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Predictors of Parenting Stress Among Gay Adoptive Fathers in the United States

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The authors examined correlates of parenting stress among 230 gay adoptive fathers across the United States through an Internet survey. As with previous research on adoptive parents, results showed that fathers with less social support, older children, and children who were adopted at older ages reported more parenting stress. Moreover, gay fathers who had a less positive gay identity also reported more parenting stress. These 4 variables accounted for 33% of the variance in parenting stress; effect sizes were medium to large. Our results suggest the importance of social support and a positive gay identity in facilitating successful parenting outcomes among gay adoptive fathers.

Keywords: sexual orientation, adoption, gay fathers, identity, parenting stress

Gay adoptive parenthood is now a fact of life in many parts of the United States. An estimated 65,500 children have been adopted by lesbian and gay parents (Gates, 2010), and more than 2 million lesbian and gay individuals are reportedly interested in adopting a child (Gates, Badgett, Macomber, & Chambers, 2007). Adoption may be becoming a more common pathway to parenthood, particularly among younger gay men (Patterson & Tornello, 2011). Despite the increasing prevalence of this type of family, studies that explore the experiences of gay adoptive fathers are still rare (McKay, Ross, & Goldberg, 2010; Tasker & Patterson, 2008). Research on lesbian and gay adoptive parents and their children is emerging (Erich, Leung, & Kindle, 2005; Farr, Forssell, & Patterson, 2010; Goldberg, Downing, & Sauck, 2007; Goldberg & Smith, 2008; Mallon, 2004), but relatively little is known about how these parents and their children fare after an adoption has taken place. In this article, we focus on correlates of parenting stress among gay adoptive fathers.

All parents experience some level of stress while rearing their children. Prior research has linked high levels of par-

enting stress to dysfunctional parent–child relationships and to negative parental and child functioning (Deater-Deckard, 1998). When parents are under great stress, they may report negative feelings toward their children as well as toward themselves as parents. The greater the level of parenting stress, the more likely both parent and child will experience a range of psychological difficulties (Deater-Decker, 2004). Thus, parenting stress can be a risk factor for many problems in family life.

Research on parenting stress among heterosexual-parent families with biological children has been extensive (Deater-Decker, 2004). Less is known, however, about parenting stress among adoptive families or among families with lesbian and gay parents. Farr and her colleagues (2010) found that lesbian and gay adoptive parents had lower levels of stress overall when compared to population norms but that greater parenting stress was associated with elevated child behavior problems. As these families face unique challenges, it is especially important to consider the context of parenting stress (Mallon, 2004). Among gay father families, some special issues may arise in connection with the acknowledgment of gay identities. Thus, an understanding of parenting stress experienced by gay adoptive fathers may require attention to stress associated with parenting generally, with adoption specifically, and also with fathers' gay identities. In what follows, we review what is known about parenting stress in each of these areas.

Many demographic characteristics are related to the level of stress a parent experiences. Conger, McCarty, Yans, Lahey, and Kropp (1984) found that demographic variables accounted for 53% of the variance in parenting stress among a rural, low-socioeconomic sample of families. In particular, significant predictors of parenting stress among this sample were lower income, younger maternal age at the birth of the child, larger numbers of children in the household, and lower maternal education level. In adoptive families, similar associations between demographic factors and

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parenting stress have been reported. For example, in a sample of mothers who adopted Romanian infants, maternal age, family income, and number of adoptive children were all significant predictors of the level of stress experienced by the mothers; younger adoptive mothers with less money and more children reported greater stress (Mainemer, Gilman, & Ames, 1998). Others have reported that families who have adopted many children experience more parenting stress than those who have adopted fewer children (Bird, Peterson, & Miller, 2002). Overall, demographic factors such as age, income, education, and number of children have been found to be associated with parenting stress.

Other things being equal, the number of adults in the household seems to be related to parenting stress, with single parents reporting more stress than parents in two-parent families (Boyce, Behl, Mortensen, & Akers, 1991). This effect might stem from financial or other resource differences between single- and two-parent households. Single parents are more likely than those in two-parent households to have a heavier workload and to experience more child-caretaking hassles, both of which are associated with higher parenting stress (Ostberg & Hagekull, 2000). Also, single parents are more likely to adopt older children (Barth & Berry, 1988) and children with disabilities (Groze & Rosenthal, 1991), which could be associated with greater parenting stress. These two factors are described in more detail below.

Research has examined the association of parenting stress with child's age. Farr, Forssell, and Patterson (2010) found that among adoptive families with lesbian, gay, and heterosexual parents, the parents of older children reported greater parenting stress. The children in this study, however, were quite young—3 years old, on average. Among families with lesbian, gay, and heterosexual parents and adopted children of more varied ages, Erich et al. (2005) found that children's grade level was negatively associated with family functioning. In a study of heterosexual adoptive parents of adolescents, parenting stress was associated with the child's age, such that parents with children who were currently 14 years of age were experiencing more parenting stress than those with children currently 10 years of age or younger (Putnick et al., 2010). Overall, the literature suggests that adoptive parents of older children report more parenting stress than do those with younger children.

Child behavioral problems can be stressful for all individuals who interact with a child. A positive association between child behavioral problems and parenting stress is well established in the literature (e.g., Bendell, Stone, Field, & Goldstein, 1989; Eyberg, Boggs, & Rodriguez, 1992; Mash & Johnston, 1983). Children who are adopted often have a complex set of needs, and they are more likely than nonadopted children to be at risk for behavior problems (e.g., Brodzinsky & Schechter, 1990; Groze & Rosenthal, 1991).

In adoptive families, the child's age at adoption is associated with parenting stress (Brodzinsky & Schechter, 1990). Older adopted children may have spent long periods of time in foster care before being adopted, which has been found to be associated with greater behavior problems

(Barth & Berry, 1988). Children with many foster placements before being adopted or who have spent more time in an orphanage (if adopted internationally) face an array of potential challenges (Mainemer et al., 1998; Simmel, 2007). Overall, parenting stress is higher in cases where a child was older at the time of adoption, has spent more time in institutional or foster care settings, or both (Brodzinsky & Schechter, 1990). Child's age at adoption and type of adoption are often confounded, because children who are adopted from foster care or adopted internationally are often older than are those adopted through private domestic adoption (Brodzinsky & Pinderhughes, 2002; Palacios & Brodzinsky, 2010). Thus, the type of adoption completed, as well as child age at adoption, may be important to consider.

Social support has been found to be an important factor that influences parenting stress among many different family systems (e.g., Crnic & Greenberg, 1990; Fagan, Bernd, & Whiteman, 2007). In adoptive families, higher levels of perceived social support prior to adoption have been found to be associated with lower parenting stress 6 months after the adoption was completed (Viana & Welsh, 2010). In a review of the literature in regard to adoptive families' pre- and postadoption adjustment, Smith (2010) concluded that social support was positively associated with family well-being. Similar results have been reported with a sample of lesbian, gay, and heterosexual adoptive parents (Erich et al., 2005). In sum, those who report good social support report less parenting stress.

Little of the research on parenting stress has focused on gay fathers, but there is some evidence in regard to gay fathers' specific experiences. Among a sample of lesbian, gay, and heterosexual adoptive parents whose children had special needs, Leung, Erich, and Kanenberg (2005) found that higher numbers of child behavior problems were associated with lower family functioning. In a study that compared adoptive families with lesbian, gay, and heterosexual parents, Farr and colleagues (2010) found that, for all parents, more child behavior problems were associated with greater parenting stress. In sum, children who had more behavior problems were likely to have parents who reported greater parenting stress.

Two variables specific to gay men as compared to their heterosexual peers may also be relevant to parenting stress. These are the disclosure of sexual orientation and the nature of gay identity. No previous research has addressed these issues in relation to lesbian and gay adoptive parents' levels of parenting stress, although there is research on the impact of different levels of disclosure and gay identity on the lives of lesbian and gay adults.

Self-disclosure of sexual identity ("coming out") has been found to play an important role in lesbian and gay individuals' lives. Beals, Peplau, and Gable (2009) conducted a diary study of 102 lesbian and gay participants and found that participants who were more open about their sexual orientation reported higher self-esteem, greater life satisfaction, and more positive feelings overall. Disclosure of gay identity was, thus, linked with positive outcomes, and

we expected that this would also be true for gay men who are adoptive parents.

Studies have also examined the extent to which lesbian and gay adults are affected by the qualities of their sexual identities. Having a positive gay identity can be described as feeling confident, comfortable, and affirmed in one's sexual orientation, whereas a negative gay identity can be described as being unsure, struggling, and disapproving of one's own sexual orientation. Among gay men, positive gay identity has been found to be associated with positive mental health, such that individuals with more positive gay identities also had higher self-esteem, greater life satisfaction, and fewer depressive symptoms (Luhtanen, 2003). We expected that this might also be the case for gay men who are adoptive parents.

The Present Study

This study was designed to explore factors related to parenting stress among gay adoptive fathers. On the basis of our review of the literature, we had several hypotheses. Consistent with the existing literature on adoptive families, we expected levels of parenting stress to be higher among gay adoptive fathers who had more children, had older children, had less income, had less education, and had less social support. We also expected greater parenting stress among gay fathers who were less open and less positive about their gay identities. We tested these expectations in a large sample of gay adoptive fathers from across the United States.

Method

Participants

The sample consisted of 230 self-described gay adoptive fathers recruited in the United States from 32 states and the District of Columbia. Information about the study was circulated through websites, e-mail lists, and e-newsletters of relevant organizations (e.g., gay father support groups). To be eligible, a man had to identify as a gay father and report

having at least one adopted child less than 18 years of age. In addition, at least one father in the family had to be a legal adoptive parent. The current sample was drawn from a larger project about gay fathers (Tornello & Patterson, 2011). In an effort to examine parenting stress among gay fathers who had formally adopted their children, data from fathers who had formed their families through informal adoption ($n = 23$) were excluded from the initial sample of adoptive gay fathers ($n = 274$). To understand parenting stress of gay adoptive fathers with children under 18 years of age (currently living at home), we removed data from those who had children over 18 years of age ($n = 21$) from analysis. The final sample consisted of 230 gay adoptive fathers.

The majority of the gay adoptive fathers were White or Caucasian (89%; see Table 1), but children were more racially diverse. In total, for children, the proportions were 34% White or Caucasian, 23% Biracial or Multiracial, 17% Latino, 14% Black or African American, 11% Asian, and 1% other. Fathers were on average, 44 years old, well-educated, and earned incomes above national averages (see Table 1). The majority (84%) reported having a romantic partner. About 48% identified as Christian; about 23% reported no religious affiliation; and the rest described themselves as being Jewish, Unitarian, or something else. Men came from across the United States, 32% from the Northeast, 13% from the Midwest, 23% from the South, and 32% from the West.

In total, the 230 gay fathers reported having 351 ($M = 1.5$, range 1–5) children. The majority had one (56.5%) or 2 (36.1%) children. Children were predominantly male (75.7%) and averaged 7 years of age. Children were on average 2 years old when they joined the family, ranging from birth to 18 years old. In all of the families, at least one father had formal legal parental rights. The majority (96%) and/or their partners (93%) had legal parenting rights. In families with two parents, however, there were several instances (10%) in which only one parent was the legal adoptive father.

Table 1
Demographic Variables for Adoptive Gay Fathers and Partners

Variable	Participant ($n = 230$)		Partner ($n = 193$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age (in years)	43.9	6.7	44.2	7.0
Relationship length (in years)	13.5	7.3	—	—
Total household income (K)	211	514	—	—
No. of children (%)				
1 child	56.5		—	
2 children	36.1		—	
3 or more children	7.4		—	
Education level (% college degree)	88.2		80.0	
Relationship status (% in relationship)	84.0		—	
Parental legal rights (%)	96.0		93.0	
Race–Ethnicity (% White)	88.7		85.6	
Religion (% religious affiliation)	77.0		74.2	

Several types of adoptions were represented in the sample. The majority of adoptions were domestic (76%), but some were international (24%). Fathers had adopted through private agencies (60%), public agencies (21%), foster care (16%), or religiously affiliated agencies (3%). The majority of the children (78%) had been adopted in the context of the respondent's current relationship; in addition, some had been adopted by a single parent (15%), or within the context of a former heterosexual or gay relationship (7%).

Materials

Demographic information. Participants were asked to provide demographic information about themselves, including their age, gender, sexual orientation, race-ethnicity, religious affiliation, relationship status, length of current relationship, education, employment, income, and zip code. If participants were currently in a relationship, they also answered demographic questions about their partners. In addition, participants were asked to report the total number of children in the family and to provide demographic information about the age, gender, and race-ethnicity of their children. Demographic information is provided in Table 1.

Pathways to parenthood. Participants were asked about their legal relationship to each of their children, and also about their partner's legal relationship to them, if applicable. Participants were asked a series of questions about whether each child was adopted and whether each child had come into the family from the foster care system. In this report, we present data relevant to the eldest child in each family.

As all children had joined their families through adoption, participants were asked about the placement. They were asked if the child joined the family during a current or past relationship or as a single parent. They were also asked to provide further information about the adoption of their children. Participants were also asked about the type of adoption (e.g., international vs. domestic), the type of agency through which the child had been placed (e.g., public, private, religiously affiliated, or through foster care), and the age of the child when he or she joined the family. In addition, participants were asked to describe the degree of openness of the adoption (1 = *entirely confidential* to 5 = *completely open*) and the amount of contact they had with the child's birth family (1 = *no contact* to 5 = *frequent contact*).

Parenting stress. Level of parenting stress was assessed among gay adoptive fathers by using the Parenting Stress Index-Short Form (PSI SF; Abidin, 1995), which is a 36-item self-report survey designed to measure the stress parents feel in their roles as parents. The scale consisted of three subscales, each of which was made up of 12 items: difficult child, parenting distress, and parent-child dysfunctional interaction. A total parenting stress score was calculated by summing scores from all three subscales. Thirty-three items were scored on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*; e.g., "My child is not able to do as much as I expected") and three items were scored

numerically (e.g., "Count the number of things which your child does that bother you., e.g., dawdles, refuses to listen, overactive, cries, etc."). Higher scores indicate greater parenting stress, and a total PSI SF score of 90 and above indicates clinical levels of parenting stress (Abidin, 1995). For this sample, Cronbach's alpha for total parenting stress was .94 (95% confidence interval [CI] [.93, .95]).

Gay identity. The Lesbian Gay Bisexual Identity Scale Revised (LGBIS-R) is a 28-item self-report survey, designed to measure multiple dimensions of lesbian, gay, and bisexual identity (Kendra & Mohr, 2008; Mohr & Fassinger, 2000). For this study, a total of 20 items were used, five subscales with four items each, scored on a 1 to 7 scale, ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). The subscales used for this study were: difficult process (e.g., "Admitting to myself that I'm an LGB person has been a very slow process"), identity centrality (e.g., "Being an LGB person is a very important aspect of my life"), identity uncertainty (e.g., "I keep changing my mind about my sexual orientation"), stigma sensitivity (e.g., "I often wonder whether others judge me for my sexual orientation"), and concealment motivation (e.g., "My sexual orientation is a very personal and private matter"). All the subscales had moderate reliability: difficult process ($\alpha = .71$; 95% CI [.64, .77]), identity centrality ($\alpha = .71$; 95% CI [.64, .78]), identity uncertainty ($\alpha = .80$; 95% CI [.75, .84]), stigma sensitivity ($\alpha = .80$; 95% CI [.75, .84]), and concealment motivation ($\alpha = .67$; 95% CI [.57, .73]). Scores on each scale ranged from 1 to 7, with low scores on difficult process, identity uncertainty, stigma sensitivity, and concealment motivation and a high score on identity centrality being more positive.

Disclosure. The Outness Inventory (OI) is an 11-item self-report survey, designed to assess the degree to which participants were currently open about their sexual orientation (Mohr & Fassinger, 2000). The items were scored on a 1 to 7 scale, where 1 meant "this person definitely does not know about your sexual orientation status" and 7 meant, "this person definitely knows about your sexual orientation status, and it is openly talked about." All items had a "not applicable" choice; if selected by participants, these items were dropped from analysis. The scale includes three dimensions, out to family (i.e., mother, father, siblings; four items), out to world (i.e., coworkers, friends; five items), and out to religion (i.e., members of the religious community; two items). Average scores were calculated for the total scale, ranging from 1 to 7, with 7 representing the greatest level of disclosure. Cronbach's alpha for the total score was .86 (95% CI [.81, .90]).

Perceived social support. Perceived social support among gay adoptive fathers was examined by using the Multidimensional Scale of Perceived Social Support (MSPSS). This is a 12-item self-report survey, designed to assess the degree to which participants perceive adequate social support from individuals in their lives (Zimet, Dahlem, Zimet, & Farley, 1988). The items were scored on a scale, ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). For this study, we used two subscales, each

with four items: family (e.g., “My family really tries to help me”) and friends (e.g., “I can talk about my problems with my friends”). Both subscales had high reliability: Cronbach’s alpha for the family subscale was .96 (95% CI [.94, .96]) and Cronbach’s alpha for the friends subscale was .93 (95% CI [.91, .94]). Average scores for each subscale ranged from 1 to 7, with 7 representing the greatest level of social support.

Procedure

Advertisements for a “Gay Dads Study” were sent in e-mails, placed on websites, and published in e-newsletters of relevant organizations, such as gay fathers’ support groups, from January 2009 until August 2009. The advertisements described the study and its eligibility criteria, and gave an e-mail address for one of the researchers. Prospective participants were asked to contact the researchers via email to express interest in participation. Participants were also invited to pass the announcement along to other gay fathers who might be interested. Thus, recruitment was accomplished through a combination of responses to advertisements (72% of participants) and through snowball sampling techniques (28% of participants).

After potential participants expressed interest in the study through e-mail, a researcher responded through e-mail to describe the study and review the eligibility criteria. If the participant was eligible and willing to participate, a researcher provided a link and password that allowed individual access to the online survey. Each link included a code that identified an individual participant and also members of couples. Follow-up e-mails encouraging participation were sent to potential participants who did not respond within one month of the initial contact.

When participants visited the website specified by their individual code for the study, they were asked to read a consent form and indicate their agreement with its conditions before taking the survey. Participation was completely voluntary and no financial incentives were offered or provided. On average, the survey took about 30 min to complete. After completing the survey, participants were shown a debriefing page that provided information about how to contact the researcher and how to access organizations supportive to gay fathers. This research was approved by the University of Virginia Institutional Review Board.

Results

Results showed that the average level of parenting stress among all gay adoptive fathers in the sample was normative ($M = 72.71$, $SD = 19.59$) and well below clinical levels. As predicted, however, several factors were related to greater parenting stress. We present our findings under four major headings. First, we examined family-related variables (i.e., child’s current age, total number of children in the household, other demographic characteristics, and social support from friends and family) to determine whether there were differences in fathers’ levels of parenting stress based on these characteristics. Second, we analyzed adoption-related

factors (i.e., child’s age at adoption, type of adoption, type of adoption agency, and the context in which the child joined the family) to examine associations among adoption-related variables and levels of parenting stress reported by fathers. Third, we studied gay-related factors by exploring associations among level of disclosure, aspects of gay identity, and levels of parenting stress. Last, a stepwise multiple regression was conducted, using variables found to be statistically significant in the first three steps of analysis, to identify the best predictors of parenting stress among this group of gay adoptive fathers.

Family-Related Variables

Table 2 presents correlations among family-related variables and levels of parenting stress reported by gay adoptive fathers. As expected, associations between parenting stress and the current age of the child ($r = .40$, $p < .001$), total number of children in the family ($r = .20$, $p < .01$), and perceived social support from friends ($r = -.35$, $p < .001$) and from family ($r = -.22$, $p < .01$) were all statistically significant. Fathers who had older children, more children, and who reported less social support from friends and family reported higher levels of parenting stress. Overall, gay fathers reported significantly higher levels of social support from friends ($M = 5.60$, $SD = 1.10$) than from family ($M = 4.72$, $SD = 1.68$), $t(214) = -7.68$, $p < .001$.

Demographic variables, such as the father’s age, education level, and income were not significantly associated with fathers’ experiences of parenting stress. Participants who were currently single and those who were involved in a relationship reported similar levels of parenting stress. For those respondents currently in a relationship, variables such as partner’s age, partner’s education level, and the length of relationship were not significantly associated with parenting stress.

Adoption-Related Variables

As expected, some adoption-related factors were significantly associated with parenting stress among gay adoptive fathers in this sample. First, the child’s age at adoption ($r = .31$, $p < .001$) was statistically significantly associated with fathers’ reported parenting stress; fathers with older children reported more parenting stress. The context in which the child joined the family (i.e., in the context of a current or former relationship or as a single parent) was also significantly associated with parenting stress, $F(2, 212) = 3.19$, $p < .05$, $f = .1$. Further analysis showed that fathers who had adopted in the context of a former relationship reported more parenting stress ($M = 84.32$, $SD = 25.39$) than those who adopted with their current partner or as a single parent ($M = 71.26$, $SD = 19.00$ and $M = 74.03$, $SD = 19.06$, respectively). There were no statistically significant differences, however, in parenting stress between fathers who adopted with their current partner or as a single parent. Last, the type of agency from which the father adopted (i.e., private, public, or foster care) was associated with parenting stress, $F(3, 209) = 3.36$, $p < .05$, $f = .1$.

Table 2
Correlations Among Parenting Stress, Family- and Adoption-Related Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Parenting stress	—																		
2. Age	.05	—																	
3. Partner's age	.08	.57***	—																
4. Household income	-.06	.20**	.04	—															
5. Education	.00	.15*	.22***	-.04	—														
6. Partner's education	.02	.05	.11	-.02	.18*	—													
7. Child 1 age	.40***	.40***	.39***	-.02	.01	-.07	—												
8. No. of children	.20**	.06	.09	.04	.02	-.03	.30***	—											
9. Social support friends	-.35***	-.05	.02	.08	.09	-.02	-.14*	-.01	—										
10. Social support family	-.22**	-.17*	-.08	-.06	.00	-.18*	-.16	.05	.30***	—									
11. Age when child joined the family	.31***	.06	.04	-.05	-.01	-.04	.56***	.23**	.06	-.05	—								
12. Level of openness	-.07	-.10	-.05	.11	-.12	.17*	-.21**	-.19**	-.01	.07	-.15*	—							
13. Amount of contact	-.10	-.15*	-.09	.09	-.06	.09	-.23*	-.16*	.05	.12	-.12	.52***	—						
14. Concealment motivation	.09	.12	.09	.02	.09	-.14	.07	.02	.00	-.03	.02	-.07	-.04	—					
15. Stigma sensitivity	.32***	-.05	-.16*	.12	.01	-.06	.02	.03	-.17*	-.06	-.03	.00	-.03	.39***	—				
16. Identity centrality	.05	.18*	.10	.09	.18*	.06	-.02	-.11	-.14	-.05	-.12	-.04	-.06	-.22**	.06	—			
17. Difficult process	.24***	.07	-.03	.09	.16*	.04	.06	.01	-.05	-.14*	.03	-.03	-.03	.22**	.40***	.04	—		
18. Identity uncertainty	.15*	.06	-.01	-.03	.05	-.06	.07	-.04	-.01	-.09	.14*	-.05	-.06	.18*	.19**	-.14*	.27***	—	
19. Identity disclosure	-.18*	-.19**	-.03	.09	.04	.12	-.23**	.03	.21**	.17**	-.03	.12	.09	-.48***	-.29***	.21**	-.29***	-.25***	—

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

Fathers who adopted children from the foster care system reported significantly more stress ($M = 81.21$, $SD = 23.71$) than did fathers who adopted through a private adoption agency ($M = 71.10$, $SD = 17.07$), a public adoption agency ($M = 68.50$, $SD = 20.60$), or a religiously affiliated agency ($M = 73.08$, $SD = 20.26$). Moreover, there were no statistically significant differences in parenting stress among parents whose children had been adopted from private, public, or religiously affiliated adoption agencies.

In contrast, parenting stress was found to be statistically unrelated to the type of adoption (domestic or international), the degree of openness in the adoption, the amount of contact with birth parents, the length of the adoption process, whether the adoption was a transracial or same-race placement and the legal status of the respondent and partner (if applicable) to the child.

Gay-Related Variables

On average, fathers reported high levels of disclosure ($M = 6.09$, $SD = 0.87$), low levels of identity uncertainty ($M = 1.19$, $SD = 0.48$), low levels of stigma sensitivity ($M = 2.70$, $SD = 1.24$), high-identity centrality ($M = 4.89$, $SD = 1.30$), low levels of difficult process ($M = 2.96$, $SD = 1.26$), and moderate levels of concealment motivation ($M = 3.29$, $SD = 1.16$). As expected, disclosure ($r = -.18$, $p < .05$), stigma sensitivity ($r = .32$, $p < .001$), difficult process ($r = .24$, $p < .01$), and identity uncertainty ($r = .15$, $p < .05$) were statistically significantly related to the amount of parenting stress that fathers reported (see Table 2). Fathers who reported more stigma sensitivity, more identity uncertainty, less disclosure, and having a more difficult process with understanding their identity also reported more parenting stress.

Stepwise Multiple Regression Model

To gain further understanding of the predictors of parenting stress among gay adoptive fathers, a multiple regression was conducted. The predictor variables included family-related variables (i.e., child's age at adoption, child's current age, total number of children in the household, and social support from friends and family), adoption-related variables (i.e., type of adoption agency used and the context in which the child joined the family), and gay-related variables (i.e., disclosure and gay identity). A model was constructed by using the variables that were statistically significantly related to the level of parenting stress in the previous analyses. None of the assumptions of multiple regressions were violated (e.g., multicollinearity, normality, homoscedasticity). Thus, our use of multiple regression was appropriate in this context.

In the first step of the model, we tested family- and adoption-related variables, and found that the context in which the child joined the family and the type of adoption agency used were not statistically significant, but the current age of the child and social support from friends were statistically significantly associated with parenting stress, $F(7, 192) = 11.23$, $p < .001$ (Nagelkerke's $R^2 = .27$). These

variables accounted for 27% of the variance in parenting stress.

The second step of the analysis included all the variables from the previous model (e.g., child's age when he or she joined the family, the number of children in the family, the child's current age, and social support from friends and family) and added in the gay-related variables (e.g., level of disclosure, stigma sensitivity, difficult process, and identity uncertainty). In Step 2, the family- and adoption-related factors (i.e., child's age at adoption, child's current age, and social support from friends) and the gay identity factor of stigma sensitivity were statistically significantly related to parenting stress, $F(11, 188) = 10.19$, $p < .001$ (Nagelkerke's $R^2 = .34$). Social support from family, level of disclosure, difficult process, and identity uncertainty were not statistically significant in this step. Having children who joined the family at older ages, having older children, and having less perceived social support from friends were all statistically significantly associated with higher levels of parenting stress. Reports of greater stigma sensitivity were also statistically significantly associated with greater parenting stress.

Step 3 included entering all of the statistically significant variables from the two previous steps and dropping variables that were not statistically significant in the prior step. As shown in Table 3, four variables remained statistically significant in this final step of analysis, $F(4, 195) = 25.69$, $p < .001$ (Nagelkerke's $R^2 = .33$) and accounted for 33% of the variance in parenting stress. Effect sizes for the variables were medium to large (see Table 3).

Summary of Results

We found that four factors accounted for variation in parenting stress among gay adoptive fathers. First, family-related variables such as the amount of social support the father perceived from friends, the child's age at placement, and the child's age at the time of the study were all associated with fathers' levels of parenting stress. Stigma sensitivity, a factor unique to gay fathers, also added significantly to the model.

Discussion

Our main aim was to identify factors that contribute to parenting stress among gay adoptive fathers. Consistent with earlier findings for heterosexual adoptive parents, we found that parenting stress among gay adoptive fathers was associated with social support, current age of the child, and the age of the child when the child joined the family. Unlike other adoptive parents, however, gay fathers' reports of parenting stress were also associated with the qualities of their identities as gay men. Fathers more sensitive to stigma reported more parenting stress.

For gay fathers, greater sensitivity to stigma was associated with the amount of parenting stress they experienced. Prior research has revealed the negative impact on overall well-being of having an unfavorable gay identity (e.g.,

Table 3
Stepwise Multiple Regression of Factors That Predict Parenting Stress of Gay Adoptive Fathers

Variable	Step 1			Step 2			Step 3			<i>sr</i> ^{2c}
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	
Age (child 1)	.84	.32	.21**	.91	.31	.23**	.96	.29	.24**	.04
Age when child joined the family (child 1)	.97	.50	.15	.99	.48	.16*	1.26	.45	.20**	.03
Total no. of children	2.51	1.86	.09	2.13	1.77	.08				
Context child was adopted ^a	1.70	3.47	.03	2.79	3.47	.05				
Type of adoption agency ^b	4.01	3.66	.08	2.81	3.56	.05				
Social support from friends	-5.40	1.15	-.30***	-4.87	1.12	-.27***	-5.03	1.07	-.28***	.07
Social support from family	-1.09	0.76	-.09	-0.89	0.73	-.08				
Disclosure of gay identity				1.13	1.54	.05				
Gay identity: Stigma sensitivity				3.54	1.05	.22**	4.35	.93	.28***	.07
Gay identity: Difficult process				1.83	1.03	.12				
Gay identity: Identity uncertainty				1.94	2.58	.05				
<i>R</i> ²		.27			.34			.33		
ΔR^2		.27			.07			-.01		
<i>F</i>		11.23***			10.19***			25.69***		

^a Context of child joining the family, 1 = former relationship, 0 = current relationship/single. ^b Type of adoption agency was coded, 1 = foster care system, 0 = adoption agency. ^c *sr*² = the squared semipartial correlations indicate the unique variance predicted by the independent variable.

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

Mohr & Fassinger, 2003), but this is the first study to examine the qualities of gay identity in relation to parenting stress. It is striking that gay fathers' stigma sensitivity was as highly associated with parenting stress as was fathers' perceived level of social support, a factor that has well-established associations with parenting stress (Smith, 2010; Viana & Welsh, 2010). Our study was the first to reveal the linkage between sensitivity to stigma and levels of parenting stress for gay adoptive fathers.

The amount of social support these fathers perceived was also associated with parenting stress. Consistent with earlier findings with heterosexual-parent adoptive families, greater social support was related to lower parenting stress (Viana & Welsh, 2010). Having a network of individuals for assistance is beneficial to all parents, regardless of sexual orientation. Even after accounting for other variables, social support from friends remained a significant predictor of overall parenting stress, but social support from family was not a significant predictor. This is consistent with earlier research with gay, lesbian, and bisexual adoptive and foster parents, suggesting that friends are an important source of social support, over and above any support from members of their families of origin (Downs & James, 2006; Goldberg & Smith, 2008).

Social support may be especially important to gay fathers, who often encounter misunderstanding and ignorance about their families (Smith, 2010), not only from the general public but also from child welfare agencies. Prevailing attitudes of adoption agencies, combined with a lack of formal policies in regard to adoption by lesbian and gay adults, can influence the placement practices of staff members (Brooks & Goldberg, 2001). Indeed, lesbian and gay adoptive parents often report encountering discrimination when working with the child welfare system (Brooks & Goldberg, 2001; Downs & James, 2006; Matthews & Cramer, 2006). Adoption professionals might improve their

interactions with prospective and current lesbian and gay adoptive parents by examining their particular agency policies and practices related to parental sexual orientation.

Some of our additional findings mirrored those from prior research. The number of children in the household was significantly associated with the amount of parenting stress that fathers reported. As in previous research, fathers with more children and with older children also reported more stress (Erich et al., 2005; Farr et al., 2010; Putnick et al., 2010). Older age at adoption has been found to be associated with children having spent more time in foster care (Barth & Berry, 1988) and in institutional settings (Mainemer et al., 1998), experiences that are linked with greater behavioral and emotional problems among children and greater parenting stress among adoptive parents (Farr et al., 2010). These findings are consistent with results of earlier research, and they extend these results to a new population of adoptive families.

In summary, predictors of parenting stress for these gay adoptive fathers were both similar to and different from those of their heterosexual peers. Prior research has pointed to various demographic factors related to higher levels of parenting stress, such as income and education level (e.g., Conger et al., 1984; Mainemer et al., 1998; McBride, 1991). In our sample, however, income and education level were not significantly associated with the amount of stress that fathers reported. Gay adoptive fathers in this sample were relatively homogenous, and on average, they had higher levels of education and higher income than do most Americans (e.g., Brodzinsky & Pinderhughes, 2002). For these reasons, the impact of such variables may have been limited in this sample.

This study had a number of strengths. First, this is the largest study of gay adoptive fathers conducted to date that has examined not only family- and adoption-related variables but also specific issues unique to gay adoptive fathers.

Second, the participating gay fathers had adopted children in a variety of ways. For example, they adopted children of different ages and from different types of agencies. The sample was also varied in terms of parent age, income, religious affiliation, and geographical location. Third, families varied in size and composition, with single and partnered fathers included as well as larger and smaller families. Overall, the sample allowed for examination of many factors relevant to parenting stress.

Some limitations should, however, be considered. First, most participants were White or Caucasian, most were well-educated, and most reported relatively high socioeconomic status. These are common characteristics of adoptive parents (Brodzinsky & Pinderhughes, 2002), but studies of more diverse samples would be valuable. The relative demographic homogeneity of our sample may have prevented some associations from emerging from our data. Because all assessments were self-reports, some overlap in reporting strategies also may have influenced our results. It would be difficult, however, to study the qualities of gay identity without using self-report data. Even with these limitations, this study is the first to demonstrate the importance of gay-related factors associated with parenting stress among gay adoptive fathers.

The results of this study have important implications for adoption agencies and for gay adoptive fathers to consider. Support services could be especially advantageous for fathers who adopt older children, as well as for those with more than one child. The association of social support and lower parenting stress should be noted. We also found, for the first time, that among gay adoptive fathers, at least one aspect of gay identity was related to parenting stress. This result suggests the importance of adoption agencies in affirming positive sexual identities among prospective gay adoptive fathers.

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