisfaction and children's well-being. Biological parents who reported greater conflict with their partners described their children as having more behavior problems. Nonbiological parents who reported less happy couple relationships and lower levels of love for their partners also described their children as having more behavior problems. Consistent with the literature on conflict and

relationship satisfaction, then, children in relatively unhappy or conflict-ridden homes had less positive outcomes, as reported by their parents. These associations, though generally smaller than those for parenting stress, still accounted for between 12% and 29% of the variance in children's total behavior problem scores.

Contrary to expectations, however, we found no significant relation between parental depressive symptoms and children's behavioral problems in this sample. One difficulty in assessing possible links between symptoms of depression and children's behavior problems that we faced was that few parents in our sample reported many depressive symptoms. Findings that children of depressed parents are at risk for maladjustment have most often been based on clinically depressed samples of parents (Downey & Coyne, 1990). Thus, the relatively well-adjusted sample of parents who participated in this study seems to have precluded observation of any effects of parental depressive symptoms on children's adjustment (see also Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993).

Taken together, our results are consistent with the general hypothesis that children's well-being is more a function of parenting and relationship processes within the family (i.e., family interactions and processes) than it is a function of household composition or demographic factors (i.e., family structure) (Patterson, 1992). The idea that only heterosexual parents can raise healthy children is certainly not supported by the present findings. Indeed, by suggesting the primacy of family process over family structure in influencing outcomes for children, the present data are consistent with the notion that parenting ability and sexual orientation are unrelated (Patterson, 1995b; Patterson & Redding, 1996).

The Contemporary Families Study was designed to further our understanding of psychological adaptation among children born to nontraditional families, and we took care to address some of the concerns raised by critics of earlier research. First, we studied a sample that included families headed by lesbian and by heterosexual parents, which allowed us to compare levels of psychological well-being between matched groups of children as well as among their parents. Second, we drew our sample in a systematic fashion from a known population (i.e., clients of TSBC), and thus were able to evaluate the impact of selection biases (Berk & Ray, 1982). Third, in addition to gathering information from parents, we also collected teachers' ratings of children's behavioral adjustment, which provided information on the children from an extrafamilial perspective. Finally, we

included single as well as coupled mothers in this study. With improved sampling, increased sample size, multiple informants, and the use of comparison groups of families headed by heterosexual mothers and single mothers, the Contemporary Families Study systematically explored the impact of family structure and family processes and their impact on children's psychosocial well-being.

There are, however, several limitations that should be borne in mind when evaluating results from the present study. First, this was a cross-sectional study, and for this reason, developmental change among this group of children conceived via donor insemination could not be observed. We must also acknowledge that although questions about causal linkages and bidirectional effects are of great interest, the present data do not allow us to test for causal or nonrecursive models and thus cannot support causal inferences (for a treatment of nonrecursive models, see Gollob & Reichardt, 1987). Second, selection effects were observed, such that lesbian parents and two-parent families were more likely than others to participate. The sample is thus most likely to be representative of families headed by lesbian couples. Third, the study did not include observational data, but focused instead on reports of parents and teachers about the variables of interest. In view of the modest number of significant correlations with teacher reports, caution should be exercised in interpreting these data pending replication. Longitudinal studies of representative samples of lesbian and heterosexual parents and their children, including observational as well as questionnaire and interview assessments, would be better able to address questions of change and causal relationships. Furthermore, the inclusion of a comparison group of naturally conceived children (see Golombok et al., 1993, 1995) would also be beneficial to draw firm conclusions regarding the impact of donor insemination on family processes and children's adjustment. These would be valuable additions to the research literature in this area.

Given the increased availability of reproductive technologies, many children are being conceived and growing up in family forms that are increasingly diverse. Results of the present research revealed that neither specific modes of conception nor parental sexual orientation were good predictors of children's developmental status. Parental well-being and relationship quality were, however, significantly related to children's adjustment. As expected, structural variables such as parental sexual orientation were not as strongly associated with child outcomes as were those assessing the qualities of family relationships. In short, our results are consistent with the view that

qualities of relationships within families are more important than parental sexual orientation as predictors of children's adjustment.

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