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Minority Stress Experiences and Psychological Well-Being: The Impact of Support from and Connection to Social Networks within the Los Angeles House and Ball Communities

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Abstract

African American young men who have sex with men (AAYMSM) from the House and Ball communities are at high risk for HIV infection. Because these communities are not only sources of risk, but also support for AAYMSM, researchers must also consider the resources these communities possess. This knowledge will assist in the formulation of more effective prevention strategies and intervention approaches. Using Minority Stress Theory as a framework, the current study illustrates the impact minority stress has on the psychological well-being of a sample of MSM from the Los Angeles House and Ball communities and investigates how these factors affect the relationship between minority stress and psychological well-being. Surveys were administered to participants over the course of a year. Structural equation modeling was used to estimate a model of the associations between minority stressors, support, connection to social network, and psychological well-being/distress (N=233). Results indicated significant associations between different sources of minority stress, including distal minority stress (e.g., racism, homophobia), gay identification, and internalized homophobia. Minority stressors were in turn significantly associated with greater distress. However, greater instrumental support significantly reduced the effects of distal minority stress on distress. Greater connection to social network also significantly reduced stress associated with gay identification on distress. Findings captured the diverse sources of minority stress faced by this population and how these stressors are interrelated to impact mental health. Results also illustrate how support from and connection to social networks can reduce the negative impact of minority stress experiences.

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Keywords

House and Ball; African American YMSM; minority stress; psychological well-being; social support

Members of multiple stigmatized minority groups (e.g., sexual and racial/ethnic minority), such as African American young men who have sex with men (AAYMSM), may be exposed to a wide array of stressors that can impact their mental health, well-being, and social functioning (Meyer, 2003). These stressors, such as abuse, violence, homophobia, and discrimination, collectively called minority stress, can be powerful antecedents to poor mental health and HIV risk-taking for AAYMSM (Carballo-Dieguez & Dolezal, 1995; Fields, Malebranche, & Feist-Price, 2008; Hightow-Weidman et al., 2011). While there is clear evidence of the negative mental health impact of minority stress among lesbian, gay, and bisexual (LGB) youth in general (Dragowski, Halkitis, Grossman, & D'Augelli, 2011; Hatzenbuehler, 2011; McCallum & McLaren, 2011), less is understood about how these stressors affect AAYMSM specifically.

Minority Stress and its Impact on AAYMSM

Regardless of minority status, individuals can be exposed to a wide array of stressors. Minority stress refers to stressors that are related to one's minority status such as racial/ethnic minority and sexual-minority individuals that stem from stigma and prejudice (Meyer, 2003). AAYMSM are likely to be exposed to minority stressors from multiple sources because of their dual minority status. Even though there is limited empirical support to indicate that exposure to multiple minority stressors has an additive or an exponentially greater negative impact on mental health than the experience of any single minority stress experience (Kertzner, Meyer, Frost, & Stirratt, 2009), the often difficult and stressful interpersonal and social environment that AAYMSM may find themselves in can fuel their poor mental health and self-denial of risk, which could then compromise their health-protective behaviors and encourage greater risk-taking. Even within the LGB community, African American LGB individuals may encounter sexualized racism (e.g., being sexually-objectified because of racial/ethnic background) and similar stressors related to their ethnic identity (Díaz & Ayala, 2001; Meyer, Schwartz, & Frost, 2008). Findings from a study with an ethnically-diverse sample of YMSM indicate that AAYMSM encounter significantly greater amounts of minority stressors, including experiences of homophobia and racism related to both their ethnicity and sexuality, compared to Latino and Caucasian YMSM (Wong, Weiss, Ayala, & Kipke, 2010). Data from the same study also revealed that AAYMSM were significantly more likely to experience high levels of internalized homophobia. In addition to its negative mental health effects (Meyer, 2003), greater experiences of internalized homophobia have been associated with unrecognized HIV infection and reduced disclosure of serostatus (Young, Shoptaw, Weiss, Munjas, & Gorbach, 2011). Engaging in unprotected anal intercourse (UAI) with partners of unknown serostatus is a significant risk factor for HIV, particularly among Latino and African American MSM who are unaware of their own status (Marks et al., 2009).

Minority stressors can also come from AAYMSM's family of origin. There is a growing literature documenting the homophobia and discrimination that occurs within racial/ethnic minority families and communities, whereby the behaviors of these communities mirror the dominant culture's practice of discriminating against LGB individuals (Díaz, 1998; Washington, 2001). These practices, including the display of aversion from family members and being silenced from expressing sexual identity, can stifle the voice and identity of the LGB person. Because of this unsupportive environment, some African American LGB youth

may distance themselves from families or even run away from home. As a result, they not only lose what few emotional connections they possess, but also the financial support and stability normally provided by their families. This can lead to greater mental health problems and exposure to other risks. For example, homeless YMSM may be forced to engage in dangerous work and activities (e.g., sex work and drug use) that can expose them to other forms of violence and victimization that increase their risk for HIV infection (Clatts, Goldsamt, Yi, & Gwadz, 2005).

What are the House and Ball Communities?

Because African American MSM and YMSM are diverse populations (e.g., differences may include their sexual preferences, identification, and behaviors), a step towards understanding the risks that AAYMSM face begins with identifying specific subgroups and understanding each group's unique experiences (Washington, 2001). At particular risk for HIV infection is a subgroup of AAYMSM who are a part of House and Ball communities (Murrill et al., 2008; Phillips, Peterson, Binson, Hidalgo, & Magnus, 2011). Research on an outbreak of tuberculosis from 1998 to 2000 found that among House members in Baltimore, MD and the New York City area, 16 out of the 26 House and Ball members were living with HIV (Sterling, Stanley, & Thompson, 2000). A recent study of the New York City Ball community revealed that 20% of those surveyed were HIV infected and among those, 73% were unaware of their infections (Sanchez, Finlayson, Murrill, Guilin, & Dean, 2010).

The House and Ball communities consist primarily of African American and Latino/Latina lesbian, gay, bisexual, and transgender (LGBT) people. Despite the diversity, participation in the House and Ball communities is typically catered toward AAYMSM (Kipke, Kubicek, Supan, Weiss, & Schrager, under review). The House and Ball communities were originally formed in response to the economic and social exclusion of its members, with the intent to provide solidarity and support for existing and new members (Arnold & Bailey, 2009). Until the documentary film *Paris is Burning* put this community in the spotlight in 1990, the House and Ball communities had been mostly an underground phenomenon. House and Ball communities are more akin to social networks and are not necessarily bound by geographic locations. House and Ball communities have sprung up in major cities across the United States, including Atlanta, Baltimore, Boston, New York City, Detroit, Chicago, Oakland, San Francisco, and Los Angeles (Arnold & Bailey, 2009; Murrill et al., 2008; Phillips et al., 2011). While House and Ball communities within each city have their own activities and events, members may travel to participate and socialize at events in other cities, which facilitates communication and relationship-building across these communities.

Houses and Balls are different entities, but they each serve important functions that work in tandem to help define and form this cohesive community. Houses are family-like structures that are often a part of a national social network. These fictive families or Houses are often led by one or two House "parents." The primary functions of Houses are to organize Balls and to provide support for children within the Houses to compete in the Balls. Balls are social events/parties hosted by different Houses with specific themes that occur several times a year. This is an opportunity for members of the community, along with friends and spectators, to come together to compete in runway categories based on dance/theatrics, athletics, and gender expression. Members take these competitions very seriously as winners not only gain modest financial rewards, but also status and notoriety within the community (Arnold & Bailey, 2009; Kipke et al., under review; Phillips et al., 2011).

Support within the House and Ball Communities

Even among those who are still connected to their communities of origin, or who are not official members of Houses, the House and Ball communities can be identity-affirming places to find friendships and community among those with similar backgrounds and experiences (Arnold & Bailey, 2009). Qualitative findings from the current study revealed that House parents advise members on how to deal with difficult life issues and guide them through personal problems (Kipke et al., under review). House parents not only offer emotional support, they are also a source of instrumental support by providing members with financial assistance and offering them basic necessities, such as clothing, food, housing, and transportation. House parents may sometimes act as positive role models for members of Houses by abstaining from substance use, sexual risk-taking, and obtaining and maintaining stable employment. Having a supportive and accepting social environment can dramatically improve the lives of LGB youth in a variety of ways, including better mental health, physical health, and educational outcomes (Needham & Austin, 2010; Poteat, Mereish, DiGiovanni, & Koenig, 2011; Ryan, Russell, Huebner, Diaz, & Sanchez, 2010; Shilo & Savaya, 2011). Having greater support about one's sexual identity was found to significantly improve the mental health of LGB youth (Doty, Willoughby, Lindahl, & Malik, 2010). Moreover, Spencer and Patrick (2009) found that the formation of supportive relationships can work in concert with the development of personal mastery (defined as the extent to which people feel they have control over the forces which influence their lives) to positively affect the well-being of sexual minority emerging adults. Therefore, the benefits associated with being a part of the House and Ball communities may help AAYMSM navigate the difficult task of adult development by instilling in them a hope for the future.

Current Study

The House and Ball community is a unique community with its own set of social structures, rules, and cultural practices. Given that a core founding principle of the House and Ball community is to care for and support its members, this community can be a powerful ally in reducing the HIV risk of its members. An important step toward identifying ways to intervene with this population is to begin to understand how their minority stress experiences impact their mental health and psychological well-being in the context of the support they receive and the connection they have with their social networks, which may include other members of the House and Ball communities.

According to Minority Stress Theory, members of multiple stigmatized minority groups (e.g., sexual and racial/ethnic minority), such as AAYMSM, are often exposed to a wide variety of distal and proximal stressors that impact their mental health, well-being, and social-functioning (Meyer, 2003). The minority stress experience is conceptualized as occurring in a continuum from distal stressors, which refer to objective events or conditions from the social environment (e.g., prejudice and discrimination) to proximal stressors which refer to personal processes related to individuals' subjective appraisal and perceptions (e.g., internalized homophobia and gay identification). Using Minority Stress Theory as a framework (see Figure 1a), the current study has two aims. First, we will illustrate the impact of minority stress on the psychological well-being of a sample of male members/participants from the Los Angeles House and Ball communities, a majority of whom are of African American descent (83%) and between the ages of 17 to 25 (81%). Second, we will investigate how support and connection to their social network affect the relationship between participants' minority stress experiences and their psychological well-being. Even though we expect that members/participants of House and Ball communities would be exposed to a wide variety of minority stressors, no study to date has documented the different sources of minority stress they face and how this might impact their psychological

well-being. Moreover, studies have not examined how support from and connection to House and Ball communities can help buffer these stressors to improve their mental health. Given the characteristics of House and Ball communities, we hypothesize that the support and connection from these social networks will have a positive impact on members' psychological well-being and buffer the negative effects of minority stress.

Methods

The present study was a collaborative effort between the research team and the House and Ball communities of Los Angeles (LA). As such, the House and Ball communities' members were involved in the study design and methods development through participation in a community advisory board (CAB). All study procedures were presented to local House leaders in order to ensure that the methods were minimally intrusive to the community's activities and appropriate for the target population.

Sampling and Data Collection

Sampling procedures were modeled after the Healthy Young Men's Study, with venue selection and participant recruitment adapted for the target community (Ford et al., 2010). Recruitment venues were categorized into three types: House meetings, Balls, and community events. Events and venues included in the sampling frame had at least a 2-hour time period with an expected yield of at least 4 House and Ball community members. Private survey areas were created at Balls and other events through the use of portable "voting booths" designed for the project. Sampling periods typically occurred during late-night or early-morning hours.

Study staff approached persons who entered the designated venue and administered screening questions to assess eligibility of each person. House and Ball community members were eligible to participate if they attended an event during the study time period and had not previously participated in the research survey. Individuals were recruited regardless of gender, sexual identity or behavior in order to represent the entire community of individuals attending Balls in Los Angeles. Eligible persons were escorted to the private survey booths to complete the data collection activity. Respondents completed a 30-45 minute audio, computer-assisted self-interview (ACASI) survey on site.

The survey was conducted between February 2009 and January 2010. A total of 296 people were found eligible to take the survey; 287 (97%) completed the survey and a total of 263 (89%) unduplicated surveys were completed (24 surveys were deemed duplicates through reviewing demographic and other survey data). The present analysis includes 233 self-identified males who completed the survey. The study was approved by the Committee on Clinical Investigations at Children's Hospital Los Angeles. All respondents provided written informed consent. For persons younger than 18, a waiver of parental permission was obtained. Participants received $40 for completing this survey.

Measures

Survey questions assessed social and demographic characteristics, sexual identity and attraction, experiences of racism and homophobia, participation in the House and Ball communities, past 3-month sexual behavior, lifetime and past 3-month substance use, characteristics of participants' social and sexual networks, HIV and STI testing behaviors, HIV status, access to HIV prevention and health services, connection to communities (e.g., racial/ethnic, religious, school, work, House/Ball) and mental health. Survey measures were borrowed or adapted from a previous study that included African American YMSM (Wong

et al., 2010) and rigorous steps have been taken to ensure their reliability and validity for this population (Kipke et al., under review).

Predictors: Stress measures

General stress latent factor: A composite measure of participants' general stress level related to their financial status and daily living situation was created with three binary indicators that measured participants' sense of general personal safety (e.g., whether they carry a weapon with them); experiences of violence (e.g., gotten in a fight), and financial difficulties (e.g., ran out of money for basic needs) in the last 3 months.

Distal minority stress latent factor: Items that measured lifetime experiences of minority stress, including racism and homophobia, were adapted from Diaz et al. (2001) and were assessed with a four-item Likert-type scale ranging from "never" to "many times." The composite measure of racism was a three-item scale (α=0.75) describing lifetime experience of verbal harassment, verbal threats and physical attack due to race or ethnicity. The composite measure of experienced homophobia was a five-item scale (α=0.74) describing lifetime experience of verbal harassment and threats, physical attack and police harassment because of sexual orientation as well as if a participant had ever needed to move in order to avoid harassment or attacks due to their sexual orientation. The composite measure of socio-sexual racism was a four-item scale (α=0.70) that assessed whether respondents felt uncomfortable in gay-identified spaces due to their race or ethnicity or felt objectified by sexual partners because of their race or ethnicity. Additional individual items included in the latent factor were how frequently participants had been harassed by the police due to their race or ethnicity and how frequently their friends and family had made fun of gay people around them.

Internalized homophobia: Internalized homophobia was measured using an adaptation of four questions from Ross and Rosser's (1996) instrument, rated on a four-item Likert scale (α=0.89) ranging from "strongly disagree" (1) to "strongly agree" (4). Items assessed the extent to which participants indicated disliking themselves for being sexually attracted to men, wished they were not sexually attracted to men, felt guilty for having sex with men, and felt stress or conflict as a result of having sex with men.

Gay Identification: Participants were also asked in a single item to give their sexual identity or orientation; responses were dichotomized into those that identified as homosexual or another primary same-sex orientation (1) and those that identified as bisexual or heterosexual (0).

Moderators: Support measures

Social network connectedness latent factor: Participants were asked to identify up to five people in their social network that they would go to for social support and characterize their relationship to these individuals (e.g., how often they communicate, how much influence these individuals have in their lives) as well as their involvement in the House and Ball communities (e.g., whether they are House members). A factor analysis of these items was then conducted to derive a composite measure of social network connectedness. The resultant latent factor is composed of four measures from the social network inventory: the density of the participant's social network (i.e., the ratio of how many people in the network know each other divided by all possible connections within the network), the proportion of network members with whom the participant communicated with at least weekly, the number of social network members who attend Ball events with the participant, and the proportion of the social network who were House members. To better understand this latent factor, additional descriptive analyses revealed that about 90% of the participants named

someone in their network who are either House Members or who they attend Balls with, or both. There were no significant differences in network density or frequency of communication between those whose social networks include only one or more House member(s), versus those whose networks have only one or more individual(s) with whom they go to Balls with, versus those participants whose networks contain both types of individuals. Hence, even though this latent factor is a measure of participants' connection to their overall social networks, it should be noted that these social networks generally have close ties to the House and Ball communities.

Emotional support: As part of the social network inventory, participants were asked how many of their social network members they felt they could talk to about things that are very personal and private or to obtain advice. The resultant variable is based on number of individuals named out of the possible five.

Instrumental support: As part of the social network inventory, participants were asked how many of their social network members they felt they could ask for monetary assistance (up to $50) or other tangible support (e.g., food/shelter). The resultant variable is based on number of individuals named out of the possible five.

Outcome

Psychological distress: Respondents completed the Centers for Epidemiologic Studies Depression Scale (CES-D) short form as an indicator of their psychological distress (Melchior, Huba, Brown, & Reback, 1993). Participants reported how often they had experienced each of four depressive symptoms within the past week (i.e., feeling depressed, lonely, sad, and having crying spells; α=0.84). A total score was calculated by summing the items.

Covariates

Socio-demographic measures: Dummy codes represented the respondents' racial/ethnic category, residential status, and dummy coded categories for age.

Analytic Strategies

Structural equation modeling (SEM) with latent variables, a multivariate technique often used to test theoretical models, was the overarching approach to analysis (Kline, 2004). When the associations among underlying theoretical constructs are represented by latent variables, SEM may decrease measurement error present when using single indicator variables, such as in path analysis. Therefore, SEM may provide more reliable results that reveal relationships among the theoretical constructs, which in turn account for covariance among the individual measured variables. The analytical process began with confirmatory factor analysis to verify that the indicators loaded as expected onto concise, interpretable latent factors consistent with minority stress constructs (i.e., the "measurement model"). Fit statistics including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA) were used to assess measurement model fit, based on standard criteria (CFI > 0.95, TLI > 0.95, RMSEA < 0.60 (Hu & Bentler, 1999; Ullman & Bentler, 2004). Subsequently, regression paths were systematically added among the established latent variables and the (observed) psychological distress variable to investigate the interrelationships among stress variables and their effects on participants' depressive symptoms. Non-significant paths were removed systematically until the most parsimonious model was reached (the "structural model"). Additionally, interaction terms were created to test whether the hypothesized minority stress effects were moderated by variables representing sources of social support available within the participants' social

networks. Measurement model analysis was conducted in Mplus Version 6 (Muthén & Muthén, 1998-2011) using the weighted least squares, means and variances adjusted (WLSMV) estimator. All structural analyses, including imputation of missing data, were conducted using robust maximum likelihood (MLR) estimation in Mplus.

Results

Demographics

Descriptive statistics for the demographic measures are reported in Table 1. The sample of 233 men was predominantly Black/African American (83%), though nearly one-third of the sample identified with more than one ethnicity. The average age was 23.6 (SD=6.03) years, with a majority (81%) of the sample between 17-25 years of age. A majority of the respondents reported living either in their own place/apartment (47%) or with family (40%). Though the majority (61%) were employed, 19% reported being neither in school nor employed. Over half of respondents (55%) indicated some recent financial hardship, indicated by running out of money for basic needs within the prior three months. Seventy-one percent of the participants self-identified as gay or some other same-sex sexual identity. Although only 25% identified as bisexual, nearly half (44%) reported an attraction to both men and women; 50% of the sample reported an attraction to men exclusively. Because there may be potential age-related differences in experiences of distal and proximal minority stressors and other variables of interest (e.g., social network characteristics), we conducted additional analysis to explore potential age-related differences. Even though some significant differences emerged, after adjusting for multiple comparisons using the Benjamini and Hochberg (1995) procedure, a less conservative adjustment than the Bonferroni correction, those differences did not remain. However, we elected the conservative approach of including age as a demographic covariate. See Table 2 for a description of these variables of interest for the entire sample.

Measurement Model

The measurement model for the three latent factors – general stress, distal stress, and social network connectedness – displayed acceptable fit (CFI=0.94, TLI=0.92, RMSEA=0.03). All proposed indicator variables loaded significantly ($p<0.001$) on their hypothesized latent factors. Residual covariances were added between the racism and police harassment indicators of the distal minority stress latent variable (r=0.24, $p<0.01$) and between the number of social network members who attend Balls and the proportion of social network members who were House members within the social network connectedness latent variable (r=0.43, $p<0.001$). The final measurement model displayed excellent fit (CFI = 0.99; TLI = 0.99; RMSEA = 0.007).

Structural Model

The final model predicting depressive symptoms is presented in Figure 1b. Unstandardized coefficients are presented in the figure and text, as standardized coefficients are not computed in Mplus when using MLR estimation with latent variable interactions. For similar reasons, formal comparisons of model fit were not possible between the final model and the (non-nested) empty model or full model without interaction terms. Thus, conclusions regarding appropriate fit are based on regression parameter significance and model conformity to theoretically predicted relationships. As shown in Figure 1, higher levels of general stress were nearly significantly associated with higher levels of distal minority stress (B=0.18, $p=0.053$) indicating that those who had experienced financial hardship and felt threats to their personal safety also reported more frequent racism, homophobia, and harassment. Greater distal minority stress was in turn associated with higher levels of internalized homophobia (B=1.03, $p<0.001$). Finally, distal minority stress

(B=2.84, $p<0.01$), internalized homophobia (B=0.74, $p<0.01$), and gay identification (B=0.68, $p<0.001$) were all significantly associated with depressive symptoms. Although not statistically significant, emotional support was negatively associated with depressive symptoms (B=-0.40, $p=0.06$).

Additionally, two significant interactions emerged between social support measures and minority stressors. To better understand the direction of the effects described by the significant interaction terms, the interactions were probed following the methods recommended by Aiken and West (1991) and Muthén and Muthén (2010). We computed and plotted predicted values of depressive symptoms for the interaction between distal stress and instrumental support, at one standard deviation above and below the means of these continuous measures (Figure 2a). For the interaction between social network connection and gay identification (Figure 2b), predicted values for depressive symptoms were computed and plotted at one standard deviation above and below the mean of the social network connectedness variable and at +1 (gay identified) or -1 (not gay identified).

As illustrated in Figures 2a and 2b, the effects of distal minority stress on depressive symptoms were moderated by instrumental support (B=-1.78, $p<0.05$), such that for participants with lower instrumental support, the detrimental psychological effects of distal minority stress were particularly exacerbated. For participants with access to more instrumental support, there was still an increase in depressive symptoms associated with distal minority stress, but this effect was attenuated compared to participants who had low levels of instrumental support. Additionally, social network connectedness moderated the relationship between gay or other same sex sexual identification and depressive symptoms (B=-7.02, $p<0.05$). For respondents who identified as gay or other same sex sexual identity, being more strongly connected to their social network that had close ties to the House and Ball communities was protective against depressive symptoms. For those who did not have this sexual identification, strong connection to their social networks was associated with a slight increase in depressive symptoms, though it did not appear to be significant.

Discussion

Results from the current study illustrate the impact of minority stress on mental health among male members/participants of the Los Angeles House and Ball communities, who are predominantly of African American descent and who are primarily young adults. These results also capture the diverse sources of stress faced by this population and how these stressors are related to each other to impact mental health. Specifically, the experiences of general stressors, which encompass financial difficulties, violence, and threats to personal safety are shown to affect the levels of distal minority stress experienced. Consistent with Minority Stress Theory (Meyer, 2003), distal minority stressors in turn predicted experiences of internalized homophobia, which both predicted depressive symptoms independently. Even though a wide age range is represented in the current sample (17 to 53), it is interesting to note that no significant age effects were found – suggesting that the commonalities shared between members of this community outweigh some of the individual differences. Surprisingly, sexual identification of gay, homosexual, or other same sex identity was also related to poorer mental health. Previous research and theoretical formulation of sexual identity development suggest that gay identification represents a later stage of sexual identity development that conveys greater acceptance of self (Bruce & Harper, 2011). Accordingly, greater acceptance should be related to lower levels of internalized homophobia, as it is shown in the current study, which should then lead to lower distress. However, current findings indicated the opposite, which is that gay or other same-sex sexual identification was associated with greater distress. The expected psychological benefits associated with reaching this sexual identity developmental milestone do not appear

to generalize to male members/participants of the Los Angeles House and Ball communities. While sexual identity development process may be operating differently for this population, it is also possible that the way sexual identification is perceived, defined, and valued differs for this population (e.g., gay identification may not be the ultimate goal for some).

Support from and Connection to Social Networks

Findings confirmed our hypothesis that support from and connection to social networks would buffer the effects of minority stress on psychological well-being. Results revealed a significant interaction between distal minority stress and number of people who provide instrumental support within participants' social networks. As shown in Figure 2a, among those with greater number of network members who could provide instrumental support, the effects of distal minority stress on distress is much less pronounced than among those with fewer numbers of individuals who provided instrumental support. Instrumental support such as money, housing, transportation can be reassurance for individuals that they can get their basic needs met and that there are individuals in their lives who care about their well-being. Experiences of racial and sexual identity harassment can instill feelings of fear within individuals that threaten their self-concept and basic assumptions about the world as a safe place (Wong et al., 2010).

As shown in Figure 2b, results also show that participants' connection to their social networks moderates the effects of minority stress on mental health. Post-hoc investigations reveal that those who have greater connection and are gay identified are less distressed than those with the same sexual identification, but less connected to their social networks. These findings are consistent with studies showing that acceptance from important individuals in one's life, in particular as it relates to one's sexual orientation, could significantly reduce gay-related distress (Doty et al., 2010). Similar associations have been found for sexual risk-taking (Brady, Dolcini, Harper, & Pollack, 2009). Furthermore, lack of supportive social interactions and acceptance related to sexual identity is associated with lower mental health and well-being, while acceptance of sexual identity not only reduces experiences of distress, but can promote personal growth (Cox, Vanden Berghe, Dewaele, & Vincke, 2010).

It is interesting to note that the distress level of those who did not identify as gay or other same sex (about 28% of the sample) is lower than those who identified as gay or other same sex regardless of the connection they have to their social networks. Moreover, for these individuals, being less connected seems to be associated with lower levels of distress. Among this small group of individuals from the House and Ball communities who identified as bisexual, heterosexual, or unknown, some may still be in the process of defining their sexual identity and may have been uncomfortable disclosing their sexual identity status, while others might simply not find this community to be supportive. This may help explain why connection to social networks that have close ties to the House and Ball communities did not decrease the experience of distress. This may be due to the compound effects of racial minority status and sexual minority status. Future studies should seek to compare groups of African American and YMSM of other racial backgrounds in order to elucidate differences in stress processes by race. Furthermore, the progression of, and/or value placed on, sexual identity development may be different for male members/participants of the Los Angeles House and Ball communities. Hence, the extent to which support and connection with the House and Ball communities moderates this process warrants additional investigation.

Study Limitations and Future Directions

There are several limitations to the current study. Due to the challenge of conducting survey data collection in a Ball setting, the first limitation relates to the brevity of the survey that

prevented the inclusion of more nuanced measures of interest. For example, the construct of mental health or psychological well-being is only represented by a four-item measure. Previous studies have clearly shown the additional mental health burden of LGB young adults including, affective disorders and suicidality compared to their heterosexual counterparts (Mustanski, Garofalo, & Emerson, 2010). Given the promising findings of the present study, future work should include additional measures that could capture the psychological burden of the minority stress experience more fully and how it would be related to other risk behaviors (e.g., substance use, STI/HIV risk) within this community. In addition, this is an overview of the minority stress experiences of male members/participants from the Los Angeles House and Ball communities. It is possible that the minority stress experiences of other groups (e.g., heterosexual women, lesbians, and transgender individuals) within this community are different. Unfortunately, the small sample of these groups in the current study precludes an in-depth analysis. In addition, the current findings are only generalizable to the House and Ball communities of Los Angeles. The racial/ethnic and gender composition and risk-taking behaviors are expected to differ between House and Ball communities across the US. Finally, data collection occurred over the course of a year. In a dynamic community such as this, it is difficult to ascertain the degree to which social networks of House and Ball members change over time. Moreover, the causal direction of the pathways specified by our model cannot be determined with cross-sectional, observational data. Hence, additional studies with other House and Ball communities, as well as longitudinal studies and randomized experiments, are needed to investigate the generalizability of these findings, verify the proposed causal paths, and ascertain the stability of these findings over time.

Conclusions

This is one of the first studies to document and examine the minority stress experiences of members of House and Ball communities, and to determine the extent to which support and connection to social networks that are present in this community impact the mental health of its members. Minority stress has pervasive influence on the mental health of AAMSM from the Los Angeles House and Ball communities, and the support and connection from these communities seem to buffer some of the negative impact of these stressors. Results from the current study also highlight that the type of support can differentially moderate distinct sources of stress. The House and Ball communities can be a place of great influence for AAYMSM and other racial/ethnic minority LGBT individuals. Additional research must find ways to incorporate the complexities of the risks and resources that this community possesses in the development of prevention and intervention strategies. For example, it is undeniable that these communities become an extended family for their members. Moreover, the House and Ball communities also offer other benefits, such as building resilience among its members (Kubicek, McNeeley, Holloway, Weiss, & Kipke, 2012), which can have long-lasting benefits. Nevertheless, not all support leads to positive outcomes (e.g., some people give bad advice and/or are negative influences), and the extent to which the benefits provided by these communities permeate to different areas of life, or endure over time, is unknown. Though the current findings provide an important glimpse into the lives of MSM members from these communities, we are still in the early stages of understanding and working with House and Ball communities to build intervention strategies that can be effective in reducing mental health problems and negative behavioral health outcomes.

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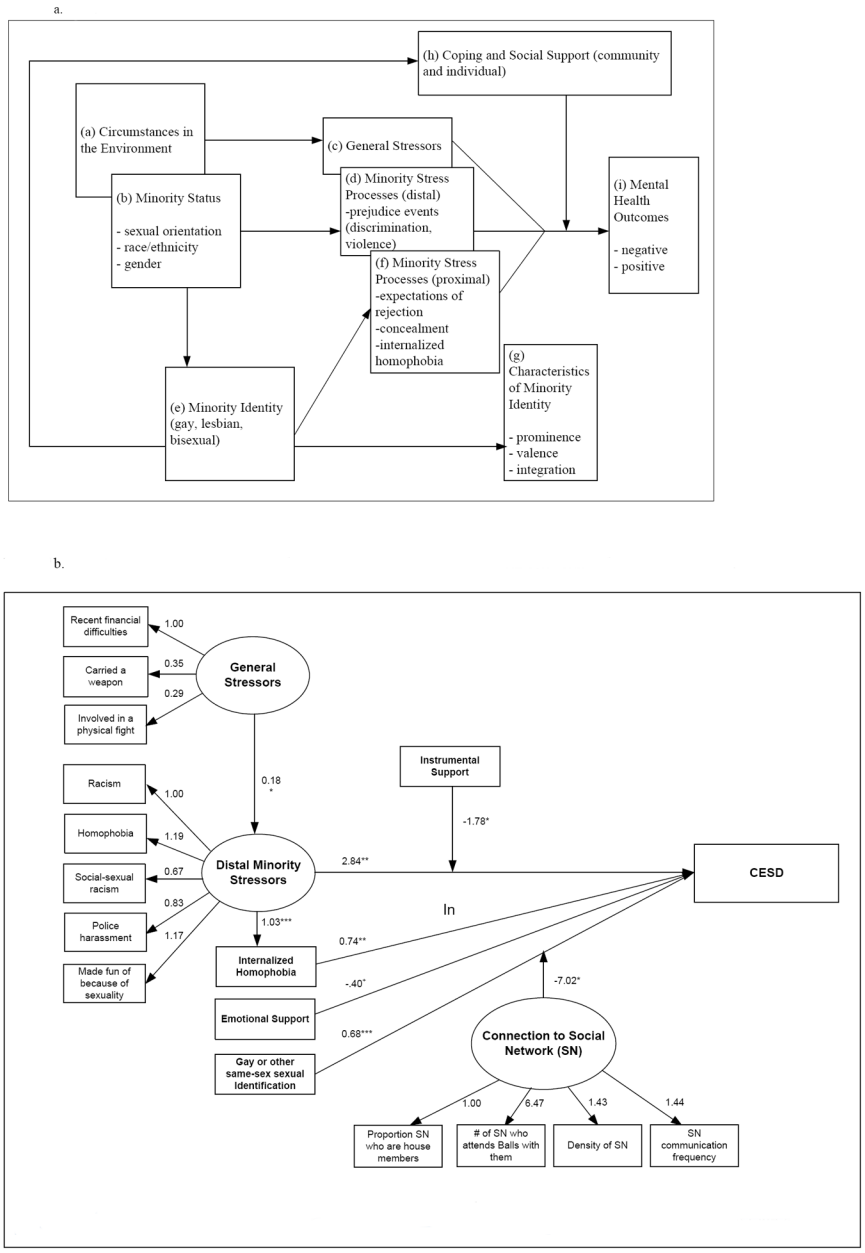

Figure 1.

a. Theoretical Minority Stress Model (Meyer, 2003)

b. Structural Equation Model of Minority Stress, Support/Connection to Social Networks and CESD among MSM from House and Ball Community of Los Angeles*

* For the sake of visual clarity, a few significant correlations are not depicted in the figure. Specifically, internalized homophobia was significantly negatively correlated with gay identification (r=-0.09, $p<0.01$) and emotional support (r=-0.06, $p<0.05$). Gay identification was also correlated with the middle age group (compared to youngest, r=0.04, $p<0.05$). Emotional support was significantly positively correlated with instrumental support (r=0.18, $p<0.001$).

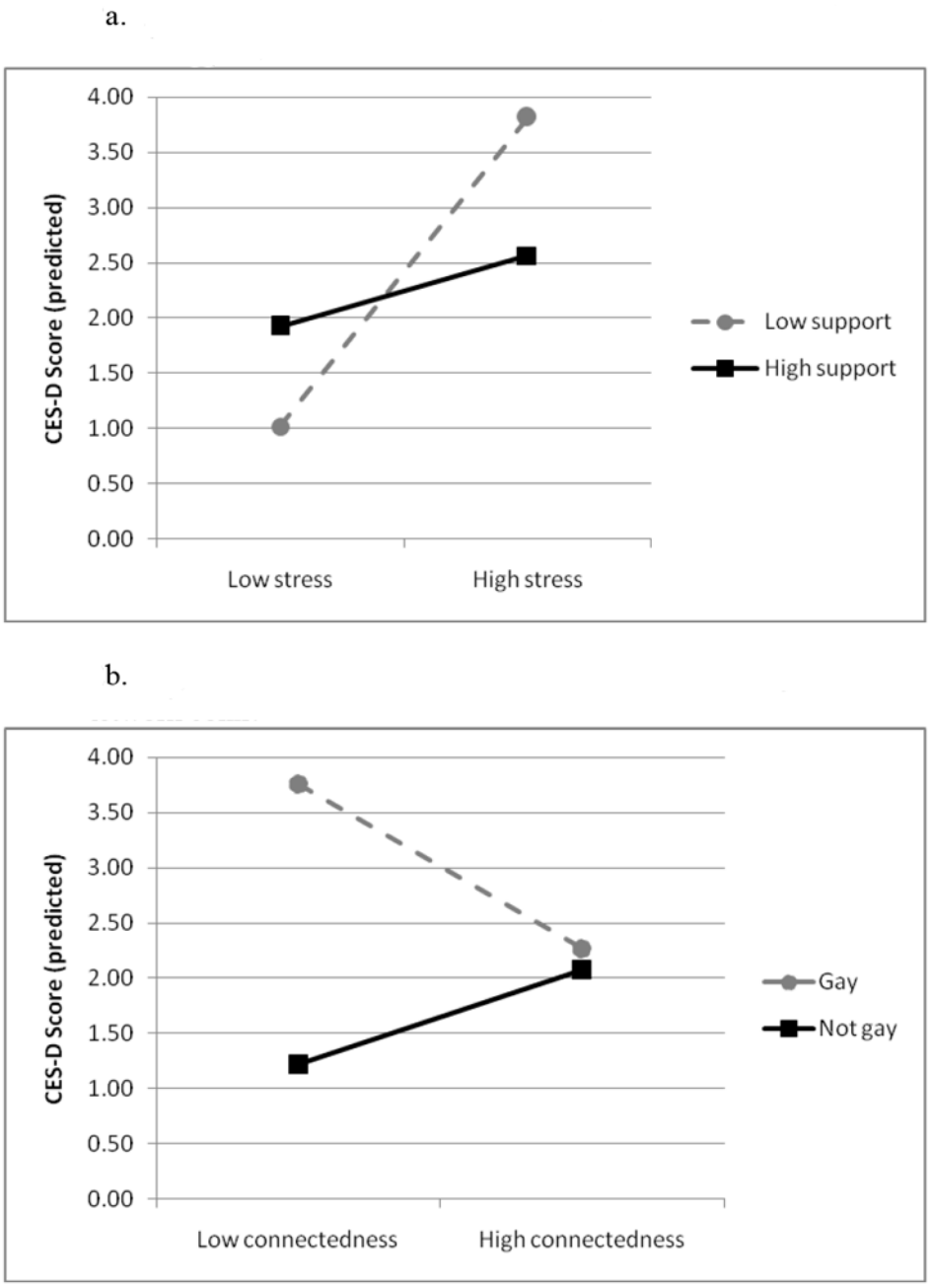

Figure 2.
a. Significant two-way interaction between distal stress and instrumental support.
b. Significant two-way interaction between gay identity and social network connectedness.

Table 1

Sample Demographics (N=233)

Variables		**M (SD)**
Age	Range [17, 53]	23.56 (6.03)
		N (%)
Age category	17-20 years	70 (30)
	21-25 years	119 (51)
	26+ years	44 (19)
Primary ethnicity	American Indian / Native American	5 (2)
	Asian / Asian American / Pacific Islander	3 (1)
	Black / African American	194 (83)
	Latino / Hispanic	15 (6)
	White / Caucasian	0 (0)
	Other	16 (7)
Multiethnic	Identifies with >1 ethnicity	72 (31)
Residential status	Family	92 (40)
	Own place/apartment	109 (47)
	Friends/partner/House/Ball members	28 (12)
	No regular place/other	4 (2)
School/work	In school	47 (20)
	In school, employed	58 (25)
	Employed	83 (36)
	Not in school, not employed	45 (19)
Sexual identity	Gay / other same sex	166 (71)
	Straight	7 (3)
	Bisexual	59 (25)
	Don’t know	1 (0)
Attraction	Men only	117 (50)
	Men and women	103 (44)
	Women only	7 (3)
	Neither / don’t know	5 (2)
Recent Resources	Did not run out of money for basic needs	106 (45)
	Ran out of money <1 per month	44 (19)
	Ran out of money about once a month	33 (14)
	Ran out of money 1-3 times a month	34 (15)
	Ran out of money about once a week	10 (4)
	Ran out of money many times a week	6 (3)

Table 2

Variables of Interest by Age Categories

	Total Sample (N = 233)
	M (SD)
Latent Variable Indicators	
Distal stress	
Racism	1.67 (0.71)
Homophobia	1.76 (0.65)
Police racial harassment	0.57 (0.50)
Made fun of	2.84 (1.11)
Social-sexual racism	1.74 (0.57)
General stress (last 3 months)	
Financial hardship	127 (55%)
Carried a weapon	37 (16%)
Was in a fight	74 (32%)
Social network (SN) connectedness latent factor	
SN ball attendance	1.82 (1.30)
SN house members	0.24 (0.27)
SN density	0.78 (0.21)
SN frequent communication	4.26 (1.74)
Observed Variables	
Social network (SN)	
SN emotional support	3.20 (1.62)
SN instrumental support	3.44 (1.42)
Internalized homophobia	2.04 (0.83)
Gay identity (identified sexually as gay or other same sex identity)	166 (71%)
CESD (depression)	2.66 (3.09)