UCLA
Other Recent Work

Title
Stigma, Social Context, and Mental Health: Lesbian and Gay Couples Across the Transition to Adoptive Parenthood

Permalink
https://escholarship.org/uc/item/6fd056b5

Authors
Goldberg, Abbie E.
Smith, JuliAnna Z.

Publication Date
2011-02-01
Stigma, Social Context, and Mental Health: Lesbian and Gay Couples Across the Transition to Adoptive Parenthood

Abbie E. Goldberg  
Clark University

JuliAnna Z. Smith  
University of Massachusetts Amherst

This is the first study to examine change in depression and anxiety across the first year of adoptive parenthood in same-sex couples (90 couples: 52 lesbian, 38 gay male). Given that sexual minorities uniquely contend with sexual orientation-related stigma, this study examined how both internalized and enacted forms of stigma affect the mental health of lesbians and gay men during the transition to parenthood. In addition, the role of contextual support was examined. Higher perceived workplace support, family support, and relationship quality were related to lower depressive and anxious symptoms at the time of the adoption, and higher perceived friend support was related to lower anxiety symptoms. Lower internalized homophobia and higher perceived neighborhood gay-friendliness were related to lower depressive symptoms. Finally, individuals with high internalized homophobia who lived in states with unfavorable legal climates regarding gay adoption experienced the steepest increases in depressive and anxious symptoms. Findings have important implications for counselors working with sexual minorities, especially those experiencing the transition to parenthood.

Keywords: adoption, depression, gay, stigma, transition to parenthood

Heterosexism, an ideological system that denies, denigrates, and stigmatizes any nonheterosexual form of behavior, identity, relationship, or community, is pervasive at every level of U.S. society (Herak, Gillis, & Cogan, 2009). At the societal level, institutionalized heterosexism takes the form of antigay legislation such as laws preventing same-sex couples from marrying or adopting children. At a more localized level, institutionalized heterosexism may manifest more insidiously, for example, in the form of workplace jokes that capitalize on stereotypes of sexual minorities. For lesbians and gay men, navigating their lives in a heterosexist world creates daily strain. Indeed, population-based surveys suggest that sexual minorities possess unique risk factors to their mental health by virtue of living in a heterosexist society (Cochran, Greer, & Mays, 2003).

Lesbians and gay men experience many of the same life transitions as heterosexuals, but the stresses of these transitions may differ due to their sexual orientation or, more specifically, to their exposure to heterosexism. For example, the transition to young adulthood represents a demanding life transition and one that may be particularly stressful for sexual minorities if they face rejection as they “come out” as nonheterosexual (Ford, 2003). The transition to parenthood may also represent a time of increased strain, insofar as it requires all individuals, regardless of sexual orientation, to renegotiate their repertoire of roles to accommodate that of a parent (Cowan & Cowan, 2000). Longitudinal research on both heterosexual (Belsky & Rovine, 1990; Cowan & Cowan, 2000) and lesbian couples (Goldberg & Sayer, 2006) has found that intimate relationship quality declines across the transition to biological parenthood. Likewise, most longitudinal studies have found that mental health also declines across the transition to biological parenthood in heterosexual couples (Keeton, Perry-Jenkins, & Sayer, 2008; Matthey, Barnett, Ungerer, & Waters, 2000), although some studies have documented no significant changes in mental health (Grant, McMahon, & Austin, 2008). The single longitudinal study of lesbians’ mental health across the transition to biological parenthood also found negative changes in mental health (Goldberg & Smith, 2008a). In that both lesbians and gay men are increasingly becoming parents (Gates, Badgett, Macomber, & Chambers, 2007) and lesbians and gay men are exposed to unique stresses by virtue of living in a heterosexist society (Herak et al., 2009), research is needed that explores their adjustment during the transition to parenthood. Given that lesbians and gay men are adopting at higher rates than ever before (Gates et al., 2007), longitudinal examination of their mental health across the transition to adoptive parenthood, specifically, is particularly important.

In the present study, we explored lesbians’ and gay men’s depressive and anxious symptoms across the transition to adoptive parenthood. In addition to examining the role of established predictors of mental health across the transition to parenthood among heterosexual couples, we attended to factors unique to sexual minorities that may impact their mental health.
**Theoretical Framework**

The present study is informed by an integrative theoretical framework that incorporates both ecological (Bronfenbrenner, 1988) and minority stress (Herek et al., 2009; Meyer, 1995) perspectives. According to Bronfenbrenner’s ecological framework, development occurs within multiple interacting contexts, with influences ranging from distal contexts, or macrosystems (such as the legal climate), to proximal settings, or microsystems (such as the family and the workplace). Of particular interest in this study are the interrelationships between these contexts (i.e., the mesosystem) and their effects on new parents’ mental health. Bronfenbrenner has emphasized the role of context in shaping development and has urged researchers to adopt an interactionist approach that integrates both personal and contextual variables in predicting adjustment. One variable that is relevant in the lives of sexual minorities and that can be conceptualized as having both personal and contextual manifestations is sexual stigma. Herek et al. (2009) have proposed a conceptual framework that emphasizes the role of sexual stigma in the lives of lesbians and gay men. Specifically, Herek and colleagues define sexual stigma as referring to “the negative regard, inferior status, and relative powerlessness that society collectively accords anyone associated with nonheterosexual behaviors, identity, relationships, or communities” (p. 33) and stress the need to study both the structural and individual manifestations of sexual stigma. For example, sexual stigma may be enacted in the form of overt discrimination; it may also be internalized, whereby one internalizes and accepts sexual stigma and adapts one’s self-concept accordingly. 

Drawing from these two theoretical stances, we explored the role of the distal social context (state laws, the neighborhood) and, specifically, the effects of enacted stigma within these contexts (i.e., state laws pertaining to gay adoption; perceived gay-friendliness of one’s neighborhood), as well as the role of internalized stigma (i.e., internalized homophobia). We also consider whether the effects of internalized stigma on mental health are greater for individuals who experience greater enacted stigma. Additionally, given that much of the literature on the transition to parenthood in heterosexual couples has focused on the role of more proximal social contexts (the workplace, family of origin, the friendship network, the partner relationship) in predicting mental health, we also examined the relative supportiveness of these domains as predictors. Indeed, in addition to considering the potential negative effects of the social context, it is important to consider the potential positive effects of supportive contexts on sexual minorities’ mental health.

**The Role of Enacted Stigma**

**State Legal Climate**

Because sexual minorities become parents in the context of institutionalized heterosexism (Herek et al., 2009), it is important to examine how aspects of the broader community in which heterosexism is embedded affect adjustment. Specifically, of interest is whether and how distal (state) and proximal (neighborhood) aspects of the community affect adjustment. For example, state laws related to marriage and adoption rights reflect, govern, and inform local practices (e.g., community members’ attitudes and behaviors toward sexual minorities), which may in turn affect sexual minority mental health (Rostosky, Riggle, Horne, & Miller, 2009).

Adoption legislation varies significantly within the United States (Human Rights Campaign [HRC], 2002, 2009). Some states have a record of favorable court rulings in regard to gay adoption, whereby states either explicitly allow same-sex partners to coadopt, or they do not allow coparent adoption by same-sex couples, but permit a “loophole” whereby gay partners are explicitly permitted to complete second-parent adoptions, which allow them to adopt their child after the first (primary, single-parent) adoption has been completed. Other states’ court rulings are mixed or unclear, such that couples in some jurisdictions have successfully coadopted and/or completed second-parent adoptions, whereas couples in other jurisdictions have not been successful in securing legal rights for both partners. Still other states have a record of unfavorable rulings regarding gay adoption, whereby few same-sex couples have successfully coadopted and/or completed second-parent adoptions. Finally, a handful of states explicitly bar same-sex partners from adopting jointly as well as disallowing second-parent adoptions by gay partners. Although same-sex couples can still adopt in these states, by having one member of the couple adopt as a single parent, only one partner is thereby legally recognized as the child’s parent.

Of interest is how these differing legal contexts affect the mental health of lesbians and gay men as they become parents through adoption. Insomuch as state laws and practices pertaining to gay adoption represent place-based factors that may index community climate (whereby states with favorable laws are characterized by supportive legal climates and states with unfavorable laws are characterized by unsupportive climates), of interest is whether state legal climate is related to mental health outcomes in lesbian/gay adopters (Lewis, 2009). Qualitative research suggests that place-based factors such as national or local policy regimes and cultural norms are related to mental health outcomes in sexual minorities (Lewis, 2009). Furthermore, a recent cross-sectional quantitative study found that sexual minorities residing in states that passed laws limiting marriage to one man and one woman showed significantly higher depressive symptoms than sexual minorities living in other states (Rostosky et al., 2009). Of interest is whether persons living in states with unfavorable legal climates pertaining to gay adoption report more depressive and anxious symptoms than those in states characterized by favorable climates.

**The Neighborhood**

The neighborhood represents a more proximal index of community climate. Perceptions of neighborhood climate (including poverty, racism, and disorganization) are frequently linked to mental health outcomes (Stockdale et al., 2007). And yet, in spite of scholars’ increasing emphasis on the importance of considering community climate in researching sexual minority mental health (Oswald, 2002), no studies have explicitly linked sexual minorities’ perceptions of their neighborhoods to their mental health (although one study did find that lesbian women’s “sense of ‘belonging’” in their community was related to their mental health; McLaren, 2006). In the present study, we explored whether sexual minorities’ perceptions of neighborhood gay-friendliness are re-
lated to their mental health across the transition to adoptive parenthood.

The Role of Internalized Stigma: Internalized Homophobia

Minority stigma is not only experienced as an external force, but it can also be internalized by individuals. Cross-sectional research has consistently documented a correlation between internalized homophobia, or the extent to which sexual minorities internalize negative attitudes about homosexuality, and mental health outcomes (e.g., depression) in lesbians and gay men (Frost & Meyer, 2009; Meyer, 1995). Furthermore, internalized homophobia has been found to interact with the experience of discrimination to affect mental health, such that experiencing discrimination or prejudice is more distressing when individuals agree with the homophobic attitudes conveyed by the discrimination events (Meyer, 1995). Thus, there is some evidence that the effects of enacted stigma may vary in part as a function of internalized stigma (i.e., internalized homophobia), although no work has examined this in the context of the transition to parenthood.

The Role of Supportive Contexts

One of the strongest predictors of mental health across the transition to parenthood for heterosexual couples is social support. Emotional support from one’s social network functions to buffer the stress associated with the transition to parenthood and has, in turn, been linked to more positive mental health across the transition (Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993; Semyr, Edhborg, Lundh, & Sjogren, 2004). Given the robust association between social network support and mental health in heterosexual couples and our overarching interest in the role of social context in adjustment (Bronfenbrenner, 1988), we examined the perceived supportiveness of several key proximal contexts—the workplace, the family of origin, the friendship network, and the intimate partner relationship—in relation to sexual minorities’ mental health.

Workplace support. Longitudinal research has linked perceptions of the work context to depression across the transition to parenthood among heterosexual parents (Perry-Jenkins, Smith, Goldberg, & Logan, 2010). Although no research has examined the role of workplace support during the transition to parenthood for sexual minorities, cross-sectional studies have documented an association between perceived workplace heterosexism and mental health in lesbians and gay men, such that higher levels of heterosexism are related to greater depressive and anxiety symptoms (Smith & Ingram, 2004). Other aspects of workplace support have rarely been studied in relation to psychological functioning in lesbian/gay employees, with the exception of a study by Huffman, Watrous-Rodriguez, and King (2008), which found that coworker support was related to greater life satisfaction among lesbians and gay men.

Family of origin support. The family of origin may represent an important source of support during the transition to parenthood. Longitudinal research on heterosexual couples shows that high perceived family support is associated with better adjustment, including fewer depressive symptoms, across the transition to biological parenthood (Bost, Cox, Burchinal, & Payne, 2002). Cross-sectional work on lesbian nonparents also indicates a link between higher perceived family support and fewer depressive symptoms (Ayala & Coleman, 2000; Goldberg & Smith, 2008b). Of interest is whether the role of family support extends to sexual minorities across the transition to adoptive parenthood.

Friend support. Friends may represent an especially important source of support to lesbians and gay men across the transition to parenthood, inasmuch as sexual minorities often perceive less support from family than heterosexuals (Goldberg & Smith, 2008b). Longitudinal research on heterosexual couples has established a link between satisfaction with friend support and postpartum depressive symptoms, whereby higher satisfaction with support is associated with fewer symptoms (Bost et al., 2002). Likewise, cross-sectional research on lesbian nonparent couples has linked higher levels of perceived friend support to fewer depressive symptoms (Ayala & Coleman, 2000). However, in one cross-sectional study of lesbian couples who were waiting to adopt a child, perceived friend support was not related to depressive or anxious symptoms, whereas family support was (Goldberg & Smith, 2008b). No longitudinal research has examined the role of friend support in sexual minorities’ mental health across the transition to adoptive parenthood.

The intimate partner relationship. Given that the partner relationship represents perhaps the most important proximal context, it is unsurprising that aspects of the relationship are often related to well-being across the transition for heterosexual couples. Both longitudinal (Lu, 2006) and cross-sectional (Logsdon & Usui, 2001) studies have found a link between lower marital quality and higher levels of postpartum depressive symptoms. Likewise, cross-sectional studies have linked higher relationship quality to fewer depressive symptoms in lesbians and gay men in general (Blair & Holmberg, 2008) and in lesbians who were seeking to adopt (Goldberg & Smith, 2008b). Of interest is whether these findings extend to sexual minorities’ mental health across the transition to adoptive parenthood.

The Present Study

In the present study, we examined the role of stigma and support in new parents’ depression and anxiety across the transition to adoptive parenthood among 90 same-sex couples (52 lesbian, 38 gay male). Depression and anxiety were chosen as the outcomes of interest insomuch as these are established indices of mental health, and domains that are particularly vulnerable to change during the transition to parenthood (Goldberg & Smith, 2008a). Distal sources of enacted stigma (state legal climate regarding gay adoption, perceived gay-friendliness of the neighborhood), internalized stigma (internalized homophobia), and proximal sources of support (perceived workplace support, perceived family support, perceived friend support, intimate relationship quality) were examined. Gender, family income, and legal adoptive status (i.e., whether the participant had legally adopted his or her child) were included as covariates. It was expected that a more favorable statewide stance on gay adoption; higher levels of perceived neighborhood gay-friendliness; lower levels of internalized homophobia; and higher levels of perceived workplace support, family support, friend support, and relationship quality would be associated with lower levels of depressive and anxious symptoms at the time of the adoption and lesser increases in symptoms across the
transition. Legal climate and neighborhood gay-friendliness were examined as modifiers of the relationship between internalized homophobia and well-being, with the expectation that the negative effects of internalized homophobia would be greater in the context of enduring heterosexism (Meyer, 1995).

Method

Data derive from a subsample of a larger, longitudinal study aimed at examining the transition to adoptive parenthood among lesbian, gay, and heterosexual parents (Goldberg & Smith, 2009; Goldberg, Smith, & Kashy, 2010). The focus of the larger study is how individuals of different genders and sexual orientations experience changes in their roles, identities, and adjustment upon becoming parents. Whereas previously published reports on this subsample have focused on predictors of change in perceived parenting skill (Goldberg & Smith, 2009) and perceived relationship quality (Goldberg et al., 2010), we focused on the role of internalized and enacted stigma as well as contextual support in predicting change in mental health outcomes in lesbian and gay couples.

Participants.

Description of the sample. All of the couples in the present study were adopting their first child; both partners were first-time parents, and both partners were working at Time 1. Regarding race, among lesbians, 90% (n = 94) were Caucasian, 4% (n = 4) were Hispanic, 2% (n = 2) were African American, 2% (n = 2) identified as multiracial, 1% (n = 1) was Asian; and 1% (n = 1) was Native American. Similarly, among gay men, 86% (n = 66) were Caucasian, 7% (n = 5) were Hispanic, 3% (n = 2) were African American, 3% (n = 2) were Asian, and 1% (n = 1) identified as multiracial. Average family incomes for lesbian and gay male couples were $108,313 (Mdn = $95,500, SD = $51,354) and $181,473 (Mdn = $152,000, SD = $120,010), respectively. The average household income of female couples in the sample is similar to the average national household income for female couples with adopted children ($102,508), whereas the male same-sex couples in the sample are more affluent than the average national household income for male couples with adopted children ($102,331; Gates et al., 2007). Average ages of lesbians and gay men were 39.09 years (SD = 5.90) and 38.74 years (SD = 4.46), respectively; this is consistent with the demographic profile of adoptive parents in prior studies (Daniluk & Hurtig-Mitchell, 2003). Lesbian and gay couples had been in their relationships for an average of 7.66 years (SD = 3.79) and 7.84 years (SD = 3.83), respectively.

In 28 lesbian couples (54%), at least one partner had tried to conceive via artificial insemination, and in two gay male couples (5%), at least one partner had tried to conceive via surrogacy using one man’s sperm. Twenty-seven lesbian couples (52% of lesbian couples) and 27 gay couples (71% of gay couples) pursued private domestic adoption; 15 lesbian couples (29%) and nine gay couples (24%) pursued public domestic adoption1; 10 lesbian couples (19%) and two gay couples (5%) pursued international adoption. On average, lesbian couples waited 16.55 months for a child placement (Mdn = 13.00, SD = 11.55), and gay male couples waited 13.79 months for a placement (Mdn = 11.25, SD = 9.89). Twenty-five lesbian couples (48%) and 11 gay couples (29%) lived on the East Coast, 14 lesbian couples (27%) and 17 gay couples (45%) lived on the West Coast, eight lesbian couples (15%) and three gay couples (8%) resided in the midwest, and five lesbian couples (10%) and seven gay couples (18%) lived in the South.

Participant recruitment. Census data were used to identify states with a high percentage of same-sex couples, and effort was made to contact adoption agencies in those states. Particular effort was made to contact agencies whose websites and materials were explicitly inclusive of a variety of family forms. Adoption agencies were asked to provide study information to clients who had not yet adopted. Over 30 agencies provided information to clients, usually in the form of a brochure that invited them to participate in a study of the transition to adoptive parenthood. Clients contacted the researcher for details about participation. Because same-sex couples may not be "out" to their adoption agencies, several major gay organizations also assisted with recruitment.

Procedure. Members of each couple were interviewed separately over the telephone during the preadoption phase (Time 1, or T1)2 and 3–4 months after they had been placed with a child (T2). At each phase, they were sent a packet of questionnaires to complete within a week of the interview. The average (mean) length of time that elapsed between T1 and T2 was 11.29 months (Mdn = 9.57, SD = 7.59). Specifically, the average time between the T1 interview and the adoptive placement was 7.54 months (Mdn = 5.41, SD = 7.53), and the average time between the adoptive placement and the T2 interview was 3.75 months (Mdn = 3.44, SD = 1.15). Members of each couple were also sent questionnaires to complete 1 year postplacement (T3).

Outcome measures.

Depression: The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). At T1, T2, and T3, the CES-D, a 20-item questionnaire, was administered to assess depressive symptoms within the last week. Participants responded to items such as “I felt that people disliked me” using a 4-point scale ranging from 0 (rarely or none of the time) to 3 (most or all of the time). Higher scores indicate more symptoms. The CES-D has established validity, and prior studies of lesbians and gay men show that the CES-D has good internal consistency in these populations (David & Knight, 2008; Frost & Meyer, 2009). Cronbach’s alphas for lesbians in the sample were .84, .87, and .91 at T1, T2, and T3, respectively; for gay men, they were .89, .92, and .92 at T1, T2, and T3, respectively.

Anxiety: State-Trait Anxiety Inventory (STAI; Spielberger, 1983). At T1, T2, and T3, the 20-item State Anxiety subscale of the STAI was administered. Participants responded to items such as “I feel nervous and restless” using a 4-point scale ranging from 1 (not at all) to 4 (very much so). Higher scores represent more symptoms. The STAI has good test–retest reliability, and prior research with lesbians and gay men indicates good internal consistency (David & Knight, 2008; Goldberg & Smith, 2008a).

1 Private domestic adoptions are typically managed by private agencies and involve the adoption of infants. Public domestic adoptions are run by counties or states and involve the adoption of children in the child welfare system.

2 At T1, all couples had completed their home study (an in-depth evaluation of the waiting family) and were awaiting placement with their first child.
Alphas for lesbians in the sample were .82, .85, and .90 at T1, T2, and T3, respectively; for gay men, they were .89, .92, and .89 at T1, T2, and T3, respectively.

**Predictor measures.**

**State legal climate.** Assessment of state legal climate was based on the classification procedures of The Human Rights Campaign’s “Family Equality Index” (HRC, 2002), an index of state rulings on gay adoptions. The HRC Family Equality index classifies states in the following way: 1 = state law prohibits adoption by same-sex couples; 2 = unfavorable court rulings with regard to gay adoption; 3 = mixed or unclear court rulings with regard to gay adoption; 4 = favorable court rulings with regard to gay adoption. The HRC classification schema was applied to up-to-date data on court rulings from HRC’s “Adoption Laws: State by State” resource (HRC, 2009). Higher scores are indicative of a more favorable statewide stance on gay adoption. In this study, four couples (4%) lived in states that prohibited gay adoption; three (3%) lived in states with unfavorable court records; 14 (16%) lived in states with unclear court records; and 69 (77%) lived in states with favorable court records.

**Neighborhood gay-friendliness.** At T1, participants were asked “How gay friendly is your neighborhood?” The 5-point response scale ranged from 1 (very much) to 5 (very gay friendly). Higher scores indicate higher perceived gay-friendliness.

**Internalized homophobia (Herek & Glunt, 1995).** At T1, internalized homophobia was assessed with a nine-item measure. Items such as “If someone offered me the chance to be completely heterosexual, I would accept the chance” were administered with a 5-point response scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Research with lesbians and gay men demonstrates that this measure has good convergent validity and good internal consistency (Herek, Cogan, Gillis, & Glunt, 1997). Higher scores indicate higher internalized homophobia. The alpha was .92 for lesbians and .82 for gay men.

**Workplace support (Eisenberger, Huntington, Hutchinson, & Sowa, 1986).** At T1, participants completed an eight-item Workplace Support scale. Items such as “My organization is willing to help me when I need a special favor” were answered on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher values indicate higher perceived support. This measure has been used in prior research with lesbian couples and demonstrates good internal consistency (Goldberg & Sayer, 2006). The alpha was .84 for lesbians and .85 for gay men.

**Perceived social support from family/friends (PSS; Procidano & Heller, 1983).** Perceived support from both family (20 items) and friends (20 items) was assessed at T1. Items such as “I rely on my family (friends) for emotional support” were answered on a 4-point scale ranging from 1 (generally false) to 4 (generally true). The PSS-Family and PSS-Friends measures demonstrate both convergent and divergent validity, and show good internal consistency in research with lesbians and gay men (Balsam, Beauchaine, Rothblum, & Solomon, 2008). Higher values indicate more support. The alpha for family support was .96 for both lesbians and gay men. The alpha for friend support was .88 for both lesbians and gay men.

**Perceived relationship quality: Relationship questionnaire (Braiker & Kelley, 1979).** The 10-item Love subscale was administered at T1 as a measure of relationship quality. This scale assesses feelings of closeness and attachment to one’s partner. Items such as “To what extent do you have a sense of belonging with your partner?” were answered on a 9-point scale ranging from 1 (not at all) to 9 (very much). Higher values indicate more love. This measure shows good internal consistency in prior research with lesbian couples (Goldberg & Sayer, 2006). The alpha was .78 for lesbians and .81 for gay men.

**Gender.** Gender was effects coded such that 1 = female and −1 = male.

**Family income.** Family income (the sum of both partners’ self-reported annual salaries) at T1 was included as a covariate. It was divided by $10,000 to keep all variables on a similar scale.

**Legal recognition.** The legal adoptive status of participants (legal parent, nonlegal parent) was included as a covariate to ensure that the effect of legal climate was not conflated with legal vulnerability. Legal adoptive status was assessed at T3 and coded as −1 if the participant was successful in legally adopting his or her child by the end of the first year of parenthood or 1 if she or he was unable to adopt. Thus, higher scores indicate legal vulnerability. In the sample, seven partners (four lesbian, three gay) were unable to adopt their child via either a coparent or second-parent adoption. This variable was included only as a covariate, because there were too few individuals in this category to provide adequate power.

**Analytic strategy.** The level and change in depressive and anxious symptoms from preadoption across the first year were examined in a series of models. The first models look at the basic change trajectories without predictors. The second set of models includes all covariates, hypothesized T1 predictors, and interactions. The final trimmed models present only those predictors that were significantly related to depressive or anxious symptoms (or the nonsignificant main effects of significant interactions).

Multilevel modeling (MLM) was used to account for the shared variance in the outcomes of partners nested in couples (Sayer & Klute, 2004) and in repeated measures over time (Raudenbush, Brennan, & Barnett, 1995). An additional challenge is introduced when couple (dyad) members are indistinguishable, or, in other words, there is no meaningful way to differentiate between dyad members (e.g., male/female). To examine change over time in dyads in which gender is not a distinguishing feature (i.e., same-sex couples), Kashy, Donnellan, Burt, and McGue’s (2008) adaptation of the dyadic growth model was used. As in the distinguishable dyad model (Raudenbush et al., 1995), separate intercepts and slopes are modeled for each member of the dyad. The two partners’ intercepts are allowed to covary, and, likewise, their change parameters are allowed to covary. However, due to the inability to distinguish between dyad members in indistinguishable dyads, the parameter estimates for the average intercept and average slope (the fixed effects) are pooled across partners as well as dyads. In addition, drawing from approaches to modeling indistinguishable dyads in structural equation modeling (Olsen & Kenny, 2006), estimates of variance are constrained to be equal for partners. Similar to the distinguishable model, two redundant dummy variables, P1 and P2, are used to systematically differentiate between the two partners (i.e., P1 = 1 if the outcome score is from Partner 1 and P1 = 0 otherwise, and P2 = 1 if the outcome score is from Partner 2, and P2 = 0 otherwise). Time is centered at the adoption date (i.e., at the date of adoptive placement, Time = 0) and is measured in months. At Level 1 of the unconditional model
(in which there are no predictors aside from Time), an intercept and slope for time for each partner is modeled:

\[ Y_{ijk} = \beta_{0ij} P1 + \beta_{1ij} P1 \times \text{Time}_{ijk} \]

\[ + \beta_{02j} P2 + \beta_{12j} P2 \times \text{Time}_{ijk} + r_{ijk}, \]

where \( Y_{ijk} \) represents the depression or anxiety score of partner \( i \) in dyad \( j \) at time \( k \), and \( i = 1, 2 \) for the two dyad members. In the Level 1 equation, \( \beta_{0ij} \) and \( \beta_{1ij} \) represent the intercepts, for Partner 1 and 2 in couple \( j \), and estimate the level of depressive or anxious symptoms at the time of the adoption. Likewise, \( \beta_{11j} \) and \( \beta_{12j} \) represent the slopes for the two partners. These slopes estimate the change in depressive or anxious symptoms over the transition to adoptive parenthood. Unlike the distinguishable model, however, the intercepts and slopes are then pooled into only two Level 2 equations:

\[ \beta_{0ij} = \gamma_{00} + u_{0ij} \text{ and } \beta_{1ij} = \gamma_{10} + u_{1ij}, \]

As these two equations show, the intercepts are pooled not only between but also within dyads (i.e., across both \( i \) and \( j \)) to estimate the fixed effect, \( \gamma_{00} \) (which is the average intercept (or the average level of depressive or anxious symptoms at the date of the adoption across all partners), and similarly, the slopes for time are pooled both between and within dyads to estimate the average slope, \( \gamma_{10} \) (or the average rate of change in depressive or anxious symptoms across all partners).

The variance components are also pooled both between and within dyads. At Level 2, the variance in the intercept, \( \text{Var}(u_{0ij}) \), represents the variability in depressive or anxious symptoms at the time of the adoptive placement, and the variance in the slopes, \( \text{Var}(u_{1ij}) \), represents the variability in depressive or anxious symptoms at the date of the adoption. Likewise, \( \text{Var}(r_{ijk}) \), is the variance of the Level 1 residuals (or the difference between the observed values of the outcome and the predicted values). The variance of the Level 1 residuals was constrained to be equal for both partners and across all time points.

In addition to the variances, dyadic growth models often include three covariances. The covariance between the intercepts estimates the degree of similarity in partners’ outcome scores at the time of the adoption. The covariance between the slopes estimates the degree of similarity in partners’ patterns of change. Finally, a time-specific covariance assesses the similarity in the two partners’ outcome scores at each time point after controlling for all of the predictors in the model.3

Unconditional models were initially fit in SPSS, using full maximum likelihood for both outcomes, estimating average status (at the time of placement) and change in depressive or anxious symptoms across the sample. Next, all predictors were added, including interactions. Finally, to create a more parsimonious model, nonsignificant effects (one at a time, starting with the least significant) were trimmed with the restriction that if an interaction was statistically significant, the corresponding main effects were included, regardless of their statistical significance. All predictors were checked for collinearity by testing them individually and in combinations. There was evidence that friend support and workplace support were collinear for depressive symptoms, but friend support was retained as a variable at it attained significance as a predictor of anxious symptoms. In all models, there were 174 participants nested within 90 couples; in six couples (three lesbian, three gay), data from one partner were missing for T1 predictors, and therefore these individuals could not be included in analyses. Four lesbian couples and four gay couples were missing T2 data, and seven lesbian couples and six gay couples were missing T3 data. These couples were retained in the analyses, however, as MLM uses all available data and individuals with missing data on the outcome at one time point are not dropped from analyses. All predictors (dichotomous, ordinal, and continuous) were grand mean-centered to reduce collinearity. Interactions were product terms created from the mean-centered variables. Effects that were significant at \( p < .05 \) were interpreted.

Results

Descriptive Statistics

The means for predictor and outcome variables for lesbians and gay men appear in Table 1. Analyses using MLM showed that there were no gender differences in any of these variables except for family income, such that gay men earned more than lesbians, on average.

Multilevel Models

Basic trajectories of depressive and anxious symptoms.

First, an unconditional model (without predictors) was fit for depression. At the time of the adoption, participants’ average depressive symptom score was 10.39 (\( SE = 5.56 \)), t(256) = 18.23, \( p < .001 \), which is below the CES-D clinical cut-off score of 16 (Radloff, 1977). The effect of time on depression was significant (\( \gamma = 0.07, SE = 0.03 \)), t(256) = 2.03, \( p < .05 \), indicating that depressive symptoms were increasing significantly, at a rate of .07 points per month. There was significant variance to be explained in level of depressive symptoms (\( \gamma = 40.23, SE = 5.38 \), Wald = 7.48, \( p < .001 \)) and change in symptoms (\( \gamma = 0.08, SE = 0.03 \), Wald = 2.34, \( p < .05 \)).

Second, an unconditional model was fit for anxiety. There was insufficient variance in rates of change to allow the slope for time

\[ ^3 \text{Two additional covariances can be estimated in dyadic growth models. An intrapersonal covariance between the intercept and slope can be estimated to examine, for example, whether having higher depressive symptoms at the time of adoption experience greater increases in depressive symptoms over time. An interpersonal covariance between the intercept and slope can also be estimated to examine, for example, whether partners of individuals with high depressive symptoms at the time of adoption experience greater increases in depressive symptoms. SPSS does not allow for estimation of these covariances, so they could not be included in the models. In addition, the covariance between partners’ slopes was close to zero, making it necessary to fix it to zero in order for the models for depression to converge. In addition, it was not possible to estimate random slopes in the anxiety models. The findings for the SPSS models were compared with models fit in SAS. (In order for the depression model to converge in SAS, it was still necessary to fix the covariances between the slopes as well as the intrapersonal and interpersonal covariances that cannot be modeled in SPSS. Similarly, the anxiety model would not converge with random slopes, so no covariances involving the slope were estimated.) The SAS models resulted in the same pattern of findings as SPSS for both depressive and anxious symptoms.} \]
to vary randomly (i.e., the model failed to converge), so only the intercept was treated as random. At the time of the adoption, participants’ average anxiety symptom score was 33.05 ($SE = 7.73), $t(88) = 4.38, p < .001$, which is below the STAI clinical cut-off score of 39 (Spielberger, 1983). There was a significant effect of time on anxiety ($\gamma = 0.10, SE = 0.03, t(256) = 3.50, p = .001$, indicating that anxious symptoms were increasing significantly, at a rate of .10 points per month. There was significant variance to be explained in level of anxious symptoms ($\gamma = 53.59, SE = 6.85, Wald = 7.83, p < .001$).

**Full Predictor Models**

Next, we fit a model treating depressive symptoms as the outcome, with enacted sexual stigma (state legal climate, neighborhood gay-friendliness), internalized stigma (internalized homophobia), and supportiveness of social contexts (workplace support, family support, friend support, love) as predictors (see Table 2). Gender, family income, and legal recognition were included as covariates. This model also included the two interactions (Internalized Homophobia $\times$ Legal Climate; Internalized Homophobia $\times$ Neighborhood Gay-Friendliness) to test whether effect of internalized homophobia was modified by enacted stigma. Neither of the interactions was significant. Internalized homophobia was significantly associated with the intercept for depression, such that persons who reported higher levels of internalized homophobia reported higher levels of depressive symptoms at the time of the adoption. Neighborhood gay-friendliness, workplace support, family support, and love were all negatively related to the depression intercept, such that a more supportive environment was related to fewer symptoms at the time of the adoption.

With regard to change over time, in addition to the significant overall effect of time (i.e., depressive symptoms increased), the interaction between internalized homophobia and legal climate emerged as significant. A graph of this interaction (see Figure 1) revealed that persons with high levels of internalized homophobia who lived in states with more unfavorable legal climates started out with high levels of depressive symptoms and experienced the most dramatic increases in symptoms over time. Persons with high internalized homophobia who lived in states with more favorable legal climates also started out with more depressive symptoms, but actually decreased in symptoms over time. Persons who had low levels of internalized homophobia started out with the fewest depressive symptoms, regardless of legal climate, and experienced little increase in symptoms. A main effect of state legal climate also emerged, whereby persons living in states with more unfavorable legal climates showed greater increases in symptoms over time; however, this finding must be interpreted in light of the above interaction.

Next, we fit a model with anxious symptoms as the outcome, and the same set of variables as predictors. Similar to the model for depression, workplace support, family support, and love were all significant predictors of the intercept for anxiety, such that persons who reported higher levels of perceived support reported fewer symptoms at the time of the adoption. Friend support also emerged as a significant predictor of the intercept for anxiety, such that persons who reported higher levels of friend support experienced fewer anxiety symptoms at the time of the adoption.

With regard to change, in addition to the significant overall effect of time showing that symptoms of anxiety increased, a significant interaction between internalized homophobia and legal climate also emerged. As Figure 2 shows, whereas most new parents showed slight increases in anxious symptoms, persons with high internalized homophobia who lived in states with more unfavorable legal climates started out with high levels of anxious symptoms and experienced the most dramatic increases in symptoms over time, mirroring the pattern for depression.
Final, Trimmed Models

In the final set of models, we retained previously significant effects and effects involved in higher order interactions. We trimmed nonsignificant predictors and covariates in order to provide a more parsimonious model. The parameter estimates and statistical tests from these trimmed models were highly similar to those from the models that included the full set of predictors (see Table 2). In the trimmed model for depression, neighborhood gay-friendliness, internalized homophobia, workplace support, family support, and love continued to predict symptoms at the time of adoption; the interaction between internalized homophobia and legal climate, and the main effect of legal climate, continued to predict change in symptoms. In the trimmed model for anxiety, workplace support, family support, friend support, and love continued to be positively related to symptoms at the time of the adoption; the interaction between internalized homophobia and legal climate continued to predict change in symptoms.4

Discussion

The present study is the first to examine mental health outcomes across the transition to parenthood among adopting same-sex couples. It is also the first study to examine mental health across the transition to parenthood of any kind among gay men.

4 The inclusion of legal recognition as a covariate to these final models did not change the pattern or significance of the results. Given the relatively small proportion of the sample living in states with an unfavorable climate, we also examined whether treating legal climate as a dichotomous variable (whereby states coded as 1, 2, or 3 were coded as -1, or unfavorable; and states coded as 4 were coded as 1, or favorable) changed the pattern or significance of the results. It did not. Finally, given that there were major outliers on the income variable (three gay male couples), we also ran the models with and without these families. This also did not change the pattern or significance of the results.
Our findings provide compelling evidence regarding the importance of considering the role of both enacted and internalized forms of stigma in sexual minorities’ mental health—particularly during the transition to parenthood. Participants’ state legal climate was related to their mental health across the transition; however, the effect of internalized homophobia varied as a function of state climate. Interestingly, persons who reported high levels of homophobia and lived in states with unfavorable legal climates started out with high levels of depressive symptoms and showed the most dramatic increases in depressive and anxious symptoms over time. Thus, the effects of internalized stigma actually became more salient in the presence of enacted stigma (Herek et al., 2009). Persons who feel shame or discomfort with their sexuality are likely sensitive to their states’ homonegativity (as reflected in their legal stance on gay adoption). State laws that are unfavorably predisposed toward gay adoption may trickle down into community attitudes (Lewis, 2009) whereby persons living in states with unfavorable legal climates face resistance from members of their community. Furthermore, this may affect change in mental health (rather than levels at the time of adoption) insomuch as “stepping out” as two men or two women and a baby may render individuals’ sexuality more visible. The experience of being “recognized” as a gay-parent family may be particularly disconcerting for individuals who are not comfortable with their sexuality and who also live in communities that are intolerant of sexual minorities—whose members may respond to their family status with hostile stares, remarks, or outright discrimination. In this manner, the stigma related to lesbian and gay parenting may become more salient after the child placement.

In contrast, individuals with high levels of internalized homophobia who lived in states with favorable legal climates actually experienced decreases in depressive symptoms across the transition. Perhaps the experience of interfacing with legally validating communities served to reduce their internalized stigma and, in turn, to improve their overall mood. All other groups showed minimal increases in depressive and anxious symptoms. In summary, the interaction between internalized homophobia and state legal climate point to the need to study the impact of broader contexts on mental health. It also highlights the need to consider the complex ways in which enacted and internalized stigma may interact in general (Herek et al., 2009), and how stigma related to gay and lesbian parenting may have deleterious effects on new parents, in particular.

These findings suggest that counselors working with sexual minorities should be mindful of, and should possibly explore directly, the role of the broader legal context on sexual minorities’ mental health. Furthermore, these findings suggest that counselors should consider their states’ legal climate alongside their clients’ level of comfort with their sexuality, as the two may interact in important ways. Sensitivity to the ways in which both enacted and internalized forms of stigma impact sexual minority mental health is essential for effective practice with sexual minorities, and may be especially important during the transition to parenthood, as once they have a child, lesbians and gay men may be particularly vulnerable to societal disapproval and judgment (Pachankis & Goldfried, 2004).

Internalized homophobia was also related to symptoms of depression (but not anxiety) at the time of the adoption, a finding that extends prior cross-sectional research linking internalized homophobia to depression (Frost & Meyer, 2009). Our finding that sexual minorities who experience discomfort surrounding their sexual orientation are at risk of poorer well-being at the time that they become parents has implications for research. Scholars who study lesbian and gay parents should assess for internalized homophobia as it may be a key indicator of mental health. This finding also has implications for counselors who work with sexual minorities during the transition to parenthood. By seeking to reduce clients’ internalized homophobia (e.g., by teaching clients about the social construction of stigmatized identities; by helping clients to relocate the “problem” in their social environment), they may help to reduce their clients’ risk for depression—both in general and during the transition to parenthood specifically (Roskosky et al., 2009).

We found that persons who perceived their neighborhoods as less gay-friendly reported more depressive symptoms at the time that they adopted their first child. Persons who perceive their neighborhoods as relatively intolerant of their gay identities and relationships may encounter elevated stigmatization once they become parents, which may negatively affect their well-being. Alternately, negative preparenthood perceptions of their neighbors may create negative expectations (e.g., they may anticipate increased hostility once they become parents), which may affect their well-being independent of whether they actually encounter negative reactions. Alternatively, given that depression is related to negative appraisals in general (Mausbach, Roepeke, Depp, Patterson, & Grant, 2009), perhaps depressed persons are simply apt to judge their neighborhoods as less gay-friendly. Assuming, however, that perceptions of neighborhood gay-friendliness do affect well-being, counselors who work with sexual minorities during the transition to parenthood might encourage them to explore their feelings about their neighborhoods as well to consider the relative salience of their neighborhoods in their lives. Counselors who find that their clients are very unhappy with or feel stigmatized by their neighbors might encourage them to take steps toward moving, if their clients have the financial resources and ability to do so. If clients are unable to move, counselors should seek to connect them with community supports and resources (e.g.,
gay parenting groups), which may function to offset the negative impact of gay-unfriendly neighborhoods (Martin, 1998).

Consistent with much of the research on heterosexual couples’ transition to parenthood (Cowan & Cowan, 2000), several proximal sources of support were related to sexual minorities’ mental health at the time of the adoption. Our finding that perceptions of workplace support were related to lower depressive and anxious symptoms is especially notable given that limited research has explored the work context in relation to mental health across the transition (Perry-Jenkins et al., 2010). This finding is also notable in that it extends prior work showing a cross-sectional relationship between workplace support and life satisfaction among sexual minorities (Huffman et al., 2008) and suggests that workplaces may play an important role in fostering positive mental health outcomes in gay workers, particularly when they become parents. Research should address how other work factors, such as job flexibility, affect the well-being of lesbian- and gay-parent families.

Consistent with prior research (Ayala & Coleman, 2000; Bost et al., 2002), perceptions of family support were also related to depressive and anxious symptoms at the time of the adoption. Thus, importantly, families of origin appear to continue to occupy a socially meaningful role in many lesbians’ and gay men’s lives, even as they begin to form families of their own. It is possible that support from family becomes even more salient for lesbians and gay men as they start their own families, such that nonsupport may have particularly deleterious consequences on mental health during the transition to parenthood. Counselors who work with sexual minorities should encourage their clients to think about, and prepare for, the type and level of support that they believe their families will offer once they become parents. Clients who perceive “holes” in their social support networks should be assisted in seeking out alternative supports (Martin, 1998).

Perceived support from friends, which has received less attention than family support in the literature (Bost et al., 2002), was significantly related to anxious symptoms at the time of the adoption, but it was unrelated to depressive symptoms. Thus, it appears that perceptions of support from friends may be more important in alleviating worries and stress related to parenthood than in lifting negative mood. Although the PSS primarily assesses emotional support, emotional and instrumental support are highly correlated (Pinquart, Hofkken, Silbereisen, & Wedding, 2007), and it is possible that persons who provide high levels of emotional support also provide high levels of practical support. In turn, persons who perceive their friends as emotionally supportive may also be receiving practical assistance such as babysitting, which may help to alleviate some of the strains associated with early parenthood, but which may have less impact on overall mood.

Consistent with findings for heterosexual couples that higher relationship quality is related to better mental health across the transition to parenthood (Logsdon & Usui, 2001; Lu, 2006), higher participant reports of love (which we treated as an index of relationship quality) were related to lower depressive and anxious symptoms at the time of the adoption. Perhaps the most proximal context in which individuals are embedded, the intimate relationship has profound implications for well-being during critical life events, such that strong, stable, and supportive relationships are consistently associated with greater well-being.

Although gender was not treated as a variable of substantive interest in this study, it is notable that it did not emerge as a significant predictor of mental health across the transition—a finding that is inconsistent with much of the research on heterosexual couples (Keeton et al., 2008). It is possible that the lack of gender differences in mental health is more a function of the adoptive context than sexual orientation; in a study of preadoptive lesbian and heterosexual couples, rates of depressive and anxious symptoms did not differ as a function of gender or sexual orientation (Goldberg & Smith, 2008b). Qualitative research with lesbian, gay, and heterosexual biological and adoptive parents could perhaps shed deeper insight into the interplay among gender, sexual orientation, and route to parenthood in shaping mental health processes.

Conclusions and Limitations

This research makes a notable contribution in that it is the first study of same-sex couples’ mental health across the transition to adoptive parenthood; it includes gay men (most prior research on same-sex couples raising children has focused on lesbians only); it uses three time points of data; and it examines both enacted and internalized forms of stigma. However, this study also has several limitations. First, all of our measures except legal climate relied on self-report. Although individual perceptions are important, future work should consider using other methods, such as observational methods or partner reports. Second, our measure of state climate was fairly specific, indexing participants’ state laws and practices related to gay adoption only. Future work should consider operationalizing legal climate in other ways (e.g., incorporating state laws/policies pertaining to marriage) to examine whether other aspects of state legal climate are related to the mental health of lesbian/gay parents. Our assessment of legal climate was also limited by the fact that most couples resided in states with relatively supportive stances on gay adoption. Our strategy of recruiting through adoption agencies in states with high numbers of same-sex couples may have contributed to this bias, insomuch as same-sex couples who are seeking to adopt may be more likely to live in states with laws and practices that are favorably disposed toward gay adoption.

Third, our measure of neighborhood gay-friendliness was limited as it consisted of only a single item. Our findings suggest the need for the development and validation of a multi-item measure, ideally one that considers multiple aspects of neighborhood climate. Future work might also supplement subjective ratings with a more objective index of gay-friendliness. Our assessment of the neighborhood context was also limited inasmuch as most participants perceived their neighborhoods to be relatively gay-friendly. Fourth, we did not examine the role of participants’ (or their children’s) racial identity in their reports of enacted and internalized stigma. Although beyond the scope of our study, this is an important area for future research: Sexual stigma may function differently for persons of different racial/ethnic identities, persons in mixed-race/ethnicity relationships, and persons who adopt children of different races/ethnicities than their own.

Despite these limitations, this study provides an important first step toward better understanding the types of social contextual forces that may impact upon sexual minorities’ mental health as they become parents for the first time. It demonstrates that social
support from multiple contexts is important for lesbian and gay couples’ mental health, just as it is for heterosexual biological parents. Notably, it reveals the important relationship between a supportive work context and mental health, an area that has received inadequate attention even in research on heterosexual parents. Most significantly, these findings highlight the importance of attending to enacted stigma in multiple contexts and point to the complex ways in which internalized and enacted stigma may interact. Future research on lesbian and gay parents should therefore attend to the multiple and varied social contexts in which they live their lives.

References
McLaren, S. (2006). The interrelations between sexual orientation, sense of
belonging, and dysphoria among Australian women. Women & Health, 43, 123–137.


