Predicting Sexual Risk-taking for Black and Latino Men who have Sex with Men (MSM): Does Ethnic Identity Conflict with Gay Identity?

Author Note

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Abstract

Black and Latino Men who have Sex with Men (MSM) are at a higher risk of contracting HIV than their White counterparts (CDC, 2011). Ethnic identity, gay identity, and the subsequent interaction, might predict sexual risk-taking but research is limited. Furthermore, despite potential differences between Black and Latino MSM, race is rarely examined as a moderator.

The current research utilizes negative binomial regressions to assess whether race, ethnic identity, and gay identity predict sexual risk-taking among Black and Latino MSM aged 18-30 from the Los Angeles Area. Results reveal that ethnic identity and gay identity differentially predict instances of unprotected anal intercourse (UAI); gay identity was correlated with less sexual risk-taking, while ethnic identity was correlated with an increase in sexual risk-taking, but only among Black MSM. Furthermore, the 3-way interaction between race, ethnic identity, and gay identity was a significant predictor of sexual risk-taking, indicating that the presumed conflict between ethnic identity and gay identity demonstrated a different relationship with risk-taking for Black versus Latino MSM. For Black MSM, gay identity was correlated with less UAI, but only for individuals with low ethnic identity; alternatively, for Latino MSM, gay identity was correlated with fewer risky partners, but only for individuals with high ethnic identity. This research reveals that identity differentially predicts for Black and Latino MSM, and provides additional understanding regarding the unique experience of these high-risk populations.

Keywords: gay identity, ethnic identity, race, risky sex, HIV/AIDS, MSM, homophobia, racism, African American, Latino
Predicting Sexual Risk-taking for Black and Latino Men who have Sex with Men (MSM): Does Ethnic Identity Conflict with Gay Identity?

The theory of intersectionality states that various socially and culturally constructed categories, like race, class, and sexuality, interact on multiple levels simultaneously, and that these unique interactions may predict attitudes and behaviors (Crenshaw, 1993). For men of color who have sex with men, ethnic identity and gay identity are not mutually exclusive, and understanding the intersection of these two identities may provide greater understanding of their experiences. Much of the discussion regarding this high-risk population focuses on their unique situation as a "dual minority," but deeper analysis of Black and Latino MSM’s ethnic identity and gay identity may foster better understanding of their sexual risk-taking. This paper addresses gaps in the literature regarding the intersection of ethnic identity and gay identity among Black and Latino MSM and examines how race, ethnic identity, and gay identity might interact to predict sexual risk-taking among Black and Latino MSM in ways not previously considered.

Black and Latino MSM need support on multiple levels to combat both homophobia and racism, but the sources of support from ethnic and gay communities rarely overlap. The gay community is often defined by White middle class males (Warren et al., 2008; Jamil, Harper, & Fernandez, 2009), and gay men of color may reject involvement with this community to avoid race-based oppression (Díaz, 1998; Harper, Jernewall, & Zea, 2004; Martinez & Sullivan, 1998) or objectification and eroticization (Diaz, 1998; Martinez & Sullivan, 1998). Furthermore, communities of color in the United States have been historically intolerant of alternative sexual preferences (O'Donnell, et al., 2002; Jamil et al., 2009) including homosexual behaviors, and embedded beliefs about religion, family, and masculinity combine to create a hostile environment for Black and Latino MSM (Diaz, 1998; Marin & Gomez, 1998). This conflict of
SEXUAL RISK-TAKING FOR BLACK AND LATINO MSM

communities can affect attitudes and behaviors of Black and Latino MSM; Compared to White MSM, they are less likely to identify as gay (Flores, Mansergh, Marks, Guzman, & Colfax, 2009), less likely to come out to their friends and family (Akerlund & Cheung, 2000), less likely to have gay or bisexual friends (Kennamer, Honnold, Bradford, & Hendricks, 2000), and report greater levels of internalized homophobia (Flores et al., 2009). Black and Latino MSM are more likely to identify as “down low” (Wolitski, Jones, Wasserman, & Smith, 2006), which indicates a lifestyle wherein a man who has sex with men maintains an illusion of heterosexuality, often engaging in sexual or intimate relationships with women.

Despite the commonalities between Black and Latino MSM, these populations are not homogenous. First, sexual risk-taking may differ for Black and Latino MSM. In a recent literature review (Feldman, 2010), Black MSM were found to be significantly less likely than White MSM to engage in UAI in three studies and just as likely to engage in UAI in seven other studies. Further, a meta-analysis by Millett, Flores, Peterson, and Bakeman (2007) revealed that Black MSM reported significantly fewer partners than White MSM. Feldman also found that Latinos were just as likely to engage in UAI as Whites in nine studies and in one study had significantly higher levels of UAI.

In addition, stigmatization differs between ethnicities. In some Black communities, homosexuality is viewed so negatively that even discussion of homosexuality is stigmatized (Hayes & Peterson, 1994), while among Latinos, homosexual behavior is accepted if it is not discussed (Flores et al., 2009). Furthermore, the definition of homosexuality can differ between these groups; whereas the Black community generally adheres to an American definition of homosexuality where any same sex behavior is considered gay, some research with Mexican immigrants suggests that homosexual identity in the Latino community is interwoven with
receptive anal sex (Carrier, 1995; Taylor, 1986). In addition, Black MSM often report significantly lower attachment to the gay community compared to White or Latino MSM (Rosario, Scrimshaw & Hunter, 2004; Warren et al., 2008; Flores et al., 2009), and research has shown that involvement with ethnic and gay communities can have different effects for Black and Latino MSM (Flores et al., 2009).

Additional research also demonstrates that the relationship between ethnic community attitudes and sexual behaviors is different for Black and Latino MSM. For Black MSM, ethnic identity appears unrelated to unprotected sex (Warren et al., 2008). However, additional work suggests that exclusion from one’s family or community significantly predicts UAI for Black MSM (Warren et al., 2008). For Latino MSM, conflicting patterns of findings have also emerged. Whereas O’Donnell et al. (2002) found that young Latino MSM attached to their ethnic community reported fewer instances of unsafe sex, Warren et al. (2008) found that higher ethnic identity was associated with more UAI among Latinos.

An additional factor to take into account for MSM is their sexual position preference. Ethnic identity among Latinos is often associated with machismo, or a sense of invincibility and need for domination, and other studies have correlated higher rates of machismo with higher rates of engaging in unprotected insertive (i.e., top), but not unprotected receptive (i.e., bottom), anal intercourse (Carballo-Dieeguez & Dolezal, 1994; Carballo-Dieeguez et al., 2004). Furthermore, Flores et al. (2009) found that for Black MSM, attending gay bars and clubs was correlated with discordant receptive UAI, while for Latino MSM, the same behavior was correlated with insertive UAI. These differences are attributed to differences between these communities; receptive partners must actively negotiate condoms, and other studies have shown that Black MSM were particularly reluctant to discuss condom use with partners citing a fear of
being viewed as HIV-positive, (Miller, Serner, & Wagner, 2005). Alternatively, the culture of machismo in the Latino community is often associated with the perception that condom use with non-primary sexual partners is a sign of weakness (Carballo-Diegoal, Remien, Dolezal, & Wagner, 1997).

Prior research has rarely considered ethnic identity and gay identity concurrently in predicting risk-taking for Black or Latino MSM. One exception is the work by Crawford, Allison, Zamboni, and Soto (2002) who investigated different Sexual and Ethnic-Racial Acculturation styles among Black MSM using median splits of ethnic identity and gay identity. Black MSM who simultaneously reported high ethnic identity and high gay identity demonstrated higher self-esteem, less stress related to gender expectations, and greater engagement in health protective behaviors compared to men reporting other types of acculturation styles (Crawford et al., 2002). Furthermore, no differences in sexual risk-taking were found between acculturation styles, but the median split approach may eliminate nuanced differences between participants. Despite the importance of these findings, this study has not been replicated among other ethnic groups (e.g., Latino MSM).

**Current Research**

The literature suggests that Black and Latino MSM may not receive integrative support regarding their dual identities. The interaction between these identities may predict sexual behavior, and these effects may differ between racial groups due to ethnic community differences. However, the research comparing these two groups is scant, and no study has investigated the interaction of ethnic identity and gay identity on sexual risk-taking among both Black and Latino MSM using robust statistical techniques like regression. The current study investigates the interaction of race, ethnic identity, and gay identity on sexual risk-taking, and
provides evidence for gaps in literature regarding this high-risk, heterogeneous, dual minority group. Furthermore, given cultural factors associated with the meaning of sexual positions for MSM, sexual position (insertive, receptive) during UAI is also investigated.

Few studies compare Black and Latino MSM, and the studies that include both racial groups have found mixed results. Most other studies in this domain have compared Black and Latino MSM to White MSM, but not to each other. The differences in sexual risk-taking between Black and Latino MSM are unclear, leading to the first research question:

**RQ1: Are there differences between Black and Latino MSM in sexual risk-taking?**

Oftentimes, Latino and Black MSM’s responses are aggregated rather than separately examined. Where they have been examined separately, some studies have found that identification with one’s ethnic community can result in less unsafe sex for Latinos, while others report the opposite for Black MSM, leading to the second and third set of research questions:

**RQ2: Does ethnic identity predict sexual risk-taking among Black and Latino MSM?**

**RQ2A: Is the predictive effect of ethnic identity different between Black and Latino MSM (i.e., Does race moderate the relationship between ethnic identity and sexual risk-taking)?**

**RQ3: Does gay identity predict sexual risk-taking among Black and Latino MSM?**

**RQ3A: Is the predictive effect of gay identity different between Black and Latino MSM (i.e., Does race moderate the relationship between gay identity and sexual risk-taking)?**

Few studies investigate the interaction of ethnic and gay identity on sexual risk-taking, and no studies have compared Black and Latino MSM to assess whether race moderates this relationship. This gap in the prior literature leads to the fourth set of research questions:

**RQ4: Does the interaction between ethnic identity and gay identity predict sexual risk-taking among Black and Latino MSM?**
**RQ4a: Does the interaction of ethnic identity and gay identity demonstrate different predictive effects on sexual risk-taking for Black versus Latino MSM?**

Prior studies have also demonstrated differences between Black and Latino MSM when investigating type of UAI (receptive or insertive). Because different types of UAI are associated with different stigmas, we also consider these distinctive UAI behaviors separately to explore the pattern of sexual risk-taking for Black and Latino MSM.

**Methods**

**Participants**

Participants included 158 Black ($n = 55$) and Latino ($n = 103$) men aged 18 to 30 who reported engaging in at least one instance of unprotected anal intercourse (UAI) with non-primary male partners in the three months prior to participating in the study were considered eligible for this analysis. The mean age was 24.4 ($SD = 3.5$), and the median income was $25,001-$30,000. This sample of MSM was part of a larger longitudinal study in which MSM of three ethnicities (Black, Latino, Caucasian) were eligible if they had at least one act of UAI in the prior three months, reported being HIV negative, and never injected non-prescription drugs. Participants were recruited through print and online advertising as well as through interpersonal recruitment at gay enclaves throughout Los Angeles County, including street intercepts, popular venues, and gay pride events from 2005 to 2008.

This study consisted of a three-month longitudinal randomized control trial (Miller et al., 2011). Participants received $50 for each visit. Eligible participants came to the lab, were provided with an information sheet describing the study protocol, and responded to a survey, which included the measures of baseline sexual risk-taking prior, to participation in an experimental condition. Participants returned for a three-month follow-up and completed scales...
assessing ethnic identity and gay identity. This protocol was approved by the Institutional Review Board of the University of Southern California.

**Measures**

Sexual risk-taking was assessed using two key measures: (1) instances of unprotected anal intercourse (UAI) with non-primary partners, and (2) number of non-primary partners with whom the participant engaged in UAI in the three months prior to recruitment. Each of these measures was assessed by instances as the insertive partner (i.e., top) and instances as the receptive partner (i.e., bottom). Analyses are conducted using three variables: (1) combined total (i.e., top and bottom), (2) frequency as the top, and (2) frequency as the bottom.

Ethnic Identity was measured using the Multi-Ethnic Identity Measure (MEIM) (Phinney, 1992), a 12-item scale that prompts participants to rate their agreement on a 4-point Likert scale with statements regarding their ethnic exploration (e.g., "I am active in organizations or social groups that include mostly members of my own ethnic group.") and ethnic commitment (e.g., "I have a lot of pride in my ethnic group."). Factor analyses reveal that two items relating to belonging and attachment to one’s ethnic group represented a third factor and were eliminated from analyses resulting in a 10-item scale (Cronbach’s Alpha = .846, Cronbach’s Alpha\textsubscript{Black} = .799, Cronback’s Alpha\textsubscript{Latino} = .861); higher scores indicate greater ethnic identity.

Gay Identity was measured using the Attitudes Towards Sexual Orientation Scale (ATSO) (Van de Meerendonk & Probst, 2004), a 12-item scale that prompts participants to rate their agreement on a 7-point Likert scale to assess their agreement with items assessing progression along the final four stages of sexual identity integration stipulated by Cass (1979). The 6-item composite was constructed using subscale items from this measure that originally factored onto identity synthesis (e.g., “I believe my public and private identities are one and the
same.”) and identity pride (“I am proud of my sexual orientation.) (Cronbach’s Alpha = .757, Cronbach’s Alpha_{Black} = .787, Cronbach’s Alpha_{Latino} = .727); higher scores indicate greater gay identity. Participants also identified their sexual orientation (e.g., gay/homosexual, bisexual, a man who has sex with men).

**Statistical Analyses**

Negative binomial regressions were used to analyze the effect of race, ethnic identity, and gay identity on instances of UAI with non-primary partners at baseline. The severe positive skew of this count variable was over-dispersed and required a negative binomial distribution with a log link. In the case of total instances of UAI and total partners, a zero-truncated negative binomial regression was used; participants who did not report UAI with a non-primary partner in the past three months were not considered eligible, thus demanding a zero-truncated negative binomial regression for the combined analyses. Incidence rate ratios (IRR) are reported. Analyses are first reported by instances of total UAI with subsequent more granular analyses by UAI behavior type (receptive, insertive). For ease of presentation, only significant or marginal findings are reported.

**Results**

**Preliminary Analyses**

There was no significant difference in age or ethnic identity between the two racial groups, and there was no difference in the percentage of individuals who identified as gay or homosexual according to a chi-squared analysis. However, Latino MSM reported significantly greater gay identity compared to Black MSM, \( r(156) = 2.60, p = .011 \) (\( d = .43 \); See Table 1). There was no significant correlation between ethnic identity and gay identity.

**Instances of UAI**
The zero-truncated negative binomial regression model predicting instances of UAI from race, gay identity, ethnic identity, and the subsequent 2- and 3-way interactions was statistically significant ($\chi^2(7) = 15.89, p = .026$). The likelihood ratio test for alpha, the over dispersion parameter, was significant ($\chi^2 = 349.07, p < .001$) indicating that the zero-truncated negative binomial model is preferred over a zero-truncated Poisson model. All three predictors demonstrated a main effect, and the 2-way interactions between race and ethnic identity, and the subsequent 3-way interaction were also significant (See Table 2). The identical models assessing race, ethnic identity, gay identity, and the subsequent 2- and 3-way interactions on top and bottom UAI were not significant.

When the two racial groups were analyzed separately, the models predicting total UAI ($\chi^2(3) = 12.15, p = .007$) and UAI as a top ($\chi^2(3) = 9.64, p = .022$) from ethnic identity, gay identity, and the subsequent interaction, were significant for Black MSM. Across Black and Latino MSM, race predicted total UAI with non-primary partners (IRR = 0.49, 95%CI: 0.28-0.83); thus, in answer to RQ1, Black MSM engaged in about 51% less UAI than Latino MSM when controlling for all other variables. Additional analyses reveal that Black MSM engage in about 25% less UAI as a top compared to Latino MSM (IRR = .748; 95%CI: 0.499-1.107; See Table 2).

In answer to RQ2, there was a positive relationship between ethnic identity and instances of UAI such that the frequency of UAI increased by a factor of 1.688 for every one-unit increase of ethnic identity (95%CI: 1.157-2.464). However, in response to RQ2a, the 2-way interaction between race and ethnic identity was also a significant predictor of UAI (IRR = 2.632; 95%CI: 1.245-5.565). Further analyses reveal that this is only significant among Black MSM (IRR = 1.68, 95%CI: 1.08-2.61). Interaction plots assess the effect of this interaction; continuous
variables were converted into 3 categories (Hilbe, 2011) and the average centered log of UAI was constructed for each group using the formula (Long & Freese, 2003): 

\[ y = \beta_{\text{const}} + \beta_{\text{Race}} \times \text{Race} + \beta_{\text{MEIM}} \times \text{MEIM}_{\text{group}} + \beta_{\text{MEIM} \times \text{GAYI}} \times \text{MEIM}_{\text{group}} \times \text{Race} \]

The interaction plot in Figure 1 reveals that an increase in ethnic identity was correlated with increased UAI for Black MSM but not for Latino MSM. Further analyses reveal that this relationship was only significant when predicting instances of UAI as a top among Black MSM (\(B = 0.519, B \ SE = 0.224, t = 2.32, p = .021; IRR = 2.769, 95\%CI: 1.083-2.609\)).

In answer to RQ3, there was a negative relationship between gay identity and UAI such that the frequency of UAI decreased by a factor of .547 for every one-unit increase in gay identity (95\%CI: 0.379-0.791). Regarding RQ3a, the interaction between race and gay identity was significant (IRR = 0.436, 95\%CI: 0.208-0.903), and interaction plots reveal that this relationship was stronger for Black MSM compared to Latino MSM (See Figure 2). When races were investigated separately, gay identity was a significant predictor of UAI for Black MSM only; the frequency of UAI decreased by a factor of .36 for every one-unit increase in gay identity (\(B = -1.032, B \ SE = .306, t = -3.38, p = .001; IRR = 0.356, 95\%CI: 0.196-0.648\)). When specific sex types were investigated, this relationship was only significant for instances of UAI as a top among Black MSM (\(B = -0.458, B \ SE = 0.216, t = -2.12, p = .034; IRR = 0.633, 95\%CI: 0.414-0.966\)).

In response to RQ4, the 2-way interaction between ethnic identity and gay identity was not a significant predictor of instances of UAI. However, the 3-way interaction between race, ethnic identity, and gay identity was a significant predictor of UAI (IRR = 3.177; 95\%CI: 1.142-8.839), indicating that the interaction between ethnic identity and gay identity demonstrated a
different effect on instances of UAI for Black and Latino MSM. To properly assess this interaction in order to address RQ4a, Black and Latino MSM were investigated separately.

For Black MSM, the 2-way interaction between ethnic identity and gay identity approached significance ($B = 0.767, B SE = 0.423, t = 1.81, p = .070; IRR = 2.154; 95%CI: 0.393-4.940$). The interaction plots reveal that, although gay identity may be negatively correlated with UAI, this relationship varies for different levels of ethnic identity in Black MSM (See Figure 3); whereas individuals with low ethnic identity report less UAI with increases in gay identity, this relationship is nonexistent for Black MSM with high ethnic identity. The interaction between ethnic identity and gay identity did not significantly predict instances of UAI among Latino MSM.

**Number of Non-Primary Partners**

The zero-truncated negative binomial regression model predicting number of non-primary partners with whom the participant engaged in UAI was statistically significant ($\chi^2(7) = 22.10, p = .002$); the likelihood ratio test for alpha was significant ($\chi^2 = 78.40, p < .001$), again indicating that the zero-truncated negative binomial model is preferred. Race, ethnic identity, and gay identity were significant predictors. In addition, the 2-way interaction between race and ethnic identity and the 3-way interaction were also significant (See Table 3). Identical models predicting different sex types were only significant in predicting partners as a bottom ($\chi^2(7) = 15.97, p = .025$). When Black and Latino MSM were investigated separately, the model predicting number of partners from ethnic identity, gay identity, and the subsequent 2-way interactions was significant in predicting the number of partners as a top for Black MSM ($\chi^2(3) = 8.43, p = .038$) and approached significance in predicting the number of partners as a bottom
for Latino MSM ($\chi^2 (3) = 6.93, p = .074$). These findings are explicated in the follow-up analyses below.

For RQ1, race was a significant predictor of total number of non-primary partners (IRR = .33; 95%CI: 0.19-0.57) across Black and Latino MSM; Black MSM engaged in sexual intercourse with about 67% fewer partners than Latino MSM when controlling for all other variables (See Table 3). Additional analyses by sex type reveal that the main effect of race was only present among partners as a bottom; Black MSM reported that they had about 48% fewer sexual partners with whom they themselves were the bottom ($B = -0.661, B SE = 0.232, t = -.284, p = .004; IRR = 0.516, 95%CI: .328-.814$).

In response to RQ2, there was a positive relationship between ethnic identity and number of partners such that number of partners increased by a factor of 1.939 for every one-unit increase of ethnic identity (95%CI: 1.314-2.860). However, this main effect was not replicated in the analyses predicting number of partners as a bottom. In response to RQ2a, the 2-way interaction between race and ethnic identity was also a significant predictor of number of partners (IRR = 4.973; 95%CI: 2.254-10.975), indicating that the relationship between ethnic identity and number of partners differs by race; and the interaction also significantly predicted number of partners as a bottom ($B = 1.073, B SE = 0.368, t = 2.92, p = .004; IRR = 2.925, 95%CI: 1.422-6.019$). The plot in Figure 4 demonstrates that, similar to instances of UAI, ethnic identity was correlated with more partners among Black MSM only; further analyses on Black MSM reveal that ethnic identity predicts number of partners as a top ($B = 0.690, B SE = 0.274, t = 2.52, p = .012; IRR = 1.994; 95%CI: 1.166-3.409$).

In response to RQ3, and also consistent with the UAI data, there was a negative relationship between gay identity and UAI such that number of partners decreased by a factor of
.709 for every one-unit increase in gay identity (95%CI: 0.529-0.949); this finding was not replicated in the analyses predicting number of partners as a bottom. Furthermore, in response to RQ3a, the interaction between race and gay identity did not significantly predict number of partners, indicating that the relationship between gay identity and number of partners did not differ between Black and Latino MSM. When investigated separately, gay identity did not significantly predict number of partners among Black or Latino MSM.

In response to RQ4, the 2-way interaction between ethnic identity and gay identity did not significantly predict number of partners across Black and Latino MSM. However, in response to RQ4a, the 3-way interaction between race, ethnic identity, and gay identity significantly predicted number of partners (IRR = 1.273; 95%CI: 1.509-8.448). These findings are consistent with the findings regarding instances of UAI and indicate that the interaction between ethnic identity and gay identity demonstrated different predictive effects on total partners by race. When sex types were investigated separately, this 3-way interaction significantly predicted number of partners as a bottom (IRR = 3.571, 95%CI: 1.509-8.448).

To investigate this interaction further, Black and Latino MSM were investigated separately; however the results were not definitive. For Black MSM, the interaction did not significantly predict any measure of partners (i.e., total, top, or bottom). For Latino MSM, the interaction of ethnic identity and gay identity was a significant predictor of number of partners as a bottom ($B = -0.338$, $B SE = 0.166$, $t = -2.03$, $p = .042$; IRR = 0.713; 95%CI: 0.515-0.988). For individuals reporting high ethnic identity, gay identity was associated with fewer partners as a bottom; but for individuals reporting low ethnic identity, gay identity was associated with more partners as a bottom (See Figure 5).

**Discussion**
The study is the first to systematically examine how race, ethnic identity, and gay identity, individually and in combination, predict risky sexual behaviors for high-risk Black and Latino MSM. When we take these factors into account concurrently, we find remarkable differences in the pattern of findings for Black versus Latino MSM.

First, we found significant differences between Black and Latino MSM: Black MSM engaged in less sexual risk-taking compared to Latino MSM. This was the case for both instances of UAI and number of sexual partners. These findings are consistent with recent findings by Magnus et al. (2010) who found that Black MSM engaged in less sexual risk-taking. These sets of consistent recent findings underline the need to consider Black and Latino MSM separately.

Although we found that, in line with past work that aggregated Black and Latino MSM, ethnic identity increased sexual risk-taking (UAI and number of partners) and gay identity reduced sexual risk-taking (UAI) among MSM, these relationships were informed by several higher order interactions. Race moderated the link between ethnic identity and sexual risk-taking. For Black MSM, greater ethnic identity was correlated with more sexual risk-taking. Alternatively, gay identity predicted fewer instances of sexual risk-taking across both Black and Latino MSM.

The current work also addresses an important set of questions regarding the potential conflict between ethnic identity and gay identity, and its effect on sexual risk-taking. This is the first study to concurrently examine the interactive effects of these dual identities on Black and Latino MSM. Although the two-way interaction between ethnic identity and gay identity was not a significant predictor of sexual risk-taking across both groups, the three-way interaction between race, ethnic identity, and gay identity was a significant predictor of both UAI and
numbers of sexual partners, demonstrating that the interaction between ethnic and gay identity is different for Black and Latino MSM.

For Black MSM, the interaction of ethnic identity and gay identity was a significant predictor of total UAI and total non-primary sexual partners. Gay identity was correlated with less sexual risk only for Black MSM with average or low ethnic identity. Although past work suggests that gay identity predicts sexual risk-taking, the current research suggests that ethnic identity can moderate this relationship. Furthermore, increased ethnic identity was correlated with sexual risk-taking as a top. This relationship may be related to masculine expectations within the Black community; when faced with a stereotypically emasculating scenario (i.e., sex with a man), Black MSM may be more susceptible to engaging in risk when given the opportunity to demonstrate masculinity as the insertive partner or top. This research, combined with Flores et al. (2009) findings that involvement in the gay community is correlated with risk as a bottom for Black MSM, provides a greater understanding of the conflict between ethnic identity and gay identity in predicting sexual risk for Black MSM.

For Latino MSM, the interaction between ethnic and gay identity was not as apparent; the interaction only emerged when assessing number of partners as a bottom. In this case, gay identity was correlated with fewer partners only for individuals with high ethnic identity. This effect was the opposite of that found for Black MSM. This finding is consistent with some prior literature correlating gay identity with receptive sexual behaviors (Carrier, 1995; Taylor 1986). Given the conflicting research regarding Latino MSM, this lack of significant findings is particularly interesting. Whereas O’Donnell et al. (2002) found that ethnic identity was negatively correlated with UAI, Warren et al. (2008) found that ethnic identity was positively correlated with UAI among Latino MSM.
These inconsistencies in the research may be attributed to cultural differences within the Latino community. All of these studies sample from populations with a high percentage of Latinos; the former study was collected in and around New York City, while data for the latter was collected around Miami and Chicago. However, each of these populations have different ethnic compositions: the largest percentage of Latinos identify as Puerto Rican in New York City, Cuban descent in Miami, and Mexican descent in Chicago and Los Angeles (U.S. Census Bureau, 2000). These cultures may demonstrate different attitudes about, and behavior towards, homosexuality, but little research has compared Latino subgroups.

**Future Research**

The sample used in this study featured Black and Latino MSM from Los Angeles County. As is the case with much of the prior research in this area, a county-specific sampling technique makes it impossible to generalize the findings to a national population. Future studies should replicate these analyses on a national sample to investigate the effects of ethnic and gay identity in different regions. Furthermore, many of the studies are conducted in urban centers with a distinct gay population; the experience of rural MSM is understudied.

In addition, these analyses assessed the effects of ethnic identity and gay identity on sexual risk-taking among risky MSM; this narrow focus does not provide a robust understanding of the conflict, which may affect other dimensions of emotions, attitudes, and behaviors among risky and non-risky MSM. Future work should apply this analytical methodology to other individual difference outcomes including self-esteem and depression, as well as other measures of risk-taking including UAI with primary partners (Appleby, Miller, & Rothspan, 1999) and drug use (Appleby et al., 2010).

**Conclusion**
Black and Latino MSM are at a higher risk of HIV infection compared to White MSM (CDC, 2011; Hall, Byers, Ling, & Espinoza, 2007; Harawa et al., 2004; Lieb et al., 2008; MacKellar et al., 2005). These findings provide a unique insight into the relationship between identity and sexual risk-taking among this high-risk population, and may be used to inform messages designed to encourage safer sex behaviors among this group, and subgroups. Much of the theory regarding dual-minority individuals aggregates Black and Latino MSM, claiming that they experience similar conflicts between their ethnic and gay identities. These findings demonstrate that this assumption is not true for Black and Latino MSM in Los Angeles County, and aggregating these two groups may be counterproductive to understanding their unique experiences and struggles regardless of their common label of “dual minority.”
References


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Table 1

*Differences between Black and Latino MSM*

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Black MSM</th>
<th>Latino MSM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 158)</td>
<td>(n = 55)</td>
<td>(n = 103)</td>
</tr>
<tr>
<td>Age</td>
<td>$M = 24.4$ (3.50)</td>
<td>$M = 23.9$ (3.37)</td>
<td>$M = 24.7$ (3.53)</td>
</tr>
<tr>
<td>% Identifying as Gay/Homosexual</td>
<td>81.6% ($n = 129$)</td>
<td>76.4% ($n = 42$)</td>
<td>84.5% ($n = 87$)</td>
</tr>
<tr>
<td>Instances of UAI with non-primary partners</td>
<td>$M = 3.98$ (5.17)</td>
<td>$M = 4.07$ (5.85)</td>
<td>$M = 3.93$ (4.79)</td>
</tr>
<tr>
<td>Number of non-primary partners with whom the participant reported UAI</td>
<td>$M = 2.67$ (2.56)</td>
<td>$M = 2.35$ (2.68)</td>
<td>$M = 2.78$ (2.49)</td>
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<tr>
<td>Ethnic Identity</td>
<td>$M = 3.72$ (.69)</td>
<td>$M = 3.84$ (.62)</td>
<td>$M = 3.66$ (.73)</td>
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<tr>
<td>Gay Identity</td>
<td>$M = 3.54$ (.83)</td>
<td>$M = 3.28$ (.98)</td>
<td>$M = 3.67$ (.70)</td>
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Table 2

Zero Truncated Negative Binomial Regression Results Evaluating Instances of UAI with Non-Primary Partners as a function of Race, Ethnic Identity, Gay Identity, and the Subsequent Interactions

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>B SE</th>
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<th>Upper 95%</th>
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<td>1.688</td>
<td>1.157</td>
<td>2.464</td>
<td>2.72**</td>
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<td>2.53**</td>
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<tr>
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<td>0.547</td>
<td>0.379</td>
<td>0.791</td>
<td>-3.21**</td>
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<td>0.913</td>
<td>-2.20*</td>
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<td>1.194</td>
<td>0.717</td>
<td>1.987</td>
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<tr>
<td>Race *</td>
<td>1.156</td>
<td>.522</td>
<td>3.177</td>
<td>1.142</td>
<td>8.839</td>
<td>2.21*</td>
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Note: $\chi^2(7) = 15.89, p = .026$. IRR represents proportional change for each unit increase in the predictor. Race was dummy coded (Latino = 0, Black = 1).

*p < .05; **p < .01; ***p < .001
Table 3

Zero Truncated Negative Binomial Regression Results Evaluating Number of Non-Primary Partners with whom the Participant engaged in UAI as a function of Race, Ethnic Identity, Gay Identity, and the Subsequent Interactions

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>B SE</th>
<th>IRR</th>
<th>Lower 95% IRR</th>
<th>Upper 95% IRR</th>
<th>t</th>
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<td>0.333</td>
<td>0.194</td>
<td>0.57</td>
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<td>1.314</td>
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<td>4.973</td>
<td>2.254</td>
<td>10.975</td>
<td>3.97***</td>
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<td>0.709</td>
<td>0.529</td>
<td>0.949</td>
<td>-2.31*</td>
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<tr>
<td>Race * Gay Identity</td>
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<td>0.675</td>
<td>0.373</td>
<td>1.22</td>
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<td>0.072</td>
<td>0.212</td>
<td>1.075</td>
<td>0.708</td>
<td>1.631</td>
<td>ns</td>
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<tr>
<td>Race * Gay Identity</td>
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<td>1.509</td>
<td>8.448</td>
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* p < 0.05, ** p < 0.01, *** p < 0.001
Note: $\chi^2(7) = 22.10, p = .002$. IRR represents proportional change for each unit increase in the predictor. Race was dummy coded (Latino = 0, Black = 1).

*p < .05; **p < .01; ***p < .001
Figure 1. The interaction of race and ethnic identity on total instances of unprotected anal intercourse (UAI) among Black and Latino MSM.
Figure 2. The interaction of race and gay identity on total instances of unprotected anal intercourse (UAI) among Black and Latino MSM.
Figure 3: Interaction of Ethnic Identity and Gay identity on total instances of unprotected anal intercourse (UAI) for Black MSM.
Figure 4: Interaction of Race and Ethnic Identity on total non-primary partners for Black and Latino MSM.
Figure 5: Interaction of Ethnic Identity and Gay Identity on number of non-primary partners as a bottom for Latino MSM.