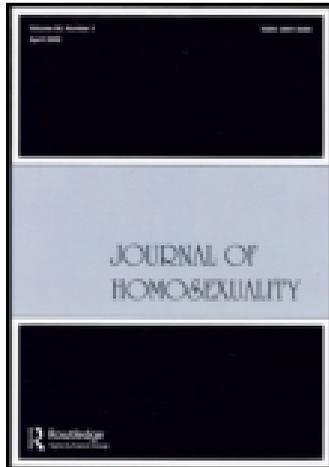


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Parents' Supportive Reactions to Sexual Orientation Disclosure Associated With Better Health: Results From a Population-Based Survey of LGB Adults in Massachusetts

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Parents' Supportive Reactions to Sexual Orientation Disclosure Associated With Better Health: Results From a Population-Based Survey of LGB Adults in Massachusetts

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This study investigated associations between coming out to parents, experiences of parental support, and self-reported health behaviors and conditions among a population-based sample of LGB individuals using data collected via the 2002 Massachusetts Behavioral Risk Factor Surveillance System (BRFSS; N = 177). We explored the following two hypotheses: 1) Lesbian, gay, and bisexual (LGB) individuals who had never disclosed their sexual orientation to a parent would report higher levels of risk behaviors and poorer health conditions than those who had come out; and 2) among LGB respondents who had come out to their parents, the individuals whose parents had reacted unsupportively would report higher levels of risk behaviors and poorer health conditions than those who had come out to parents who were

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supportive. Approximately two thirds of gay and bisexual (GB) males and lesbian and bisexual (LB) females reported receiving adequate social and emotional support from the parent to whom they first disclosed their sexual orientation. Among LB females, no disclosure of sexual orientation to a parent was associated with significantly elevated levels of past-month illicit drug use (AOR 12.16, 95% CI 2.87–51.54), fair or poor self-reported health status (AOR 5.71, 95% CI 1.45–22.51), and >15 days of depression in the past month (AOR 5.95, 95% CI 1.78–19.90), controlling for potential confounders. However, nondisclosure to a parent by GB males was not associated with greater odds of any of the health indicators assessed. Among GB males, those with unsupportive parents were significantly more likely to report current binge drinking (AOR 6.94, 95% CI 1.70–28.35) and >15 days depression in the past month (AOR 6.08, 95% CI 1.15–32.15), and among LB females, those with unsupportive parents were significantly more likely to report lifetime illicit drug use (AOR 11.43, 95% CI 2.50–52.30), and >15 days depression in the past month (AOR 5.51, 95% CI 1.36–22.36). We conclude that coming out may be associated with better health for LB women, and that parents who react nonsupportively when their children disclose LGB sexual orientation may contribute to children's increased odds of depression and hazardous substance use.

KEYWORDS *bisexual, gay, lesbian, sexual identity disclosure, sexual orientation*

Gay, lesbian, and bisexual (LGB) people are at increased risk for a number of health risk behaviors and negative health-related conditions, including cigarette smoking, unhealthy alcohol consumption, illicit drug use, poor mental health, and lack of access to primary care and health insurance (Cochran, Sullivan, & Mays, 2003; Gruskin & Gordon, 2006; Heck, Sell, & Gorin, 2006; Rhodes, McCoy, Hergenrather, Omli, & Durant, 2007; Wilsnack et al., 2008). As a result, the U.S. Department of Health and Human Services and the Gay and Lesbian Medical Association (GLMA) have called for research that explains these health disparities and strategies that will reduce them (GLMA, 2001; U.S. Department of Health and Human Services, 2009).

One theory about why LGB people are at greater risk for experiencing poor mental health and substance use than heterosexual people is that they experience increased levels of psychosocial stress (Igartua, Gill, & Montoro, 2003; Lewis, Derlega, Griffin, & Krowinski, 2003; Rosario, Schrimshaw, Hunter, & Gwadz, 2002). Meyer's Minority Stress Model proposes four

possible causes for increased stress among LGB people, including: a) overt prejudice, b) expectations and vigilance about discrimination, c) internalized stigma, and d) concealment of sexual orientation (Meyer, 2003). A related body of research has investigated whether ending concealment of sexual orientation (i.e., coming out) may decrease stress, but results are mixed. Several studies have found that coming out can improve mental health or satisfaction with partnerships and employment (Beals & Peplau, 2001; Day & Schoenrade, 1997; Jordan & Deluty, 1998; Morris, Waldo, & Rothblum, 2001; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001; Taylor, 1999), while others have found that coming out may have no impact on satisfaction with partnerships, or may precipitate verbal or physical abuse and worsen health risk behavior (D'Augelli, Hershberger, & Pilkington, 1998; Green, Bettinger, & Zacks, 1996). In short, the act of coming out may be a weaker determinant of stress than the context of the disclosure, including the reactions of the people to whom the disclosures are made.

Because parental attachment and support are known to be particularly important for healthy child and adolescent development, there has been interest in parental reactions to children's sexual orientation disclosure (Bouris et al., 2010). Two separate surveys of parents of gays and lesbians have found that the majority of parents initially respond to their children's LGB sexual orientation disclosure negatively (Robinson, Walters, & Skeen, 1989; Savin-Williams & Ream, 2003), and it has been theorized that unsupportive parental reactions may adversely affect LGB youths' mental and behavioral health (Willoughby, Doty, & Malik, 2008). A recent study of family rejection as a predictor of negative health outcomes in 245 LGB youth found that children of parents who react negatively to their sexual orientation have elevated levels of suicidal ideation and attempts, depression, drug use, and unprotected sex (Ryan, Huebner, Diaz, & Sanchez, 2009). Thus, while some mental health professionals are of the opinion that coming out to a parent is an important developmental milestone and a sign of psychological health (LaSala, 2000b), others have argued that because many parents may react unsupportively and even abusively, coming out to parents—particularly during adolescence—may not be the best course of action for all LGB individuals (Green, 2000).

The present study was designed to investigate associations between coming out to parents, experiences of parental support, and self-reported health behaviors and conditions among a population-based sample of LGB adults. Importantly, to our knowledge, it is the first population-based study to assess the associations between coming out, parental support, and selected indicators of physical and mental health. We analyzed data collected via the 2002 Massachusetts Behavioral Risk Factor Surveillance System. Based on prior literature, we anticipated that LGB respondents would be more likely to report negative health risk behaviors and outcomes

than their heterosexual counterparts. We then explored the following two hypotheses:

- H1: LGB individuals who had never disclosed their sexual orientation to a parent would report higher levels of risk behaviors and poorer health conditions than those who had come out.
- H2: Among LGB respondents who had come out to their parents, the individuals whose parents had reacted unsupportively would report higher levels of risk behaviors and poorer health conditions than those who had come out to parents who were supportive.

METHODS

This study was a cross-sectional analysis of 2002 Behavioral Risk Factor Surveillance System (BRFSS) data from Massachusetts. The study was determined to be exempt by the Institutional Review Board of the Boston University School of Public Health.

Data Collection

The BRFSS is a collaborative effort between the U.S. Centers for Disease Control and Prevention (CDC) and individual state departments of public health. The survey collects data on a variety of health characteristics, risk factors, preventive behaviors, chronic illnesses, and emerging health issues. Data is collected via a random-digit-dial survey from noninstitutionalized, housed adults age 18 years old and older. Each year, the survey includes a core set of questions developed by the CDC as well as state-added questions developed by individual state departments of public health. In order to provide population estimates, BRFSS data are weighted to reflect the probability of participation as well as respondent differences in sex, age, and race and ethnicity. BRFSS methodology is discussed in detail elsewhere (Bolen, Rhodes, Powell-Griner, Bland, & Holtzman, 2000; Hughes et al., 2006). The present analysis utilized data from the 2002 Massachusetts BRFSS.

Measures

HEALTH RISK FACTORS AND CONDITIONS

Seven health-related risk behaviors and conditions were assessed, including lifetime and past-month illicit drug use, current binge drinking, current cigarette smoking, self-rated physical health, self-rated mental health, and depression. Three of these were assessed via single questions on the core (i.e., national) BRFSS. For each, dummy variables were created that

dichotomized responses. Binge drinking was defined as consuming five or more alcoholic beverages on one occasion in the past month. Smoking was assessed via the question: "Do you now smoke cigarettes every day, some days, or not at all?" Those who reported smoking every day or some days were classified as smokers, and those who reported smoking not at all were classified as nonsmokers. Self-reported health status was assessed via the question: "Would you say that in general your health is excellent, very good, good, fair or poor?" Responses were dichotomized as excellent, very good, and good versus fair and poor.

Illegal drug use, mental health status, and depression were assessed via questions added by the Massachusetts Department of Public Health to the BRFSS survey. Respondents were classified as ever having used an illegal drug if they reported any use of marijuana, cocaine, heroin, hallucinogens, MDMA, or nonprescribed tranquilizers, sedatives or oxycontin. Past-month illicit drug use was any use of the listed substances in the past 30 days. Poor mental health was assessed through the question: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, on how many days during the past 30 days was your mental health not good?" Those who reported that their mental health was not good on 15 or more days were classified as having poor mental health. Depression was measured through the question: "During the past 30 days, on how many days did you feel sad, blue, or depressed?" Those who reported feeling depressed on 15 or more days were classified as having ≥ 15 days of depression in the past month.

SEXUAL ORIENTATION

Respondents were asked, "Do you consider yourself to be: heterosexual or straight; homosexual or gay (for males)/lesbian (for females); bisexual; or, other?" Men who reported gay or bisexual sexual orientation were grouped into the GB category, and women who reported lesbian or bisexual sexual orientation were grouped into the LB category.

EXPERIENCES RELATED TO THE DISCLOSURE OF GAY, LESBIAN, OR BISEXUAL ORIENTATION

LGB respondents were asked "Have you ever talked with your parents or step-parents about being gay/lesbian/bisexual?" Those who responded in the affirmative were then asked which parent they first spoke with about their sexual orientation and the age at which they disclosed. Those who self-disclosed to a parent were asked "Do you think your (parent) provided you with the social and emotional support you needed after talking to them about being gay/lesbian/bisexual?" Those who reported receiving "a lot" or

“a little” support were classified as having received support, while those who reported receiving “not much support” were classified as not having had parental support.

DEMOGRAPHICS

Demographic data were collected using standard BRFSS questions for age, sex, race, and education. Health care access, measured by reported health insurance status, and access to a primary care physician were reported. Responses were dichotomized into yes–no variables.

Data Analysis

Analyses were conducted with SAS 9.1. All analyses were weighted to reflect the population of Massachusetts. Proportions were calculated for the demographic characteristics and health risk factors for both LGB and heterosexual respondents, and differences were assessed using Chi-square tests for statistical significance. For all statistical tests, p values of $p < .10$ were considered significant. Weighted prevalence statistics were calculated for GB males LB females for self-disclosure of sexual orientation to a parent, parent to whom respondent disclosed, and age at disclosure. Survey weighting is a technique that accounts for the probability that individual respondents are selected to participate in a population-based survey. The advantages of presenting weighted results here are two-fold: 1) It permits our results to be generalized to the population of Massachusetts, from which this sample was drawn; and 2) it addresses the fact that not all Massachusetts residents were equally likely to be invited to participate in this survey.

We used a series of multivariate logistic regression models to assess associations between a) sexual orientation and health-related outcomes, b) disclosure to parents and health-related behaviors and conditions, and c) parental support and health-related behaviors and conditions. These analyses were stratified by gender and adjusted for the following potential confounders: age, race, education level, and health insurance status.

RESULTS

Because the sexual orientation question was only asked of respondents who were between 18 and 60 years old (and the survey was implemented with people who were up to age 64), we first restricted the data to those ages 18–60 years old ($n = 5,723$). Next, we excluded those who refused to answer the sexual orientation question ($n = 229$), or reported that they didn't know their sexual orientation ($n = 38$), or reported that it was something other

than heterosexual, gay, lesbian, or bisexual (LGB; $n = 29$). Our final sample size was $N = 5,658$ people, and 3.1% of these ($n = 177$) reported being LGB.

Of the seven health risk factors and conditions assessed, five were significantly elevated among LGB respondents as compared to heterosexuals (Table 1). Specifically, LGB respondents were substantially more likely than heterosexual respondents to report lifetime illicit drug use (82% vs. 56%), past-month illicit drug use (23% vs. 9%), being a current binge drinker (30% vs. 22%), being a current smoker (47% vs. 21%), and experiencing more than 15 days of depression in the past month (16% vs. 7%; Table 1). In addition, LGB respondents were almost twice as likely to report not having health insurance as compared to their heterosexual counterparts (14% vs. 8%; Table 1).

TABLE 1 Demographic Characteristics of Sample and Distribution of Health-Related Risk Factors and Conditions

	Lesbian, gay, bisexual %	Heterosexual %	<i>p</i> value
Total, unweighted	$n = 177$	$n = 5,481$	
Age: Mean (<i>SD</i>)	38.41 (11.54)	39.47 (12.50)	
Sex			
Male	55.6	49.3	
Female	44.4	50.7	
Race			
White	77.9	81.8	
Black/African American	6.8	3.4	
Hispanic	11.0	9.1	
Asian	2.6	3.5	
Other	1.8	2.2	
Education			
<12 years	8.9	7.4	
High School or GED	17.2	24.7	
Some college	22.9	25.6	
College graduate	51.0	42.3	
Health risk factors/conditions			
Substance Use			
Lifetime illicit drug use	82.0	56.2	$p < .001$
Illicit drug use past 30 days	22.9	9.0	$p < .001$
Current binge drinker	30.2	21.7	$p < .10$
Current smoker	44.6	20.7	$p < .001$
Physical and mental health			
Fair or poor self-reported health	8.3	10.1	
≥ 15 days poor mental health, past month	13.3	10.0	
≥ 15 days depression, past month	15.7	7.1	$p < .01$
Healthcare access			
Does not have health insurance	14.0	7.5	$p < .05$
Does not have a personal doctor	10.2	14.5	

TABLE 2 Prevalence of Sexual Orientation Disclosure-Related Variables, by Gender

	GB males %	LB females %
Total, unweighted	<i>n</i> = 90	<i>n</i> = 87
Have you ever talked to your parents or step-parents about being LGB?		
Yes	73.4	72.8
No	26.6	27.2
Who was the first parent that you spoke with?		
Mother (biological)	87.8	78.4
Father (biological)	12.2	20.9
Mother (step)	0.0	0.7
Father (step)	0.0	0.0
Do you think your parent provided you with the social and emotional support you needed after talking to them about being LGB?		
Yes (a lot or a little support)	68.6	67.0
No (not much support at all)	31.4	33.0
How old were you when you first spoke with your parent about being LGB?		
<20 years old	34.9	30.4
20–24 years old	35.9	30.8
25–29 years old	17.4	14.9
>30 years old	11.8	23.8
Mean (<i>s.d.</i>)	25.64 (12.97)	24.89 (7.73)

The majority (73%) of GB males, and LB females, had talked with their parents or step-parents about their sexual orientation (Table 2). On average, respondents were 25 years old when they first disclosed their sexual orientation to a parent. Both GB males and LB females were most likely to have talked first with their biological mother about their sexual orientation, although a substantial minority of LB females (21%) had spoken first with their biological father (Table 2). Approximately two thirds of GB males and LB females reported receiving adequate social and emotional support from the parent to whom they first disclosed their sexual orientation (69% of GB males, and 67% of LB females; Table 2).

We found partial support for Hypothesis 1, which was that not having disclosed one's sexual orientation would be associated with higher levels of the health risk behaviors and conditions assessed. We tested this hypothesis with GB males and LB females separately, and found that among LB females, nondisclosure of sexual orientation to a parent was associated with significantly elevated levels of past-month illicit drug use (AOR 12.16, 95% CI 2.87–51.54), fair or poor self-reported health status (AOR 5.71, 95% CI 1.45–22.51), and >15 days of depression in the past month (AOR 5.95, 95% CI 1.78–19.90), controlling for the respondents' age, race, level of education, and health insurance status (Table 3). However, GB males'

TABLE 3 Adjusted Odds of Health Risk Factors and Conditions by Sexual Orientation, Disclosure Status, and Level of Parental Support Received

	LGB vs. heterosexual [†]		No sexual orientation disclosure to parent vs. disclosed to parent [†]				No parental support vs. adequate parental support [†]	
	Males AOR (95% CI)	Females AOR (95% CI)	GB Males AOR (95% CI)	LB Females AOR (95% CI)	GB Males AOR (95% CI)	LB Females AOR (95% CI)		
Lifetime illicit drug use	2.08 (0.90–4.80)*	7.65 (3.54–16.52)****	0.81 (0.18–3.57)	3.81 (0.84–17.19)*	3.58 (0.62–20.56)	11.43 (2.50–52.30)***		
Illicit drug use, past month	2.18 (0.95–5.01)*	4.91 (2.13–11.28)****	0.95 (0.18–4.90)	12.16 (2.87–51.54)***	3.14 (0.78–12.59)	3.66 (0.56–23.91)		
Current binge drinker	1.50 (0.78–2.87)	1.27 (0.53–3.02)	0.84 (0.14–4.93)	1.50 (0.23–9.75)*	6.94 (1.70–28.35)***	0.78 (0.15–3.99)		
Current smoker	5.14 (2.48–10.65)	2.50 (1.35–4.62)***	3.30 (0.57–19.14)	3.58 (0.84–15.22)	4.62 (0.98–21.90)	0.46 (0.13–1.58)		
Fair or poor self-reported health status	0.30 (0.10–0.93)**	1.82 (0.80–4.18)	0.62 (0.12–3.22)	5.71 (1.45–22.51)**	—	1.86 (0.37–9.41)		
≥15 days poor mental health, past month	1.29 (0.52–3.19)	1.82 (0.84–3.98)	0.46 (0.09–2.28)	2.79 (0.67–11.57)	0.76 (0.13–4.29)	2.30 (0.42–12.46)		
≥15 days depression, past month	2.87 (1.16–7.08)**	2.61 (1.21–5.64)**	0.69 (0.14–3.46)	5.95 (1.78–19.90)***	6.08 (1.15–32.15)**	5.51 (1.36–22.36)**		

[†]Adjusted for age, education, race, and health insurance status; weighted to account for complex survey design.

—could not be calculated due to small cell size.

* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .001$.

non-disclosure to a parent was not associated with greater odds of any of the health indicators assessed.

Similarly, we found partial support Hypothesis 2, which was that parents unsupportive reactions to LGB individuals disclosure would result in elevated levels of health risk behavior and negative health conditions compared to LGB individuals whose parents had reacted supportively. Among GB males, those with unsupportive parents were significantly more likely to report current binge drinking (AOR 6.94, 95% CI 1.70–28.35) and >15 days depression in the past month (AOR 6.08, 95% CI 1.15–32.15), and among LB females, those with unsupportive parents were significantly more likely to report lifetime illicit drug use (AOR 11.43, 95% CI 2.50–52.30), and >15 days depression in the past month (AOR 5.51, 95% CI 1.36–22.36) (Table 3). In addition, although the results did not reach statistical significance, we noted that for GB males, the adjusted odds of lifetime illicit drug use, past-month drug use, and current smoking were all large and in the expected direction. For LB females, the adjusted odds of past-month illicit drug use, fair or poor self-reported health status, and >15 days of poor mental health in the past month were large and in the expected direction, but did not reach statistical significance.

DISCUSSION

To our knowledge, this is the first population-based study to assess the association between negative or positive support received from parents after coming out (i.e., disclosing LGB sexual orientation) and health risk behaviors and conditions. Our results suggest that in this sample, coming out to one's parents was associated with less risky health behavior and better physical and mental health for females, although we found no support that coming out to parents was associated with better health indicators for males. Our results also indicate that once LGB children came out to a parent, the parent's response was associated with that child's longer-term health-related behaviors and status; for GB males and LB females, experiencing a lack of support from a parent after coming out was associated with a range of negative health risk behaviors and conditions, including spending more than two weeks depressed in the past month.

That we found evidence of an association between coming out to a parent and better health indicators for females, but not males, suggests that studies of Meyer's Minority Stress Model should be tested separately for females and males. It is possible that the stress of being closeted (i.e., concealing sexual orientation) with one's parents tends to affect females and males differently. If this were true, it may be worthwhile to explore possible sex-based differences in other aspects of Meyer's model,

including experiences of overt prejudice, vigilance about discrimination, and internalized stigma (Meyer, 2003).

While causal inferences cannot be drawn from this cross-sectional study, the strength of the associations between the lack of parental support and more risky health behavior underscore the need for additional studies that use a prospective, longitudinal design, and larger samples, to investigate the influence of parental support of the health of LGB people. Our findings are consistent with those of prior studies that suggest that 60–77% of LGB men and women disclose their sexual orientation to their parents (Berger, 1990; LaSala, 2000a), and with studies that have found that parental support is a significant factor in LGB youths' mental health (Eisenberg & Resnick, 2006; Ryan et al., 2009). Because the adults in our sample disclosed their sexual orientation to a parent, on average, at age 25, our findings extend the prior literature because our sample of LGB individuals primarily came out during adulthood. Moreover, while it is not possible to tell from this cross-sectional study if a parent's reaction to their adult child's sexual orientation disclosure would still be influencing that child's health risk behavior and conditions as many as 10–20 years later, it is plausible; the parent's initial reaction may be a proxy for their general support (or lack thereof), attitude, and attachment with their adult children. These factors, in turn, may be influential in adult health-related risk behaviors and conditions. This possibility is supported by the compelling evidence provided by Ryan et al.'s (2011) study, which found that negative family reactions to an adolescent's sexual orientation was associated with health risk behaviors and problems that were assessed, on average, 5–10 years later.

Ultimately, if it becomes clear that parental reactions to children's disclosure of LGB sexual orientation is a contributing factor to those children's short-term or long-term physical and mental health, strategies that provide parents with the information and skills that they need to support their LGB children appropriately should be developed. For example, a low-cost and potentially far-reaching strategy would be for national academies of pediatric medicine to develop and disseminate guidelines and/or recommendations that would encourage pediatricians to provide *all* parents of adolescents with tips for supporting children if they come out as LGB, so that parents can prepare in advance for that situation. Alternatively, as Willoughby, Doty, & Malik, (2008) suggests, psychotherapists working with clients who are planning to come out may find it helpful to engage family members to bolster familial communication and problem solving prior to the disclosure.

One of the strengths of this study is that the data were obtained from a population-based sample, and that results are generalizable to the residents of one state, Massachusetts. A second strength of this study is the age range of the respondents; although we controlled for respondents' age in our analyses, it is a strength that there was diversity in the ages of respondents

because it reduces the chance that our findings are relevant only for one particular age cohort. A third strength of this study is that we were able to control for a number of potential confounders, including respondents' health insurance status, education, and race. However, future studies with larger sample sizes will allow for more refined analyses, such as the relationship of parental support to LGB individuals' health behaviors within specific racial groups. Given recent evidence that bisexual youth are at even higher risk for engaging in selected health risk behaviors than their gay and lesbian peers (Kann et al., 2011), analyses that examine outcomes for bisexual individuals specifically would be useful.

Our study was also limited by several factors. First, the sample of LGB respondents was small; however, the primary limitation of the small sample size is that some of the associations that were not statistically significant in this study may have reached statistical significance had we had more power. Second, this study investigated disclosure to and support from parents and step-parents only. The potentially important role of sibling support, support from extended family members, friends, teachers, and other community members should be explored in future studies. Moreover, our results do not suggest that a lack of parental support is the sole potential determinant of LGB health disparities; there are likely a wide range of factors that contribute to observed disparities. For example, LGB individuals' capacity for coping or resilience are protective factors that are likely at play for many, but we lacked data to examine how these assets might moderate the relationship between disclosure and health behaviors and conditions. Finally, some may also question whether our findings, based on data collected in 2002, are still relevant today—particularly given that Massachusetts became the first state to allow for same-sex marriage in 2004, and we might, therefore, infer that Massachusetts residents have enjoyed a better quality of life than LGB people in other parts of the country in the past six years. While we hope future research will produce evidence to support the contention that same-sex marriage has had positive outcomes for LGB individuals (Buffie, 2011), to date, there are none. Moreover, Massachusetts-based studies still indicate troubling health disparities by sexual orientation (Conron, Mimiaga, & Landers, 2010), and that LB women in Massachusetts continue to experience discrimination and quality of life problems similar to LB women in other U.S. states (Boehmer, Clark, Timm, Sullivan, & Glickman, 2011).

Conclusion

In this sample, parents' lack of support for their children's sexual orientation was associated with negative health behaviors and conditions in adulthood. This study extends prior research that has found a positive association between parental rejection of children's LGB sexual orientation and negative health outcomes in youth. As evidence about the potential importance

of parental support for LGB health mounts, public health advocates should devise strategies to encourage parental support for LGB children who disclose their sexual orientation.

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