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Coming Out in Color: Racial/Ethnic Differences in the Relationship between Level of Sexual Identity Disclosure and Depression among Lesbians

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Abstract

Disclosing one's sexual minority identity, or "coming out," has varying effects on the mental health of lesbians. Previous research indicates a negative association between disclosure and depression. However, these findings are based on research with White lesbians. To date, there is a paucity of studies that examined how the relationship between disclosure and depression may differ by race/ethnicity among lesbians. To address this gap, we examined the relationship between disclosure and depression among African American (26.5%), Latina (19.7%), and White (53.8%) self-identified lesbians (N=351) in two survey-interviews (~3-years apart). Over 50% of the participants reported a history of lifetime depression at baseline and 35.9% reported depression at T2. Disclosure levels varied: 78.9% had disclosed to their mother, 58.4% to their father, and 83.3% to a sibling. The mean level for disclosure to nonfamily individuals was 6.29 (SD 2.64; range 0-9). Disclosure results varied by race/ethnicity showing African American lesbians (versus White lesbians) were less likely to disclose to nonfamily individuals when controlling for covariates. Results for the relationship between disclosure and depression showed disclosure to either parent or sibling was not associated with depression for the total sample. Among Latinas only, disclosure to nonfamily individuals was associated with less depression. Additional research is needed to explore racial/ethnic differences in disclosure with certain individuals and to better understand the relation between disclosure and depression. Findings have implications for reducing overall rates of depression among lesbians living with multiple-minority identities.

Keywords

| Depression; sexual identity | / disclosure; lesbi | ns of color; mul | ltiple-minority | status; intersectionality |
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Introduction

Depression is a leading cause of disability in the United States (Marcus & Olfson, 2010). In any given year, an estimated 13 million American adults (~1 in 17) have a debilitating mental illness (Kessler, Chiu, Demler, Merikangas, & Walters, 2005), depression being the most commonly reported (WHO, 2004). Women are generally twice as likely as men to develop depression (Eaton et al., 2012; Nolen-Hoeksema, 2001) and rates of depression can vary substantially based on socio-demographic factors. In recent years, researchers have identified sexual orientation as a risk factor for depression among sexual minority women (SMW). Data collected from probability and convenience samples show a consistent pattern of elevated risk for depression among SMW (Ayala & Coleman, 2000; Cochran, Mays, & Sullivan, 2003; Morris, Waldo, & Rothblum, 2001). They consistently report higher rates of depression (18–66%) than heterosexual women (6–17%) because of unique factors they may face (Bostwick, Boyd, Hughes, & McCabe, 2010; Gilman et al., 2001; Hughes, Wilsnack, & Johnson, 2005; Kessler et al., 1994; Marshal et al., 2011) with few exceptions (Cochran et al., 2003; Zea, Reisen, & Poppen, 1999).

Meyer's (2003) minority stress model examines factors unique to lesbian, gay, and bisexual (LGB) populations. His model includes environmental and individual-level stressors and allows the examination of how they impact mental health outcomes. One unique stressor included in Meyer's model is disclosure of one's sexual minority identity ("coming out").

Disclosure among Sexual Minority Women and Potential for Elevated Risk of Depression

Disclosure is a construct that can be viewed as a process or outcome (Smith, 1997). The "process" of disclosure generally examines the identity-formation stages (Rust, 1993; Troiden, 1989). These stages describe the process an individual undergoes from first considering to accepting their sexual minority status (Cass, 1979). Disclosure can also be viewed as an "outcome," the point on the continuum when an individual has self-identified as a sexual minority (e.g., lesbian) and discloses this to others (Smith, 1997), recognizing that disclosure can potentially occur with every encounter throughout one's lifespan. The decision to disclose is influenced by many factors: age, geography, religious beliefs, and social-contexts to name a few. An individual's race/ethnicity can also play an important role in the decision of disclosure particularly if one's racial/ethnic identity is of equal or greater significance to one's sense of self (Greene, 1994). Bowleg et al., (2003) for example, reported African American lesbians felt that race was the most important component of their self-concept. According to Meyer (2003), self-identity can vary in social and personal meaning and the related stressors (e.g., lesbian community versus ethnic community). De Fina (2006) describes identity as a characteristic of an individual or something that emerges through social interaction. De Fina further states that identity can be anchored to an individual or a group. Meyer's (2003) model considers identity management. It is the first model to consider multiple-minority identities within one framework, unlike previous models (Cass, 1979; Coleman, 1982; Troiden, 1989) which only addressed one—sexual minority identity.

Intersectionality, a related-concept was introduced as a way to understand the impact of living with multiple-marginalized statuses (Hancock, 2007; Parent, DeBlaere, & Moradi,

2013). Proponents of the intersectionality perspective argued that different forms of social oppression (e.g., racism and heterosexism) do not act independently but rather "intersect" with one another. In contrast to an additive perspective that considers for example, female gender, race/ethnicity, and lesbian identity to be separate, independent, and summative. Intersectionality posits that individuals' multiple- minority identities interact in a synergistic way and can have multiplicative effects (Bowleg, 2008; Herek, 2000; Purdie-Vaughns & Eibach, 2008; Warner & Shields, 2013).

The importance of intersectionality is inherent in Meyer's (2003) minority stress model. Meyer's model suggests that lesbians of color potentially face unique and persistent stressors due to their membership in multiple-marginalized social groups hence increasing their vulnerability for depression (Bowleg, Burkholder, Teti, & Craig, 2008; Bowleg, Craig, & Burkholder, 2004; Rothblum, 1990). Previous studies have shown that depression rates are higher for SMW of color due to multiple-minority statuses (Matthews, Hughes, Johnson, Razzano, & Cassidy, 2002; Mays, Cochran, & Roeder, 2003).

The Relationships between Sexual Identity Disclosure and Depression

Research has shown that disclosure is positively associated with psychological well-being (Crawford, Allison, Zamboni, & Soto, 2002; Legate, Ryan, & Weinstein, 2011; Morris et al., 2001). For example, Morris et al. found that higher levels of outness were associated with lower levels of psychological distress (e.g., depression and anxiety). Similarly, Jordon and Deluty (1998) found that lesbians who disclosed their sexual identity more widely reported less anxiety and more positive affectivity and self-esteem than those who disclosed to fewer people. Conversely, disclosure may not always be beneficial. For example, individuals may fear what Meyer (2003) describes as distal factors in his model (e.g., fear of rejection, stigmatization, harassment, or violence) which in turn hinders disclosure (a proximal factor) (Comstock, 1991; LaSala, 2000; Ryan, Huebner, Diaz, & Sanchez, 2009).

Less is known about the relationship between sexual identity disclosure and depression among LGBTs of color, specifically lesbians because relatively few studies have included sufficient numbers of racial/ethnic minorities to permit comparisons across subgroups (Moradi, DeBlaere, & Huang, 2010). Crawford and colleagues (2002) examined African American men and sexual minority disclosure and found those who were openly gay and embraced their racial identity reported lower levels of psychological distress compared to those who were not openly gay. However, there may be factors that deter willingness to disclose a minority sexual identity among LGBTs of color (Akerlund & Cheung, 2000). For example, some racial/ethnic cultures have been reported to hold more conservative views regarding homosexuality than Whites (Herek & Gonzalez-Rivera, 2006; Mays, Cochran, & Rhue, 1993; Morales, 1989), which may contribute to lower rates of disclosure among LGBTs of color. This conservatism may cancel out any beneficial effects of disclose for decreasing depression risk among LGBTs of color compared to their White counterparts. Riley (2010) reported significant differences exist among racial/ethnic males who come out to parents, that the greatest cultural barriers existed for Asian/Pacific Islander males followed by African American and Latino females and males, and the least barriers by White females and males. This finding is consistent with other studies (Grov, Bimbi, Eanin,

& Parsons, 2006; Mustanski, Newcomb, & Garofalo, 2011; Rosario, Schrimsaw & Hunter, 2004). Ryan and colleagues (2009) found that Latino LGB young adults reported higher rates of family rejection following a minority sexual identity disclosure than their non-Latino White counterparts. They further found that negative family reactions to disclosure were associated with higher rates of depression and suicidality among Latinos compared to non-Latino Whites. Previous studies have shown that lesbians of color would rather conceal their sexual minority identity in order to maintain family harmony over living a life that allows them to be true to themselves (Bowleg et al., 2003; D'Augelli & Grossman, 2001; Merighi & Grimes, 2000; Parks et al., 2004; Ryan, 2003).

Specific Aims

Drawing on Meyer's minority stress model, we examined the relationship between sexual identity disclosure and depression among a sample of women with multiple-minority identities, more specifically, African American, Latina, and White women who self-identified as lesbians. We tested the following four hypotheses: (1) African American and Latina lesbians are less likely than White lesbians to disclose their sexual minority identity; (2) Compared to White lesbians, African American and Latina lesbians report higher rates of depression; (3) Higher levels of disclosure are associated with lower rates of depression; and (4) White lesbians who report higher levels of disclosure will show lower rates of depression; however, for African American or Latina lesbians higher levels of disclosure will not be associated with lower rates of depression.

Methods

Sampling and Recruitment

We conducted a secondary data analysis using two waves of data from the Chicago Health and Life Experiences of Women (CHLEW) study. Time 1 (T1) was collected in 2000–2001 and Time 2 (T2) in 2003–2004. We recruited participants using a broad range of recruitment methods including advertisements in local LGBT newspapers in Chicago and lesbian-related listservs. Additionally, we distributed flyers at locations frequented by lesbians, such as bookstores and lesbian cultural/social events. Recruitment strategies targeted women who have been underrepresented in previous studies of lesbian health: lesbians of color, older lesbians, and lesbians of lower socioeconomic status. The researchers collaborated with social organizations/agencies to recruit these particular groups. Study participants were informed that participation was voluntary and they could withdraw at any point. The University of Illinois at Chicago's Institutional Review Board approved this study.

Eligibility was determined during a brief telephone-screening survey-interview. Women were eligible if they self-identified as lesbian, were 18 or older, spoke English, and lived in the Chicago metropolitan area. Data were collected in face-to-face survey-interviews with 447 women at T1 and 384 women at T2 (85.9% response-rate). Trained female interviewers used Computer Assisted Personal Interviewing to administer the survey-interviews. We compensated participants for their time after the 90-minute survey-interviews. Sixty-three participants (14.1%) were lost to follow-up: 10 (2.2%) were deceased, 33 (7.4%) could not

be located, 10 (2.2%) declined, 9 (2.0%) were unable to continue for various reasons (e.g., schedule conflicts), and one transitioned from female-to-male.

Women were included in this study if they: participated in both T1 and T2 survey-interviews, self-identified as lesbian, and reported their race/ethnicity as African American, Latina, or White (*N*=351). Participants were excluded if they identified as bisexual (n=11) or "other" (n=2) or reported race/ethnicity as "other" (n=20 [e.g., Asian, Native American]).

Measures

All the predictor variables used in this study were from T1 and the outcome variable (depression) was from T2. We noted this in Table 1.

Depression

We assessed depression using questions from the Diagnostic Interview Schedule (DIS) (Robins, Helzer, Croughan, & Ratcliff, 1981). Although Robins et al. based the DIS on diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM-III), we developed a depression measure that more closely resembles DSM-V. The criteria used in our study required two or more weeks of feeling sad, blue, or depressed or losing interest or pleasure in things they usually cared about, plus four or more depressive symptoms that occurred simultaneously for two weeks or longer. The symptoms included decreased appetite; unexplained weight loss or gain; sleeping problems (too much or too little); fatigue; talking or moving unusually slowly; restlessness or pacing; reduced interest in sex; feelings of worthlessness, sinfulness, or guilt; and thoughts of death. We assessed impairment by asking, "How much did (the episode[s]) interfere with your everyday life/ activities?" The response options ranged from 0=not at all to 5=a great deal: we further recoded the responses to 0=No (1-2) and 1=Yes (3-5) to match the algorithm used to create the major depressive episode (MDE) variable based on DSM-V criteria (APA, 2013). Participants who reported depressed mood/loss of interest, four or more symptoms that lasted for two weeks or longer, and who reported impairment from the symptoms, were classified as having a depression. We did not include exclusionary criteria (substance use and general medical condition) and recognize the limitations as a diagnostic measure; thus we will refer to the measure as depression (rather than MDE) throughout the paper.

We asked participants the same battery of DIS questions at T1 and T2. Participants were asked about lifetime depression that occurred prior to their survey-interview at T1 and were asked again about depression at T2 (since their last survey-interview). This allowed us to control for depression that occurred prior to T1 in all of our statistical models thus capturing depression that occurred between T1 and T2.

Disclosure of Sexual Minority Identity

Age of First Disclosure—To assess age that participant first disclosed their minority sexual identity, we asked, "How old were you when you first told someone you were lesbian/gay?" The range was from 6–70 years old.

Our disclosure measures were based on Herek, Cogan, Gillis, and Glunt's (1998) scale. We assessed the extent to which participants were "out" to family members (mother, father, and siblings) and nonfamily (heterosexual friends and acquaintances, work/school colleagues, and health providers).

Parental Disclosure—Level of disclosure to either parent was assessed separately by asking: "Does your mother/father know that you are a lesbian?" Responses were coded as 1=Yes, mother/father knows or 0=No, mother/father does not know. Responses from 19 participants were coded as missing because they reported their mother (n=2) or father (n=10) were absent or deceased when they came out, or who did not provide a response for disclosure to father (n=7), thus excluded from analyses that included these variables. Participants who did not recall disclosing to their mother (n=3) or father (n=2) were also coded as missing and excluded from analyses because a parent's reaction to disclosure is generally recalled whether it was positive or negative (Savin-Williams & Dubé, 1998; Williamson, 1998).

Sibling Disclosure—Participants who reported having siblings were asked, "How many of your (brothers/sisters) know that you are a lesbian?" If any of the siblings were aware, it was coded as 1=At least one sibling knows; otherwise, 0=No sibling knows. Those who did not have siblings (n=30) were coded as missing and excluded from any sibling analyses to distinguish them from those who had not disclosed to a sibling. Our rationale for combining siblings was based on the belief that participants will disclose to the sibling they feel closest to regardless of the sibling's gender (Savin-Williams, 1998).

Nonfamily Disclosure—For disclosure to nonfamily, participants were asked, "How much would you say you are out of the closet to each of the following people?" (1) current heterosexual friends, (2) casual heterosexual acquaintances, (3) co-workers, (4) work supervisors, (5) people at school, and (6) health care providers." Response options were on a 10-point Likert scale ranging from 0 (none of them) to 9 (all of them). We calculated an average for the six-items where higher scores represented greater level of disclosure. We eliminated one case due to missing data. This six-item scale showed good internal consistency (alpha=.83).

Race/Ethnicity

Participants were asked, "Which of the following categories best describes your race?" (a) White; (b) Black/African American; (c) Asian/Pacific Islander; (d) Eskimo; (e) Aleut; or (f) Other. Participants were then asked, "Are you of Hispanic or Latino origin/descent?" (1=Yes/0=No). Participants who responded "Yes" were asked to identify their ethnicity. Given the small subgroup-samples (9.7% Mexican or Mexican American, 2.1% Puerto Rican, 1% Cuban, and 3.7% other) we combined Latinas into one group. There were six participants who reported Race as "Other" and in their verbatim responses indicated they were Latina/White (n=3) or Latina/African American (n=3), we included these cases in the Latina group because they did not categorize themselves as White or African American for Race. We restricted the analyses to African American, Latina, and White women. We created dummy variables for African American and Latina to compare them with the

reference group (White). We replicated the final logistic model using Latinas as the reference group to examine if they differed from African Americans.

Control Variables

We controlled for variables known to influence depression in all multivariate analyses. We included age (in years), social network size (i.e., how many people can participants discuss personal problems, excluding partner), education, employment status, relationship status, and presence of lifetime depression.

Data Analysis

To summarize demographic characteristics of the three racial/ethnic groups, we used correlations and contingency tables (i.e., chi-square tests) for categorical variables. We employed oneway analysis of variance (ANOVA) for continuous variables and conducted post hoc comparisons using the Bonferroni procedure to adjust for multiple comparisons. We interpreted *p*-values .05 as significant for all analyses.

We conducted logistic regression analyses to examine the dichotomous outcomes (family disclosure and depression) and multiple regression analysis to examine the continuous measure of disclosure to nonfamily. We report odds ratios and 95% confidence intervals along with several model-fit statistics, including full model results, chi-square statistics, and Nagelkerke (pseudo R^2) for the logistic regression analyses. Similarly, we reported fit statistics and R^2 values for the multiple regression analysis. Our data met the basic assumptions required for multivariate analyses.

Results

Sample Characteristics

Sample characteristics for the total sample (N=351) and by race/ethnicity are summarized in Table 1. Just over one half (53.8%) of the sample was White; 26.5% were African American, and 19.7% Latina. The overall sample had relatively high levels of education (60% had a bachelor's degree or higher), but level of education differed significantly among the three groups: 75.1% of the White participants compared with 35.5% of the African American and 50.7% of the Latina participants had a bachelor's or higher ($X^2=43.73$, p<. 001). The majority of participants (81.8%) were employed (85.7% of White, 75.3% of African American, and 79.7% of Latina lesbians, $[X^2=4.81, p=ns]$). White lesbians were more likely to be in a committed relationship (74.1%), followed by African American (64.5%) then Latina lesbians (59.4%) (X^2 =6.05, p < .05). The three racial/ethnic groups differed significantly in social network size (F [2, 348]=11.15, p<.001), with Whites reporting larger averages of people they can discuss personal problems to (M=4.71), compared to Latinas (M=3.59) and African Americans (M=3.32). Finally, ANOVA results for age of first disclosure differed significantly by race/ethnicity (F [2, 343]=2.95, p<.05). The mean age of first disclosure for Whites was 25.23 (SD 9.58), African Americans was 22.77 (SD 6.95) and Latinas was 23.24 (SD 8.22).

Racial/Ethnic Differences in Sexual Minority Identity Disclosure

The racial/ethnic groups did not differ in disclosure to either parent in the bivariate comparisons (Table 1) or logistic regression models after controlling for study covariates (Table 2). However, bivariate findings indicated a significant association between race/ethnicity and disclosure to a sibling ($X^2=11.24$, p<.01). Almost all White lesbians (96.0%) compared with 87.5% of African American and 83.6% of Latina lesbians had disclosed to at least one sibling. However, after controlling for study covariates, the logistic regression results for race/ethnicity were not significantly different for sibling disclosure (Table 2). Additionally, we examined age of first disclosure, which was significantly associated with disclosure to family and nonfamily individuals. For each group (mother, father, sibling, or nonfamily), women's disclosure at an older age was associated with a lower likelihood that family and nonfamily members would be aware of their sexual minority identity. Other significant results included relationship status, where those who were in committed relationships were more likely to have disclosed to their mother and a sibling. Women reporting larger social networks were also more likely to have disclosed to their father and a sibling, and to nonfamily individuals.

ANOVA results also showed that disclosure to nonfamily individuals differed significantly by race/ethnicity (F [2, 347]=8.11, p<.001). The post hoc tests showed significant differences for nonfamily disclosure between African American and White lesbians (p<.001) and between African American and Latina lesbians (p<.05), with Whites (M=6.69; SD=2.49) and Latinas (M=6.42; SD=2.2) reporting greater nonfamily disclosure than did African Americans (M=5.38; SD=3.01) (see Table 1). After controlling for covariates, multiple regression analyses confirmed that African American lesbians were less likely than White lesbians to disclose to nonfamily individuals (β =-.17, p<.01) (Table 2—Model 4). However, Latinas were comparable in nonfamily disclosure to Whites. These findings partially supported hypothesis 1.

Racial/Ethnic Differences in Depression

In examining depression, the univariate results showed slightly more than one-half (54.1%) of the sample reported a history of lifetime depression at T1 and more than one-third (35.9%) reported depression at T2. However, rates of depression at T1 did not differ significantly based on race/ethnicity but did at T2 (X^2 =7.00, p<.05) (see Table 1). We examined race/ethnicity and depression using logistic regression (see Table 3) and the results were not consistent with the bivariate findings once we controlled for baseline levels of depression and other covariates. In Model 1 (Table 3), African Americans compared to Whites were more likely to report depression (OR=2.21, p<.05). However, Latina and White lesbians did not differ from each other. These results partially supported hypothesis 2.

In Table 3—Model 2, we tested hypothesis 3 by examining the relationship between disclosure and depression. Results indicate disclosure to a sibling was a significant predictor for reporting less depression (OR=.33, p<.05) in this sample, which partially supported hypothesis 3. However, there were no significant differences in the relationships between disclosure to mother, father, or nonfamily and depression. In the next model (3), we included race/ethnicity to examine the main effects on depression when controlling for

covariates, results showed no significant differences for race/ethnicity for any of the disclosure variables. We conducted separate interaction analyses for each variable and only nonfamily disclosure showed a significant interaction effect therefore, we used this variable in the final model. In Model 4, we examined the interaction effects of race/ethnicity on the relationship between nonfamily disclosure and depression. We found the interaction of nonfamily disclosure by Latina identity was statistically significant, as illustrated in Figure 1. More specifically the slopes were significantly different (OR=0.58, p<.001) between Latina and White lesbians. Latinas versus Whites who disclosed to a broader range of nonfamily individuals were less likely to report depression. Overall, Latinas showed the highest rates of depression; however, as their level of disclosure to nonfamily individuals increased, their rates of depression decreased relative to Whites. African American and White lesbians were not significantly different from one another. These results partially supported hypothesis 4.

As a further test of racial/ethnic differences, we reanalyzed the final model (results available from authors). We tested the relationship of nonfamily disclosure and depression using Latinas as the reference group and compared them with African Americans. Relative to Latinas, African Americans (OR=1.52, p<.01) who disclosed to nonfamily individuals were significantly more likely to report depression. Reviewing the results from Model 4 (above) together with these show the effect of disclosure to nonfamily individuals was similar for both African American and White lesbians relative to their Latina counterparts.

Discussion

Disclosure is a unique stressor that LGBT individuals confront throughout their lives. Researchers have reported the benefits as well as the negative effects disclosure has on some LGBT individuals' mental health. In this study, we used the minority stress framework to examine women with multiple-marginalized identities (gender, race/ethnicity, and sexual minority identity). More specifically, we examined the relationship between sexual minority identity disclosure and depression in a sample of African American, Latina, and White lesbians. We followed Cuádraz and Uttal's (1999) and Bowleg's (2008) recommendations by first examining the direct effects for the relationships across all the study variables then using a multiplicative approach that examined the interaction effects of race/ethnicity on the relationship between sexual identity disclosure and depression. By investigating these additional relationships, we found that African American (versus White) lesbians were more likely to report depression. Additionally, sibling and nonfamily disclosure played a larger role in our findings. The most impressive finding of this study was that Latina lesbians were less likely to report depression when they disclosed to nonfamily individuals compared to their White and African American counterparts. This finding is important because Latinas were the least likely to disclose to family members and more likely to report depression compared to Whites and African Americans.

The majority of what we know about self-disclosure is based on predominantly-White lesbian samples (Jordan & Deluty, 1998; Lewis, Derlega, Griffen, & Krowinski, 2003). Using a variety of outreach efforts, we successfully recruited a sample of non-White lesbians for this study, which allowed racial/ethnic comparisons. The number of women of

color participating in most studies of sexual minority women's health are small, often necessitating combining women from various racial/ethnic backgrounds into a single group for comparisons (e.g., subgroup analyses of "White" and non-White" participants). Others have criticized this approach, citing important differences between women of color in terms of culture, socio-economic factors, and historical experiences in the U.S. (Anthony, 2012; Myers, 2009). Indeed, in our study we observed important differences between African American and Latina lesbians on patterns of disclosure that would have been obscured had these groups been combined as "lesbians of color."

The first goal of this study was to examine whether disclosure differed by race/ethnicity. We hypothesized that African Americans and Latinas, compared to Whites, would be less likely to disclose their sexual minority identity to others. The three racial/ethnic groups in our sample were equally likely to disclose to their mother, father, or a sibling. This finding may be attributed to our use of a non-probability sample and eligibility was based on self-identifying as a lesbian. Consequently, our participants were relatively out to others which limited the variance across racial/ethnic groups. These results differed from Maguen, Floyd, Bakeman, and Armistead (2002), who reported that White gay/lesbian adolescents were more likely than African American, Latino, and Asian adolescents to disclose to either parent. Similarly, Grov et al. (2006) found that LGB adults of color were less likely to be out to parents compared to their White counterparts. Despite the similar age means to the adults in Grov et al.'s study, our results may have differed from theirs because they assessed disclosure to one's "parents" (combined) where we assessed each parent separately.

We did, however, observe differences by race/ethnicity in disclosure to nonfamily individuals. African American lesbians were less likely to disclose to nonfamily compared to White lesbians. Despite the mean age difference, our results for African Americans were similar to Rosario's et al., (2004). They reported African American lesbian/gay adolescents were less comfortable with others knowing about their sexual minority identity and had disclosed to fewer nonfamily individuals than White or Latino lesbian/gay adolescents. Our racial/ethnic difference in disclosure would have been concealed had we used a composite (combining family and nonfamily) measure of disclosure.

The separate assessment of self-identity disclosure for three different categories of family members and nonfamily is a strength of this study. Majority of previous studies examining the relationship between sexual identity disclosure and depression used a composite measure for disclosure which potentially masks the importance of disclosing to different people (e.g., a mother versus a doctor) (Jordan & Deluty, 1998; Morris et al., 2001).

Our second aim was to examine racial/ethnic differences in rates of depression. We hypothesized that, compared to White lesbians, depression would be higher among African American and Latina lesbians. Consistent with previous studies (Bostwick et al., 2010; Chae et al., 2010; Cochran, Mays, Alegria, Ortega, & Takeuchi, 2007; Mays et al., 2003), overall rates of depression were high among study participants. Slightly more than one-half (54.1%) of the sample reported a history of depression at T1 and more than one-third (35.9%) reported depression at T2. Consistent with the study hypothesis and with findings from previous studies involving sexual minority women of color (Mays et al., 2003); rates of

depression did differ significantly at T2 with African Americans more likely to report depression (versus Whites) but not for Latinas versus Whites. Our findings differed from national statistics that provide evidence of racial/ethnic differences in depressive disorders or symptomatology, which generally report higher rates of depression among Latinos (Alegria et al., 2008) and lower among African Americans both compared to Whites (González et al., 2010; Williams et al., 2007). The fact that we did not find similar racial/ethnic differences in depression as observed in the general population may be partially explained by the experiences intersectionality African American lesbians. That is, African American lesbians (versus African American women in the general population) may have higher rates of depression due to the combined influences of sexism, racism, and heterosexism of the larger society. Additional research is needed to better understand predictors of depression among African American women based on sexual orientation.

Contrary to study hypotheses and the extant literature, we did not find a significant association between sexual minority identity disclosure and depression for our third hypothesis. Previously, researchers have reported a fairly consistent pattern of findings indicating that level of disclosure is protective against depressive distress among lesbians (Ayala & Coleman, 2000; DiPlacido, 1998; Jordan & Deluty, 1998; Morris et al., 2001). One possible explanation for the difference in our results compared to others who have reported an inverse relationship between disclosure and depression may be that the cited studies used a composite variable to assess disclosure. The disadvantage of a composite variable is that the scores ignore the possibility that some components (e.g., disclosure to nonfamily or sibling) may contribute more to the overall results of a composite variable (Freemantel, Calvert, Wood, Eastaugh, & Griffin, 2003; Rowe, 2002). One study using a composite measure (Oetjen & Rothblum, 2000) did not find a significant relationship between disclosure and depression. Even when Oetjen and Rothblum examined disclosure to groups separately (e.g., family or friends) using post hoc tests, they confirmed there was no association between disclosure and depression.

One common factor among previous studies reporting a relationships between disclosure and depression is that their participants were predominantly-White, whereas our sample was almost half (46.2%) lesbians of color, and we found racial/ethnic differences for the relationship for nonfamily disclosure and depression, specifically among Latinas (versus Whites or African Americans). Perhaps the sample composition contributed to the differences in results, a possibility that warrants further examination.

Addressing our fourth hypothesis, an important finding emerged from the current study. For Latina lesbians, compared to White or African American lesbians, disclosure to nonfamily individuals was associated with less depression. This finding is important because Latina lesbians were the least likely to disclose to family members *and* reported a slightly higher percentage of depression at T2. This result for disclosure to nonfamily among Latina lesbians was unanticipated. In fact, we had postulated that the positive benefits of disclosure among Latina or African American lesbians would be attenuated by negative attitudes toward homosexuality within their family and ethnic community. Lower rates of disclosure to family members among Latinas, compared to Whites or African Americans in our study, may reflect reluctance to sacrifice familial connections or cultural traditions. Latina lesbians

may have felt it was less threatening to disclose to nonfamily individuals than risk possible familial loss (Ryan et al., 2009). Family and ethnic communities are particularly important to racial/ethnic minorities because of the shared experiences of oppression they collectively attempt to overcome (Fukuyama & Ferguson, 2000). This finding partially supported our hypothesis. This final analysis allowed us to examine multiple-minority identities simultaneously in the relationship between disclosure and depression as suggested by Bowleg (2008) within Meyer's minority stress framework. We were able to specifically examine the role race/ethnicity played among a sample of lesbian women.

Our findings differed from Morris et al. (2001) who did not find a significant relationship between level of outness and psychological distress among Latina lesbians. This difference may be related to measures they used to assess depression and disclosure. Morris and colleagues combined three dimensions of outness to create a composite variable that included disclosure to family, heterosexual friends, lesbian/gay friends, and coworkers; attitudinal items; and a behavioral item. Composite disclosure variables do not take into account the strong familial ties in many ethnic groups (Espin, 1993; Greene, 2000) that may have masked racial/ethnic differences in their study. Moreover, researchers who use these types of composite disclosure variables appear to assume an equal level of importance across all individuals one can disclose their sexual minority identity. Given the diversity and the increasing visibility of the lesbian population, it is important to examine the components of disclosure (e.g., family and nonfamily) separately, especially given our findings of racial/ethnic differences in disclosure to nonfamily individuals.

Our study also highlighted differences between Latina and African American lesbians. Our results indicated an inverse relationship between nonfamily disclosure and depression among Latina lesbians but not among African American lesbians. One explanation may be that African Americans are more likely than Latinos to experience various forms of discrimination (Stuber, Galea, Ahern, Blaney, & Fuller, 2003), it is reasonable to assume African American lesbians may be more reluctant to disclose a stigmatized identity that may be invisible to others in order to abate further discrimination.

Study Limitations and Recommendations for Future Research

Despite the strengths of our study, there were limitations that we should note. The data were collected in 2001 and 2004 and since then many positive changes have occurred in the U.S. in support of LGBT issues: several states legalized—civil unions (2000) or same-sex marriages (2004), Don't Ask, Don't Tell was repelled (2010), and Supreme Court ruled in 2013 that the Defense of Marriage Act was unconstitutional to name a few (Infoplease, 2013). These positive changes might make it easier for individuals to come out as LGBT in today's society and at younger ages. But there are still valid reasons (e.g., employment and/or promotion) why some individuals would prefer to conceal their sexual minority identity (Legate, Ryan, & Weinstein, 2011). Harper and Schneider (2003) stated that oppression, discrimination, and harassment are known to have negative effects on the mental health of the LGBT populations in spite of the valid reasons for self-concealment (e.g., in the workplace). Remaining in the "closet" has consequences—while the "closet" is safe it has its own problems—the increased stress of hiding (Harper & Schneider, 2003) and

potential risk of depression (Meyer, 2003). Another limitation is the cross-sectional design; previous studies have reported that sexual identity can change over time and should not be viewed as a "fixed" identity (Diamond, 2000; 2003), moreover, identity labels are becoming less important to individuals (Riley, 2010). Because individuals may change their sexual identity over time or prefer not to use labels, future studies could benefit from a non-restrictive labeling schema for sexual identity particularly as more studies are showing that sexual identity labels may not be the most reliable assessment for identifying a sexual minority individual (Diamond, 2000). Additionally, we recognize that our Latina group is not homogeneous, but our sample sizes were too small to conduct within (e.g., Mexican, Puerto Rican) ethnic group analyses. Finally, it is also important to note that relatively small amounts of variability were accounted for by the variables in our models, suggesting that other factors beyond those used here to test the minority stress model also need to be considered when examining disclosure and depression.

The final recommendation we would suggest is expanding the assessment of disclosure so that it includes additional dimensions. These dimensions should include assessment for levels of acceptance, tolerance, and positive and negative reactions to disclosure. These additional dimensions may give researchers a better understanding of the association between disclosure and depression among racial/ethnic minority groups where culture, ethnic traditions, and collectivist ideology may influence how lesbians of color negotiate whether or not to disclose their sexual minority identity. Some racial/ethnic families may only tolerate a lesbian's disclosure news (Espin 1987; Green, 1994), which does not necessarily translate to acceptance hence adversely affecting her mental well-being.

Conclusion

With the Latino and African American populations in the U.S. rapidly growing, it is reasonable to expect that the Latina and African American lesbian population will also increase. It is important that we gain a better understanding of why Latina or African American lesbians may experience difficulty disclosing to certain individuals. This study provides a starting point for examining lesbians living with multiple-minority identities and how additional stressors might affect how lesbians of color deal with their multiple and often conflicting identities within the family, ethnic and lesbian communities, and society.

The consistent high rate of depression among participants in this study and previous studies emphasizes the need to develop interventions to reduce depression among lesbians. Since disclosure to certain individuals appears to be associated with less depression in this study, perhaps awareness campaigns and support groups can be used for optimizing additional support for lesbians of color. Despite the improving attitudes toward same-sex relationships in the U.S., we must be mindful that disclosure can still carry both benefits and risks for some lesbians. Thus, careful consideration is needed when helping lesbians and specifically, lesbians of color make decisions about when and to whom they should disclose their sexual minority identity.

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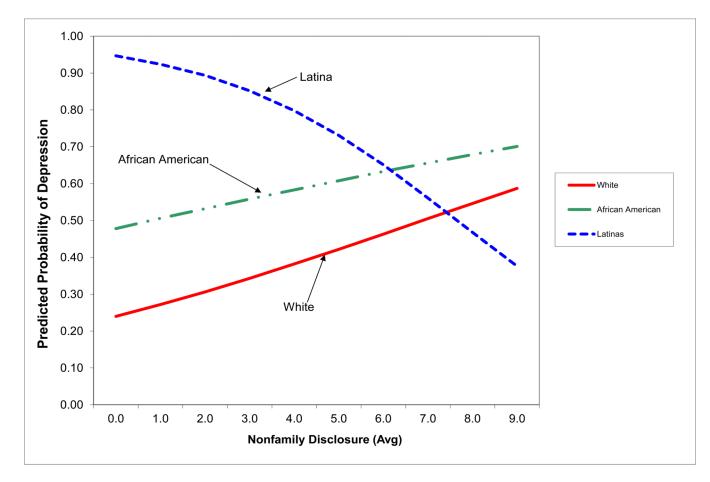


Figure 1. Interaction Effects of Nonfamily Disclosure by Race/Ethnicity on Depression This figure adjusted for the six covariates, four disclosure variables, and two dummy variables representing race (African American and Latina), using White lesbians as the reference group. The x-axis represents the level of disclosure to nonfamily members based on a scale range of 0 to 9. The y-axis represents the predicted probability of depression ranging from 0 to 1. The slopes show the interaction effects of nonfamily disclosure by race/ethnicity on depression at Time 2.

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Table 1

Sample Characteristics for Entire Sample and by Race/Ethnicity

| Control variables (11) | San San | Total Sample $(N = 351^d)$ | (n = | White (n = 189) | Afri Ame (n = | African American (n = 93) | Lat (n = | Latina (n = 69) | |
|---------------------------------------|------------|----------------------------|-------|-----------------|---------------------|---------------------------------|-------------|--------------------|---------|
| | M | (QS) | М | (QS) | M | (QS) | М | (QS) | p-value |
| Age (range 18–83) | 38.43 | (11.87) | 41.27 | (13.15) | 35.74 | (9.47) | 34.26 | (8.70) | .001 |
| Age of first disclosure (range 6–70) | 24.20 | (8.76) | 25.23 | (9.58) | 22.77 | (6.95) | 23.24 | (8.22) | .05 |
| | u^a | (%) | n^a | (%) | u^a | (%) | n^a | (%) | p-value |
| Education | | | | | | | | | |
| No degree (high school/some college) | 141 | (40.2) | 47 | (24.9) | 09 | (64.5) | 34 | (49.3) | .001 |
| Degree (BA/BS, graduate/professional) | 210 | (59.8) | 142 | (75.1) | 33 | (35.5) | 35 | (50.7) | |
| Employment | | | | | | | | | |
| Unemployed | 64 | (18.2) | 27 | (14.3) | 23 | (24.7) | 14 | (20.3) | us |
| Employed | 287 | (81.8) | 162 | (85.7) | 70 | (75.3) | 55 | (79.7) | |
| Relationship status | | | | | | | | | |
| Not in committed relationship | 110 | (31.3) | 49 | (25.9) | 33 | (35.5) | 28 | (40.6) | .048 |
| Committed relationship | 241 | (68.7) | 140 | (74.1) | 09 | (64.5) | 41 | (59.4) | |
| Lifetime depression | | | | | | | | | |
| No, lifetime depression | 159 | (45.3) | 80 | (42.3) | 49 | (53.8) | 30 | (43.5) | us |
| Yes, lifetime depression | 190 | (54.1) | 109 | (57.7) | 42 | (46.2) | 39 | (56.5) | |
| | M | (QS) | M | (QS) | M | (QS) | M | (QS) | p-value |
| Social network size (range 0–11) | 4.14 | (2.62) | 4.71 | (2.85) | 3.32 | (2.31) | 3.59 | (1.90) | .001 |
| Independent variables $({ m Tl}^b)$ | u^a | (%) | u^a | (%) | u^a | (%) | u^a | (%) | p-value |
| Disclosure | | | | | | | | | |
| Falliny Mother knows | <i>Z77</i> | (78.9) | 149 | (79.3) | 75 | (80.6) | 53 | (77.9) | us |
| Father knows | 205 | (58.4) | 118 | (63.8) | 20 | (58.8) | 37 | (57.8) | Su |

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| Control Variables $(\mathrm{TI}^{m{b}})$ | Sar (N = N) | Total Sample $(N = 351^a)$ | (n = | White (n = 189) | African American (n = 93) | African American (n = 93) | Lat (n = | Latina (n = 69) | |
|---|----------------|----------------------------|-------|-----------------|---------------------------------|---------------------------------|-------------|------------------------|-------------------|
| Sibling (at least one sibling knows) | 293 | 293 (83.5) 167 (96.0) | 167 | (0.96) | 70 | 70 (87.5) | 56 | 56 (83.6) | .004 |
| | M | M (SD) | M | M (SD) | M | (SD) | | (QS) | M (SD) p-value |
| Nonfamily (range 0–9) | 6.29 | 6.29 (2.64) 6.69 (2.49) | 69.9 | (2.49) | | 5.38 (3.02) 6.42 (2.20) | 6.42 | (2.20) | .001 |
| Dependent variables (T2 ^c) | u^a | <i>n</i> a (%) | u^a | <i>n</i> a (%) | u^a | n^a (%) | | (%) | na (%) p -value |
| Depression No, no depression since last survey-interview Yes, depression since last interview | 225 126 | 225 (64.1) 126 (35.9) | 133 | (70.4) | 53 | 53 (57.0) 40 (43.0) | 39 | 39 (56.5) 30 (43.5) | .030 |

 $^{^{}a}$ Number of valid responses for variables,

 $b_{T1} = Time 1 (2001),$ $c_{T2} = Time 2 (2004).$

p < .05;** p < .01;** p < .01;***

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Table 2

Logistic and Multiple Regression Models Examining Effects of Participant Characteristics on Family and Nonfamily Disclosure

| Hypothesis I Independent Variables | M Moth | Model 1 Mother knows | M Fath | Model 2 Father knows | Sibli | Model 3 Sibling knows | | M Nonfar | Model 4 Nonfamily knows | SA |
|---------------------------------------|------------------|------------------------------|-----------------|------------------------------|------------------|------------------------------|-------|-------------|-------------------------------|---------|
| | Odds Ra | Odds Ratio (95% CI) | Odds Ra | Odds Ratio (95% CI) | Odds Ra | Odds Ratio (95% CI) | В | SE B | ھ | t |
| Age | 1.00 | (0.97, 1.03) | 0.97 | (0.96, 1.00) | 1.09** | (1.02, 1.16) | 0.00 | 0.01 | 0.01 | 0.10 |
| Age of first disclosure | 0.93 | (0.90, 0.97) | 0.97* | (0.94, 1.00) | 0.91 | (0.84, 0.97) | -0.05 | 0.02 | -0.16 | -2.74** |
| Education | 0.45* | (0.23, 0.89) | 0.73 | (0.43, 1.24) | 9.02 | (0.24, 1.77) | -0.19 | 0.30 | -0.04 | -0.63 |
| Employment | 1.38 | (0.63, 3.01) | 1.33 | (0.72, 2.45) | 1.52 | (0.53, 4.47) | -0.07 | 0.36 | -0.01 | -0.20 |
| Relationship status | 2.68*** | (1.47, 4.88) | 1.32 | (0.79, 2.19) | 2.93* | (1.17, 7.32) | 0.34 | 0.29 | 90.0 | 1.17 |
| Social network | 1.02 | (0.91, 1.15) | 1.10* | (1.00, 1.21) | 1.31* | (1.01, 1.68) | 0.26 | 0.05 | 0.26 | 4.92*** |
| Lifetime depression | 1.32 | (0.74, 2.36) | 1.07 | (0.67, 1.71) | 1.66 | (0.67, 4.10) | -0.01 | 0.27 | -0.00 | -0.05 |
| Race | | | | | | | | | | |
| White | 1 | I | | I | I | I | | | | |
| African American | 0.89 | (0.41, 1.91) | 0.82 | (0.45, 1.50) | 0.51 | (0.15, 1.75) | -1.01 | 0.35 | -0.17 | -2.89** |
| Latina | 0.71 | (0.33, 1.54) | 99.0 | (0.35, 1.25) | 0.35 | (0.12, 1.08) | -0.10 | 0.37 | -0.02 | -0.27 |
| Intercept | | 2.60 | | 1.57 | | 0.54 | | | 6.59 | |
| Models | χ^2 (9, 342 | χ^2 (9, 342) = 39.13**, | χ^2 (9, 32 | χ^2 (9, 328) = 22.62**, | χ^2 (9, 31, | χ^2 (9, 314) = 33.16*** | F(9) | 9, 333) = | F(9, 333) = 5.60, p < .001. | .001. |
| Nagelkerke (pseudo R^2) | pnəsa) | (pseudo R^2 .171) |) (psend | (pseudo R^2 .091) | nesa) | (pseudo R^2 , 235) | 7 | ₹ .13: A | R^2 .13; Adjusted R^2 .11 | 2.11 |

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

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Table 3

Logistic Regression Models Examining Effects of Sexual Identity Disclosure on Depression

| | | | | Dep | Depression | | | |
|--|---------------------------|-------------------------|----------------------|----------------------------|----------------------|----------------------------|--------------------------|----------------------------|
| | | Main Effe | Main Effect Models | | | Interaction | Interaction Effect Model | |
| Models addressing hypotheses | Moc Hypot | Model 1 Hypothesis 2 | Moc Hypot | Model 2 Hypothesis 3 | Mod | Model 3 | Mc Hypo | Model 4 Hypothesis 4 |
| Independent and moderator variables | Odds ratio | 95% CI | Odds ratio | 95% CI | Odds ratio | 95% CI | Odds ratio | 95% CI |
| Age | 1.00 | (0.97, 1.02) | 1.00 | (0.97, 1.03) | 1.01 | (0.97, 1.03) | 1.01 | (0.98, 1.03) |
| Age of first disclosure | 66.0 | (0.96, 1.02) | 0.97 | (0.94, 1.01) | 76.0 | (0.94, 1.01) | 76.0 | (0.93, 1.00) |
| Education | 0.75 | (0.44, 1.27) | 0.51* | (0.29, 0.91) | 0.57 | (0.32, 1.04) | 0.53* | (0.29, 0.97) |
| Employment | 1.52 | (0.80, 2.89) | 1.45 | (0.71, 2.95) | 1.50 | (0.73, 3.06) | 1.56 | (0.75, 3.27) |
| Relationship status | 0.82 | (0.49, 1.37) | 0.84 | (0.48, 1.47) | 0.89 | (0.50, 1.59) | 0.87 | (0.48, 1.58) |
| Social network | 0.99 | (0.90, 1.09) | 86.0 | (0.89, 1.09) | 1.00 | (0.91, 1.10) | 0.97 | (0.88, 1.08) |
| Lifetime depression | 4.88*** | (2.90, 8.21) | 4.42 *** | (2.54, 7.67) | 4.84** | (2.74, 8.57) | 5.32 *** | (2.94, 9.64) |
| Race | | | | | | | | |
| White | I | I | I | I | I | I | I | I |
| African American (AA) | 2.21* | (1.18, 4.11) | I | 1 | 1.83 | (0.91, 3.69) | 2.90 | (0.55, 15.20) |
| Latina (L) | 1.69 | (0.88, 3.23) | l | I | 1.68 | (0.84, 3.36) | 56.47*** | (5.88, 542.07) |
| Disclosure | | | | | | | | |
| Mother knows | | | 0.74 | (0.34, 1.59) | 0.71 | (0.33, 1.54) | 89.0 | (0.30, 1.48) |
| Father knows | | | 0.70 | (0.38, 1.27) | 0.72 | (0.40, 1.31) | 89.0 | (0.36, 1.26) |
| Sibling knows | | | 0.33* | (0.11, 0.99) | 0.34 | (0.11, 1.05) | 0.32* | (0.10, 1.00) |
| Nonfamily knows | | | 1.04 | (0.93, 1.17) | 1.05 | (0.93, 1.18) | 1.18* | (0.98, 1.40) |
| $AA \times Nonfamily\ knows$ | | | | | | | 0.94 | (0.74, 1.20) |
| $L \times Nonfamily knows$ | | | | | | | 0.58*** | (0.42, 0.81) |
| Intercept | (-1.48) | | (0.90) | | (1.37) | | (-0.40) | |
| Model | X^2 (9, N=344)=52.76*** | !)=52.76*** | X^2 (11, N=29 | X^2 (11, N=298)=49.27*** | X^2 (13, N=29 | X^2 (13, N=298)=53.00*** | X^2 (15, N=29 | X^2 (15, N=298)=55.99*** |
| Nagelkerke (pseudo R^2) | $(pseudoR^2) = .195$ | .195 | $(pseudoR^2) = .208$ | :.208 | $(pseudoR^2) = .222$ | .222 | $(pseudoR^2) = .231$ | .231 |

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$$p < .05,$$

**

 $p < .01;$

 $p < .01;$
