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Racial Pride and Condom Use in Post-Incarcerated African-American Men Who Have Sex With Men and Women: Test of a Conceptual Model for the *Men in Life Environments Intervention*

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Abstract

African-American men who have sex with men and women (MSMW) are among those most heavily impacted by HIV in the United States, and those who have histories of incarceration are at further risk of infection. *The Men in Life Environments* (*MILE*) HIV prevention intervention was developed to provide culturally appropriate skills-based education and support for African-American MSMW with recent histories of incarceration. The *MILE's* conceptual framework was informed by three theories: Theory of Reasoned Action and Planned Behavior, Critical Thinking and Cultural Affirmation Model, and Empowerment Theory. The theory-based framework posits that improving racial pride is crucial in building self-efficacy and intentions that in turn promote health-protective behaviors. Therefore, our study aimed to assess whether baseline associations between racial pride and condom use self-efficacy, intentions, and behaviors among African-American MSMW with histories of incarceration align with our conceptual model. We report data on 212 participants recruited from Los Angeles County Sheriff's Department Men's Central Jail and the local community. Using structural equation modeling, we tested two separate models: one with female sexual partners and one with male sexual partners, while stratifying by participant's

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HIV status. Only among HIV-negativeparticipants was greater racial pride associated with less condomless intercourse with men. In this group, greater self-efficacy and intentions—but not racial pride—predicted less condomless intercourse with women. Our findings suggest that racial pride is an important factor to address in HIV prevention interventions for post-incarcerated African-American MSMW.

Keywords

African-American; HIV prevention; Incarceration; Bisexuality; Racial pride; Condom use

Introduction

Men who have sex with men (MSM) and men who have sex with men and women (MSMW) accounted for 70 % of all new HIV diagnoses in the U.S. in 2014, with African-Americans being the most heavily affected racial group (Centers for Disease Control and Prevention, 2015). Likewise, in Los Angeles County, California, male-to-male sexual contact accounted for the majority of new infections (95 %) in 2013, and the rate of diagnoses among African-American men was over 70 per 100,000 persons—higher than any other racial group in this county (Division of HIV and STD Programs, 2014).

High rate of incarceration among African-American men has been identified as a contributor to the HIV epidemic in this population (Brewer et al., 2014; Fullilove, 2011; Jones et al., 2008; Lichtenstein, 2009). In general, populations at risk for incarceration, currently incarcerated, or recently discharged are disproportionately affected by HIV. According to the Bureau of Justice Statistics, 1.5 % of the U.S. prison population was confirmed to be living with HIV in 2010, a prevalence three times higher than the estimated prevalence of HIV (0.446 %) in the general population aged 13 and older (Centers for Disease Control and Prevention, 2013; Maruschak, 2012). Moreover, 16.9 % of people living with HIV in the U.S. are estimated to pass through a correctional facility annually (Spaulding et al., 2009). In 2012, between 4 and 7 % of African-American males aged 20–49 were in prison, higher than the overall U.S. population of males (1 %) (Carson & Golinelli, 2014). Furthermore, between 22.1 and 27.9 % of African-American men living with HIV in 2006 were estimated to have spent time in a correctional facility within the prior 12 months (Spaulding et al., 2009). In Los Angeles County jails specifically, the overall new positivity rate was 0.33 % in 2011 (Division of HIV and STD Programs, 2013). African-Americans (0.5 %) were the most greatly impacted racial group, and men (0.4 %) had a higher rate than women (Division of HIV and STD Programs, 2013). These values exceed the rates of new diagnoses among the general African-American (0.035 %) and male (0.023 %) populations in Los Angeles County (Division of HIV and STD Programs, 2014), but the positivity rates reported for Los Angeles County jails may only be generalizable to the small fraction of people tested in those facilities.

Contextualizing HIV in Post-Incarcerated African-American MSMW

Many African-American MSM do not self-identify with labels such as gay or bisexual, which they may associate with notions of a gay/bisexual culture or community that they do

not find relatable (Ford, 2006; Mustanski, Newcomb, Du Bois, Garcia, & Grov, 2011). In addition, African-American MSM are more likely than other MSM to be bisexually active or discreet about engaging in same-gender sexual activity, which has implications for transmission to the heterosexual community as well as for approaches to intervention (Harawaet al., 2008; Malebranche, 2008; Millett, Malebranche, Mason, & Spikes, 2005). The intersection of race, gender, bisexual behavior, and incarceration in African-American MSMW presents complex issues that can influence HIV risk. These include the competing primacy of cultural and sexual orientation identity, reticence around disclosing same-sex attraction, homonegative stigma, racism, socioeconomic disenfranchisement, disparate burden from criminal justice, and social pressures around masculinity (Mays, Cochran, & Zamudio, 2004; Millett, Flores, Peterson, & Bakeman, 2007; Millett et al., 2005; Millett, Peterson, Wolitski, & Stall, 2006; Williams, Ramamurthi, Manago, & Harawa, 2009).

Culture in HIV Intervention

With these considerations, researchers have asserted the importance of promoting positive self-perceptions around race and culture while instilling HIV prevention skills and other health behaviors in African-American MSM and MSMW (Davis & Stevenson, 2006; Harawa, Obregon, & McCuller, 2014; Male-branche, 2003; Manago, 2002; Maulsby et al., 2013; Stevenson, 1998; Stevenson, Reed, Bodison, & Bishop, 1997; Williams et al., 2009; Williams, Wyatt, & Wingood, 2010). A systematic review of literature by Maulsby et al. (2013) identified 12 studies of HIV interventions geared specifically to African-American MSM—rather than MSM broadly—of which, just 3 integrated formal content around race and culture (e.g., racial socialization, racism, and racial identity), 8 aimed to reduce HIV risk behaviors (rather than promote testing or linkage to care), and 5 found a significant longitudinal reduction in HIV risk behavior.

Although there is support within the scientific community that HIV interventions that address culture represent a best practice (Maulsby et al., 2013; Williams et al., 2010), the degree to which racial pride is associated with HIV preventive behaviors among intervention participants is not fully understood. In studies of culturally congruent HIV interventions, the absence of an equivalent comparison group (without a cultural component), as well as the absence of evaluation of the effect of racial pride on behavioral outcomes can obscure the specific importance of culture in HIV prevention among African-American MSM and MSMW (Maulsby et al., 2013; Williams et al., 2009). Findings by DiStefano et al. (2013) suggests that racial pride is protective against HIV risk behaviors among Pacific Islander communities, but this association has yet to be quantitatively demonstrated among African-Americans. Therefore, the objective of our study is to assess the pathways by which racial pride is associated with condom use self-efficacy, intentions, and behaviors among post-incarcerated African-American MSMW using baseline data from our intervention, *Men in Life Environments* (*MILE*) (Harawa et al., 2016). The MILE intervention, is adapted from the *Men of African Legacy Empowering Self* (*MAALES*) intervention for African-American MSMW (Harawa et al., 2013; Williams et al., 2009) to address the needs of post-incarcerated African-American MSMW (Harawa et al., 2016). Like MAALES, MILE incorporates African-American culture both in the communication of HIV prevention content (e.g., efficacy to change, intentions to change, sexual communication, problem

solving, etc.) and as content itself, with discussions and activities around cultural capital, racial socialization, and critical examination of culture and society (Harawa et al., 2013, 2016).

The MILE intervention draws upon on three behavioral models—the Theory of Reasoned Action and Planned Behavior (TRA/TPB) (Ajzen, 1991), Empowerment Theory (Freire, 1983), and the Critical Thinking and Cultural Affirmation (CTCA) Model (Manago, 1996, 2002). TRA/TPB, a health behavior theory, supports that safer sex norms, positive attitudes regarding condom use and perceived behavioral control (self-efficacy), promote intentions and subsequent behavior change (Ajzen, 1991). CTCA is a culturally informed African-American prevention strategy that encourages the development of critical thinking, communication skills, and positive mental health, including protective racial socialization and self-actualization (Stevenson, 1998; Stevenson et al., 1997) that can aid in the adoption of protective health practices (Manago, 1996, 2002). Empowerment Theory has been popularized in HIV prevention interventions in sexual minority populations (Kegeles, Hays, & Coates, 1996) under the conceptual basis that fostering confidence and agency as a member of a greater community (i.e., the African-American community) can facilitate the acquisition of knowledge and other aspects of personal growth. The pedagogical process through which this empowerment takes place then leads to self-efficacy and intentions to engage in safer sexual behaviors.

Conceptually, these theories can be applied together toward HIV prevention among post-incarcerated MSMW by fostering racial pride, such as through cultural affirmation and critical analysis of social and media expectations, as a means to augment self-efficacy, intentions, and behaviors forusing condoms in African-American MSMW. Considering that racial pride reflects one's positive regard for his or her membership in the African-American community (Sellers, Rowley, Chavous, Shelton, & Smith, 1997), it stands to reason that those with high racial pride would possess higher confidence and perceived skills in negotiating and implementing condoms during sex (Manago, 1996,2002). In turn, those with greater confidence around using condoms will have higher intentions to use them and will be more likely to actually engage in the practice (Ajzen, 1991; Kegeles et al., 1996). The conceptual framework for this study and the theories associated with each construct (shown in Fig. 1) guided our analysis, where we tested associations between racial pride, condom use self-efficacy, condom use intentions, and sexual intercourse without condoms in alignment with the intersecting theories of the MILE intervention.

Method

Participants

African-American MSMW with recent histories of incarceration were recruited from the Los Angeles County Sheriff's Department Men's Central Jail, community settings, and through peer referral using a modified respondent-driven sampling approach. Aside from the Men's Central Jail, community sites used to recruit participants included employment training and referral centers, probation offices, self-help meetings, and drug treatment programs among others. Peer referral was accomplished by providing participants who had completed the 3-month follow-up interview with a brief training and three to five coupons to pass onto

individuals like themselves to the study. If potential participants returned with the coupon to the study site and were found to be eligible for the study, the referring participant received a $10 incentive for the successful referral. Overall, 65 % of participants were recruited directly by outreach workers from the jail and community sites and 35 % were identified through peer referral.

Study eligibility criteria included (1) self-identification as Black/African-American, (2) labeled male at birth and currently self-identified as a man, (3) 18 years of age or older, (4) residence in LA county, (5) incarceration in jail within the 12 months prior to recruitment, (6) anal intercourse without condoms with a man in the prior 12 months, (7) vaginal or anal intercourse without condoms with a woman in the prior 12 months, (8) any vaginal or anal intercourse without condoms in the prior 3 months, and (9) two or more sexual partners (of any sex) in the prior 3 months. Potential participants who were unable to speak, read, and understand English, as well as those who self-reported injection drug use in the prior 12 months, were excluded. Participation in the study occurred solely outside of jail and prison to ensure participants were not subject to direct or indirect coercion from the criminal justice system.

A total of 377 potential participants were screened for eligibility for the study, and 252 of them were initially considered eligible for inclusion in the study. Of these 252 eligible persons, 236 were initially enrolled: however, 22 of those enrolled were excluded because their baseline survey responses indicated that they did not fulfill the eligibility criteria. Participants completing the baseline interview were given $30USD for their time and effort. The median time to completion of the survey was almost 2 h. In addition, 2 of the remaining 214 participants were found to have unusable data. Complete baseline data were available for 190 participants for study variables pertaining to sexual activity with female partners and for 177 participants pertaining to sexual activity with male partners. The remaining participants either did not report sexual partners of that sex in the prior 3 months or provided incomplete responses. Participants were assessed at baseline using audio-computer-assisted self-interview (NOVA Research Company, 2013), allowing for electronic self-reporting of survey responses. All study procedures were approved by the Institutional Review Board of the authors' home institutions.

Measures

Participant Characteristics—We collected sociodemographic information at baseline, including age, racial/ethnic identity, sexual orientation, housing status, marital/relationship status, education, employment/income, as well as health characteristics such as HIV status.

Racial Pride—We measured racial pride across 6 items from the Black Group Perception scale (Cronbach's $\alpha = 0.71$) (Allen & Hatchett, 1986), which captures the degree to which African-Americans embrace positive and negative attitudes toward their own race. Responses ranged from 0 (*Not at all true*) to 3 (*Very true*), with higher scores representing greater racial pride. An example of an item is: “How true do you think it is that most Black people are proud?” Items with negative phrasing were reverse-coded.

Condom Use Self-Efficacy—We assessed perceived self-efficacy around negotiating and using condoms during anal and vaginal intercourse across seven items from the National Institute of Mental Health (NIMH) Multisite Condom Use Self-Efficacy scale (CUSES) (Dilorio, Maibach, O'Leary, Sanderson, & Celentano, 1997) intended for research with African-American populations (Cronbach's $\alpha = 0.88$). Two separate sets of questions, with 7 items in each, were phrased to refer separately to condom use self-efficacy with female and male sexual partners. Responses ranged from 1 (*Not all that sure I can do*) to 5 (*Completely sure I can do*) to statements such as "I can get every potential male partner to use a condom with me."

Condom Use Intentions—Intention to use condoms with new sexual partners was assessed using the Condom Use Intentions scale (Cronbach's $\alpha = 0.85$) (Jemmott, Jemmott, Spears, Hewitt, & Cruz-Collins, 1992). The scale consists of four items in total, with two items pertaining to condom use intentions with female sexual partners and two items pertaining to condom use intentions with male sexual partners. Responses ranged from 1 (*Quite sure I won't*) to 4 (*Quite sure I will*). An example item is as follows: "In the next 90 days, how likely is it that you will use a condom every time you have vaginal or anal sex with casual female partners?"

Sexual Intercourse Without Condoms—We assessed number of episodes of sexual intercourse without condoms with females and with males within the prior 3 months. Patients reported both vaginal and anal intercourse behaviors with female partners within the prior 3 months as well as receptive and insertive anal intercourse behaviors with male partners in the prior 3 months.

Analysis

Statistical Approach—We used Stata 13 (StataCorp, 2013) to perform descriptive statistics for our sample and EQS 6.2 (Bentler, 2014) to perform structural equation modeling (SEM). SEM allowed us to quantitatively represent our study constructs (racial pride, self-efficacy, intentions, and behavior) as latent variables (or factors) by modeling their associations with related indicators (representing measured items), and it allowed us to test associations between these factors in alignment with our conceptual model (Fig. 1). We used the maximum likelihood estimation algorithm in EQS 6.2 (Bentler, 2014) for modeling missing data in our analyses (Enders, 2001). This method computes a deterministic estimate from maximizing two likelihoods, which are computed separately for those cases with complete data on some variables and those with complete data on all variables (Enders, 2001).

Two analytic models were tested to separately assess associations between constructs and behaviors pertaining to participants' condom use with their female sexual partners and with their male sexual partners. We used the "GROUPS" option in EQS 6.2 to fit each model by participant HIV status, with one group comprising participants of HIV negative or unknown status ($n = 174$) and the other group comprising participants of HIV positive status ($n = 65$). Power analysis using the A priori Sample Size Calculator for Structural Equation Models by

Soper (2015) indicated that the smallest group (n = 65) is of sufficient size to detect a small effect size of 0.20 or greater (Cohen, 1988).

Tests of Association—Indicators or items (denoted as 'X' in Figs. 2, 3, 4, 5) pertaining to our study constructs—racial pride, condom use self-efficacy, and condom use intentions—were loaded onto their corresponding factors representing these constructs. We incorporated frequency of intercourse without condoms into the model as an outcome variable using the observed measure. In alignment with our conceptual model (Fig. 1), we tested the pathways from racial pride to condom use intentions in the form of both direct association and mediation through self-efficacy. Lastly, we tested a pathway from condom use intentions to frequency of intercourse without condoms, while quantifying both direct effects of condom use intentions and indirect effects of racial pride and condom use self-efficacy. Although our conceptual and analytic focus was on self-efficacy as an antecedent of intentions, we confirmed that individually assessing other TRA/TPB constructs (condom use attitudes and condom use norms) yielded nonsignificance among several pathways necessary to maintain the structure of our hypothesized model.

Model Refinement—Model fit indices—including chi square (χ^2) goodness of fit, root mean square error of approximation (RMSEA), and comparative fit index (CFI)—were calculated to evaluate the fit of the final model. Model modification encompassed performing a Lagrange Multiplier test for each model to identify additional parameters that could improve model fit while still adhering to the theoretical framework of our analysis. Any parameter identified by Langrage Multiplier was included in the refined model if it reflected an association with substantive meaning (i.e., if it can be explained by prior research findings).

Results

Participant Characteristics

Descriptive statistics for sociodemographics and study variables are displayed in Table 1. The mean age of the sample was 40.5 years (SD = 10.6). More than 61 % of the sample reported having an annual income of less than $5000. While the majority of men were not married or living with women, 6 % of the sample was married to women, while 2 % were married to men. The majority of participants identified as being bisexual (71 %), followed by homosexual/gay (17 %) and heterosexual/straight (8 %). About 31 % of our sample was HIV-positive, while the remainder reported HIV-negative or unknown status. Over 62 % of participants reported having been homeless within the prior 12 months. Racial pride scores averaged at 10.6 (SD = 2.7, scale range: 0–15) with Cronbach's α = 0.64 in our sample. Mean condom use self-efficacy with female partners and with male partners were 18.9 (SD = 8.2, scale range: 0-28, Cronbach's α = 0.93) and 17.9 (SD = 8.3, scale range: 0–28, Cronbach's α = 0.91), respectively. Mean condom use intentions with female partners were 2.9 (SD = 2.7, scale range: 0–6, Cronbach's α = 0.86) and 3.0 (SD = 2.6, range: 0–6, Cronbach's α = 0.87) with male partners. In the prior 3 months, participants reported having engaged in condomless sexual intercourse with female partners (vaginal and anal) an

average of 16.7 times (SD = 29.5) and with male partners (insertive and receptive) an average of 10.4 times (SD = 14.4).

Racial Pride and Condom Use with Female Partners

Our first model tested variables pertaining to condom use with female sexual partners. Because the model was fit by HIV status, Figs. 2, 3 separately display direct paths and estimates (with standardized coefficients β) for participants of HIV-negative or unknown status and participants of HIV-positive status, respectively.

Among HIV-negative participants (Fig. 2), racial pride was positively associated with condom use self-efficacy with women (β = 0.32, p = .001), which in turn was positively associated with condom use intentions with women (β = 0.33, p < .001). In this group, condom use intentions with women was negatively associated with frequency of intercourse without condoms with women (β = −0.18, p < .046). The indirect effects of racial pride on condom use intentions with women was significant (β = −0.11, p<.016), but not the indirect effects of racial pride on frequency of intercourse without condoms with women (β = −0.05, p = .190).

Among HIV-positive participants (Fig. 3), racial pride was positively associated with condom use self-efficacy with women (β = 0.31, p = .036). Condom use self-efficacy was positively associated with condom use intentions with women (β = 0.34, p = .015), but neither condom use self-efficacy nor intentions were associated with frequency of intercourse without condoms with women in this subgroup.

Factor loadings for two indicators (X1 and X3) for racial pride were nonsignificant, while the four remaining racial pride indicators loaded with significance (p<.01). All indicators for the other factors—condom use self-efficacy with women and condom use intentions with women—had significant loadings (p<.001).

The Lagrange Multiplier test identified correlated errors that would improve the fit of both of our models. Without accounting for these correlated errors, our model fit indices were: x^2 = 374.741, df = 198, p<.001; CFI = 0.896; RMSEA = 0.092, 90 % CI (0.077,0.106). We modified this model (Figs. 2, 3) to account for five pairs of correlated errors. The correlated errors corresponded to two pairs of indicators for racial pride (E1 and E3; E3 and E5), two pairs of indicators for condom use self-efficacy with female partners (E7 and E8; E9 and E10), and another pair corresponding to the sixth indicator for racial pride (E6) (“How true do you think it is that most Black people are violent?”) and frequency of intercourse without condoms with women (E16). Accounting for these correlated errors, fit indices for our first model indicated improved overall fit: χ^2 = 295.538, df = 192, p < .001; CFI = 0.939; RMSEA = 0.072,90 % CI (0.055, 0.087).

Racial Pride and Condom Use with Male Partners

Our second model measured construct associations symmetrically to our first model and pertained to condom use with male sexual partners. Figures 4 and 5 display direct paths and standardized coefficients (β) for participants of HIV-negative or unknown status and participants of HIV-positive status, respectively.

Among HIV-negative participants (see Fig. 4), racial pride was positively associated with condom use self-efficacy with men ($\beta = 0.40$, $p<.001$), which in turn was positively associated with condom use intentions with men ($\beta = 0.38$, $p<.001$). Condom use self-efficacy with men—rather than condom use intentions with men—was directly, negatively associated with frequency of intercourse (insertive and receptive) without condoms with men ($\beta = -0.27$, $p<.001$) and mediated the association between racial pride and this outcome (indirect effects = −0.11, $p = .011$).

Among HIV-positive participants (see Fig. 5), racial pride was positively associated with condom use self-efficacy with men ($\beta = 0.53$, $p < .001$), which in turn was positively associated with condom use intentions with men ($\beta = 0.47$, $p = .009$). Indirect effects of racial pride on condom use intentions with men (through self-efficacy with men) was $\beta = 0.25$, $p = .044$, while direct effects of racial pride on condom use intentions with men was $\beta = -0.40$, $p = .037$. However, condom use intentions with men was not associated with frequency of intercourse without condoms with men in this subgroup.

As with our first model, in our second model, two indicators for racial pride (X1 and X3) had nonsignificant factor loadings—while the four remaining racial pride indicators loaded with significance ($p < .01$). All indicators for the other factors—condom use self-efficacy with men and condom use intentions with men—loaded with significance ($p<.001$).

Without accounting for correlated errors, fit indices for our unmodified second model did not demonstrate good fit: $\chi^2 = 362.316$, df = 200, $p < .001$; CFI = 0.881; RMSEA = 0.088, 90 % CI [0.073,0.102]. This second model (Figs. 4,5) included four pairs of correlated errors identified by the Lagrange Multiplier test which corresponded to two pairs of indicators for racial pride (E1 and E3; E3 and E5) and two pairs of errors for the items for condom use self-efficacy with male partners (E7 and E8; E9 and E10). This modified model demonstrated improvedand overall good fit: $\chi^2 = 118.637$, df = 84, $p < .001$; CFI = 0.968; RMSEA = 0.048, 90 % CI [0.025,0.067].

Discussion

In both analytic models, racial pride appeared to have positive association with condom use intentions, mediated by condom use self-efficacy. These findings support extant research and our conceptual framework and emphasize the need to incorporate positive representations of racial identity into holistic sexual health interventions for African-American men, especially those focused on skill-building and self-efficacy (Davis & Stevenson, 2006; Malebranche, 2003; Manago, 1996,2002; Stevenson, 1998; Stevenson et al., 1997; Williams et al., 2009). Specifically, having improved self-concept, regardless of socioeconomic status or sexual orientation, can promote self-efficacy and willingness to engage in safer sexual behaviors among African-American MSMW (Manago, 1996, 2002).

Among HIV-negative participants, racial pride was not significantly associated with condomless intercourse with women (Fig. 2). However, greater condom use intentions with female sexual partners were associated with fewer instances of vaginal or anal intercourse without condoms with female partners, which is consistent with prior research suggesting

that intentions to use condoms is the most proximal antecedent to condom use in heterosexual activity (VanderDrift, Agnew, Harvey, & Warren, 2013). Instilling condom use intentions in men may be especially important given that African-American women report problems integrating condom use despite learning that their male partners were sexually active sex with other men (Harawa et al., 2014). Analysis by Harawa et al. pointed to substance use, financial instability, and desire to maintain intimate partnerships as barriers to protective changes in sexual behavior in these relationship contexts. In other qualitative research, this research group found the following: (1) that Black MSMW are the most motivated to use condoms with women when concerned about avoiding pregnancy, and (2) that their sexual encounters with women were more often in the context of a relationship, in contrast to their sexual encounters with other men that more frequently occurred without emotional ties (Harawa, Williams, Ramamurthi, & Bingham, 2006; Harawa et al., 2008). Others have noted that, in established heterosexual relationships, both males and females often view condoms as signs of infidelity or distrust, dissuading their adoption of condoms (Ferguson, Quinn, Eng, & Sandelowski, 2006; St. Lawrence et al., 1999). The effects of racial pride on condomless intercourse with women may be conflated with these situational factors. Rather, our findings emphasize that aligning intentions of MSMW to use condoms with those of their female partners may be necessary to translate intentions into the actual adoption of safer sexual behaviors.

Among HIV-negative participants, greater racial pride was significantly protective against condomless intercourse with other men, mediated by self-efficacy to use condoms with other men (Fig. 4); intentions to use condoms was not a significant predictors of behavior in this model. This suggests that condom use self-efficacy may be a stronger protective factor against condomless intercourse between African-American MSMW and their male partners than condom use intentions. It is possible that MSMW's successful incorporation of condoms during sex depends more on their self-efficacy during encounters with other men compared to other women due to differences in gender dynamics. For example, it has been reported that African-American men often have greater control and decision-making power than their female partners (Harawa et al., 2014; Raiford, Seth, Braxton, & DiClemente, 2013), and in these situations, it stands to reasons that their intentions to use condoms may still translate into condom use even with only moderate condom-specific self-efficacy. In contrast, if power dynamics between African-American men and their same-sex partners are relatively equal, condom use self-efficacy may have a stronger effect on condom use behaviors than mere intentions.

Among HIV-positive participants, none of our study constructs were associated with frequency of intercourse without condoms with women (Fig. 3) or with other men (Fig. 4). Considering that the standardized estimate between condom use intentions and condomless intercourse with women was similar among HIV-positive participants as among HIV-negative participants ($\beta = -0.18$) but still nonsignificant, it is possible that the number of HIV-positive participants ($n = 65$) was insufficient to detect this effect size. As previously stated, a priori power analysis had indicated that our model was only powered to detect an effect size of 0.20 or greater in this group. In this group, the nonsignificant association between our study constructs and condomless sex with both women and men also may be attributed to the barriers posed by HIV-related stigma on the prevention of HIV

transmission. Multiple studies have supported that high HIV-related stigma is predictive of inconsistent condom use (Peretti-Watel et al., 2007; Varni, Miller, & Solomon, 2012; Wolitski, Pals, Kidder, Courtenay-Quirk, & Holtgrave, 2009) and nondisclosure of HIV status (Overstreet, Earnshaw, Kalichman, & Quinn, 2013) among people living with HIV. Moreover, the experience of HIV stigma in our study population could possibly have been amplified by its intersection with other stigmas, such as those rooted in being a racial and sexual minority and having a history of incarceration (Brinkley-Rubinstein, 2015).

All items representing racial pride were drawn from the Black Group Perception scale (Cronbach's $\alpha = 0.71$),a validated scale which measures the degree to which African-Americans hold positive and negative attitudes toward their own race (Allen & Hatchett, 1986). Still, two items—worded (a) “How true do you think it is that most Black people are intelligent?” and (b) “How true do you think it is that most Black people are hard-working?”—did not have significant factor loadings with racial pride in either model. Accounting for correlated errors between these two items (E1 and E3) improved fit of both models. In addition, the error term E3 was found to be correlated with the error term E5 (corresponding to the item “How true do you think it is that most Black people are proud of themselves?”). Together, these correlated errors suggest that a separate factor from the overall racial pride factor may encapsulate these three items. Substantively, this might be explained by the positive framing of these three items compared to the negative framing of the three remaining items (i.e., “How true do you think it is that most Black people give up easily?”). This may suggest that a particular aspect of racial pride—rejection of negative racial stereotypes—is a salient predictor of HIV preventive behavior. It is important to note, however, that the positively framed item “How true do you think it is that most Black people are proud of themselves?” still loaded onto the overall racial pride factor with significance.

Interestingly, among both HIV-negative and HIV-positive participants, the correlated error (E6) corresponding to the racial pride indicator, “How true do you think it is that most Black people are violent?” was negatively associated with the correlated error (E16) for frequency of condomless intercourse with women (Figs. 2,3). This racial pride indicator was reverse-coded, which suggests that disagreement with the notion that Black people are violent is protective—independently from the main racial pride factor—against condomless intercourse with women. Given that prior studies have indicated that violence enacted by men against their female partners is a hindrance to condom use and sexual negotiation (Frye et al., 2011; Wingood & DiClemente, 1997), it is conceivable that African-American MSMW who renounce violent stereotypes would be more receptive to sexual negotiation and condom use with their female partners.

Although there is general consensus among researchers that addressing sociocultural factors in African-American MSM and MSMW is a best practice for both understanding the epidemic and intervening at multiple levels (Harawa et al., 2013; McCree, Jones, & O'Leary, 2010; Williams et al., 2009, 2010), our study provides novel evidence to further strengthen these perspectives. While cultural tailoring has to improve accessibility and retention in HIV prevention interventions (McCree et al., 2010), our findings suggest that racial pride has value as a health determinant. Furthermore, the present study illustrates a potential mechanism by which addressing issues pertaining to race and other aspects of self-concept

can augment condom use self-efficacy, intentions and practices in post-incarcerated African-American MSMW. In addition, racial pride may be associated with other constructs not assessed in this model that are predictive of condom-related behaviors.

There exist two primary strategies for incorporating culture into HIV preventive interventions for African-American MSMW (Williams et al., 2010; Wilson & Miller, 2003). The first strategy involves focusing on the process or on the presentation; the way to use language, facilitators, and media that is rooted in the culture of the audience in order to optimize their receptivity and understanding of the content and empower them to advocate for their health. The second strategy is to incorporate culture into the intervention as conceptual content. Examples of this may include emphasizing or discussing strengths and resources that are characteristic of one's culture, critically assessing race and society, and identifying processes of racial socialization that help participants adapt to societal challenges. Future research is needed to longitudinally evaluate the effects of different approaches to incorporating sociocultural content on protective sexual practices, as it is often difficult to determine which cultural components of the intervention are most predictive of behavioral change, even among HIV prevention interventions with demonstrated efficacy.

Behavioral interventions will likely continue to serve an important role in reducing the risks associated with HIV infection among post-incarcerated African-American MSMW. The combined social burdens of sexual minority stigma, racism, poverty, and negative experiences with law enforcement (Mays et al., 2004; Millettet al., 2005, 2006, 2007; Williams et al., 2009) can pose challenges for this group around access to expanding biomedical interventions such as pre-exposure prophylaxis (PrEP) (King et al., 2014). These problems were reflected in our study sample as well, as marked proportions of participants reported having been homeless within the prior 12 months and having an annual income of less than $5000. HIV prevention in the form of culturally congruent and effective interventions that encourage both behavioral and biomedical options for prevention may be the most feasible and accessible resources for this population (Williams et al., 2009, 2010). Therefore, research efforts to identify and address culturally relevant determinants of condom-related behaviors will continue to be necessary for refining and improving the effectiveness of these interventions.

Limitations

Limited inferences about causality or directionality can be made from our findings, as these models represent cross-sectional examination of baseline data. For example, while condom use intentions reflected participant predictions of future condom use, instances of condomless sex were reported for the prior 3 months only. Still, it is feasible that participant condom use intentions at reported baseline had remained static since the prior 3 months. Considering that our model accounted for a limited number of factors and pathways for purposes of parsimony, it is also possible that racial pride might reduce sexual risk behaviors through other mechanisms not explored in this study. The accuracy of our data may be subject to recall and self-report bias, although use of A-CASI has been known to reduce underreporting of self-reported sexual risk behavior (Des Jarlais et al., 1999; Jimenez, 2003; Turner et al., 1998). Finally, the representativeness of our sample might not fully extend to

all African-American MSMW with histories of incarceration given that our sample was recruited solely from Los Angeles County and that participants were selected for their recent sexual risk behaviors.

Conclusions

Our findings support the importance of considering racial pride and other aspects of self-concept when promoting skills and intentions for safer sexual health behaviors among African-American MSMW, especially those affected by incarceration. Additional research is needed to understand the ways in which racial and sexuality-based self-concept intersect. Furthermore, the degree to which racial and sexuality-based self-concept influences protective sexual behaviors in this population through other mechanisms should be explored in future research. A repeated measures analysis might provide a more detailed evaluation of the theoretical framework for the CHJ MILE intervention and shed light on the intervention's impacts over time. Because translating condom use self-efficacy and intentions into protective practices may be a challenge among participants living with HIV, successful interventions may need to incorporate content on coping with the intersecting stigmas of HIV, racial and sexual minority statuses, and having a history of incarceration.

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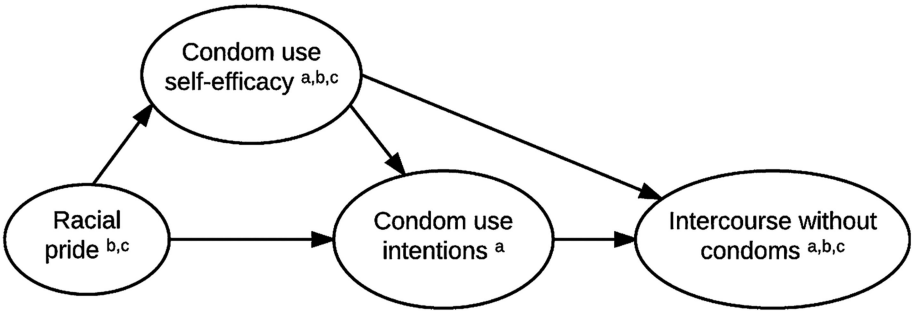

Fig. 1.

Conceptual framework illustrating the effects of racial pride on self-efficacy, as well as mediated pathway from racial pride to condomless intercourse; constructs are based on overlapping constructs from three theories—Theory of Planned Behavior, Empowerment Theory, and Critical Thinking and cultural Affirmation. [a]Denotes a Theory of Planned Behavior-based construct. [b]Denotes an Empowerment Theory-based construct. [c]Denotes a Critical Thinking and Cultural Affirmation-based construct

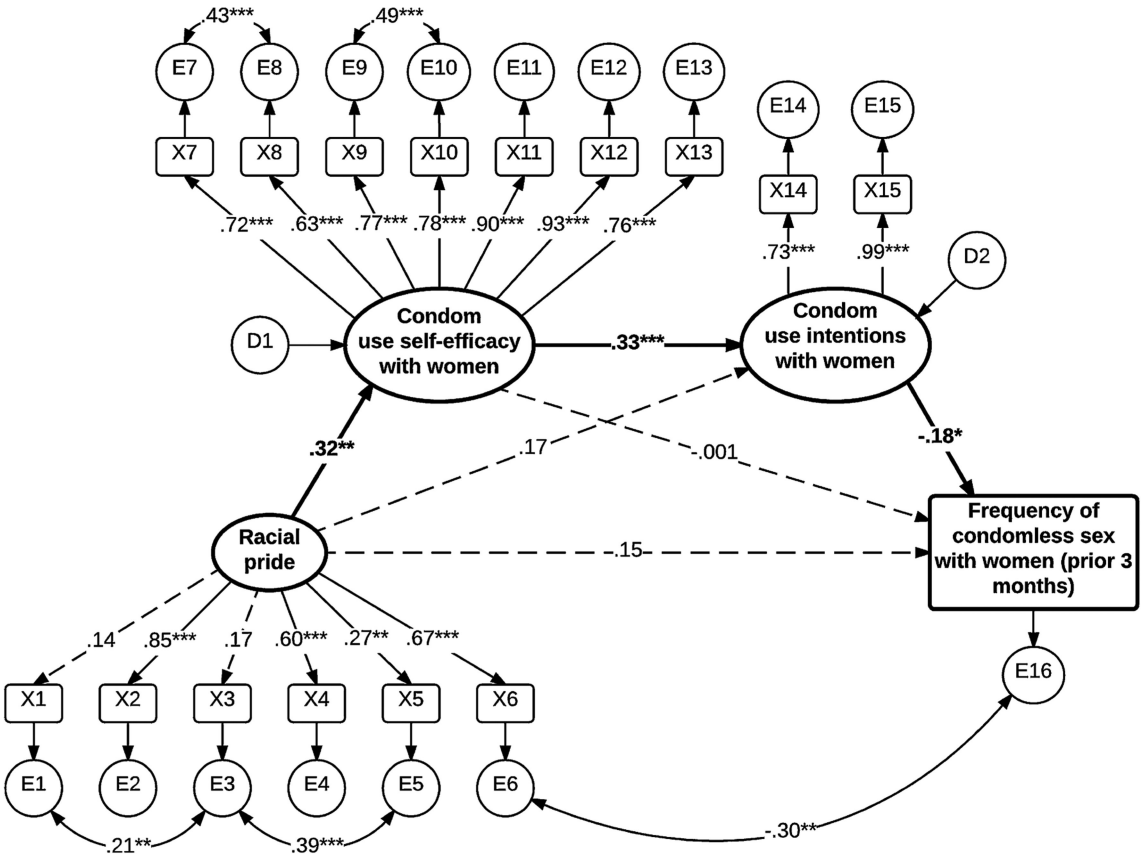

Fig. 2.

Racial pride, self-efficacy and intentions to use condoms, and frequency of intercourse (vaginal and anal) without condoms among HIV-negative African-American MSMW (n = 147) with female partners, displaying standardized coefficients (β) for direct associations only. E = error, X = indicator, and D = disturbance. Indirect effects are reported in the "Results" section. *p<.05, **p<.01, ***p<.001

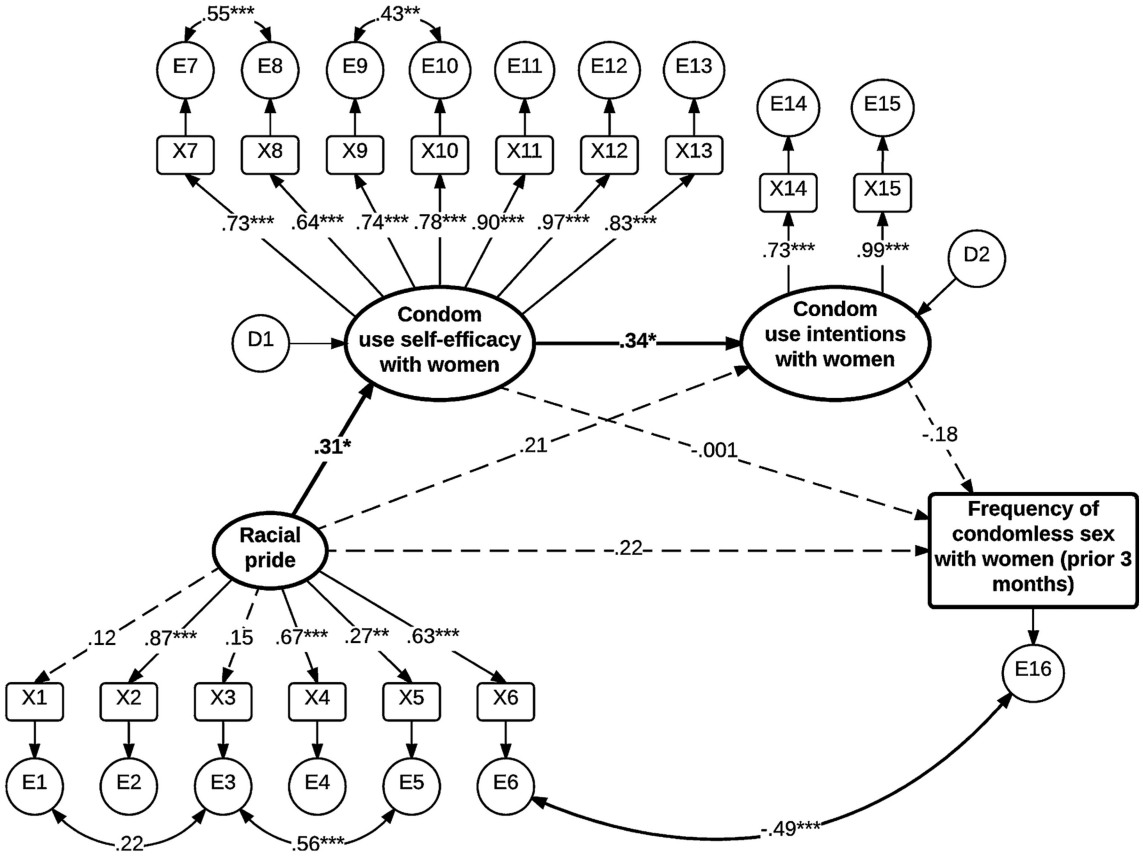

Fig. 3.

Racial pride, self-efficacy and intentions to use condoms, and frequency of intercourse (vaginal and anal) without condoms among HIV-positive African-American MSMW (n = 65) with female partners, displaying standardized coefficients (β) for direct associations only. E = error, X = indicator, and D = disturbance. Indirect effects are reported in the "Results" section. *p<.05, **p<.01, ***p<.001

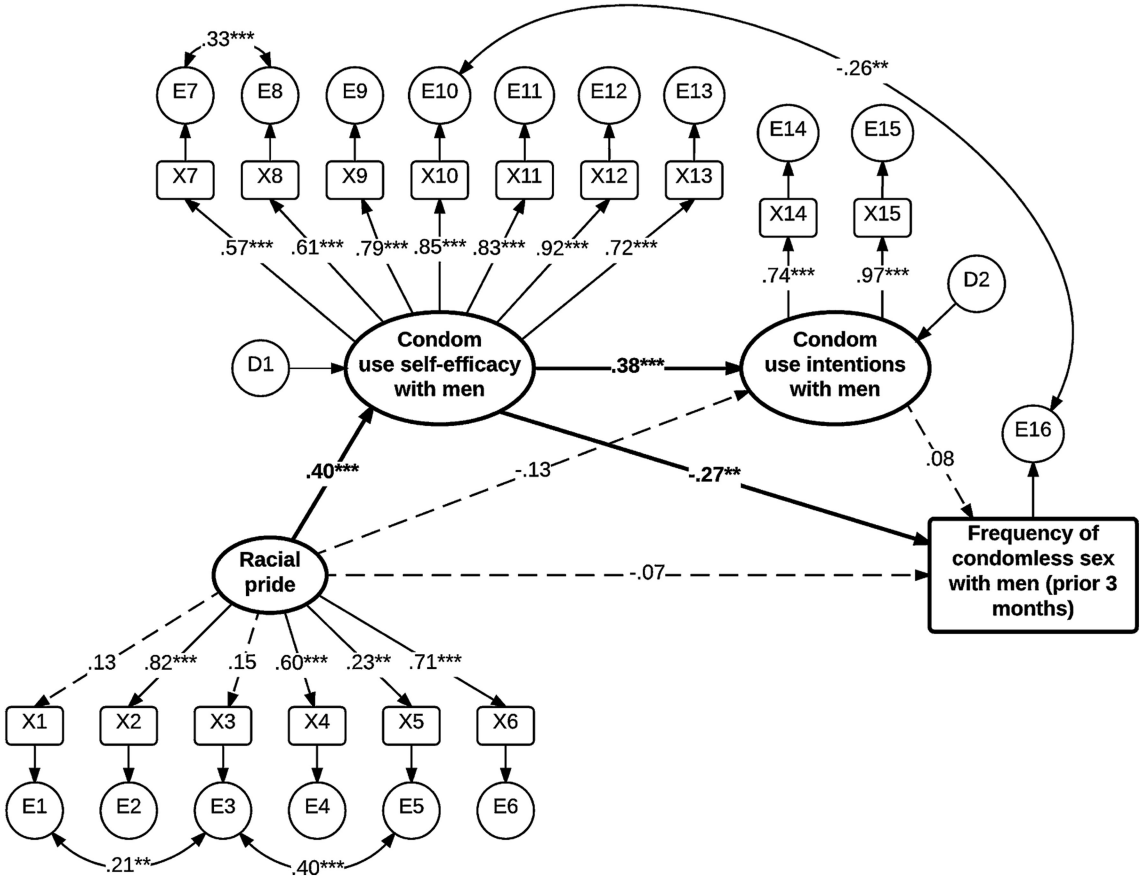

Fig. 4.

Racial pride, self-efficacy and intentions to use condoms, and frequency of anal intercourse (insertive and receptive) without condoms among HIV-negative African-American MSMW (n = 147) with male partners, displaying standardized coefficients (β) for direct associations only. E = error, X = indicator, and D = disturbance. Indirect effects are reported in the "Results"section. *p<.05, **p<.01, ***p<.001

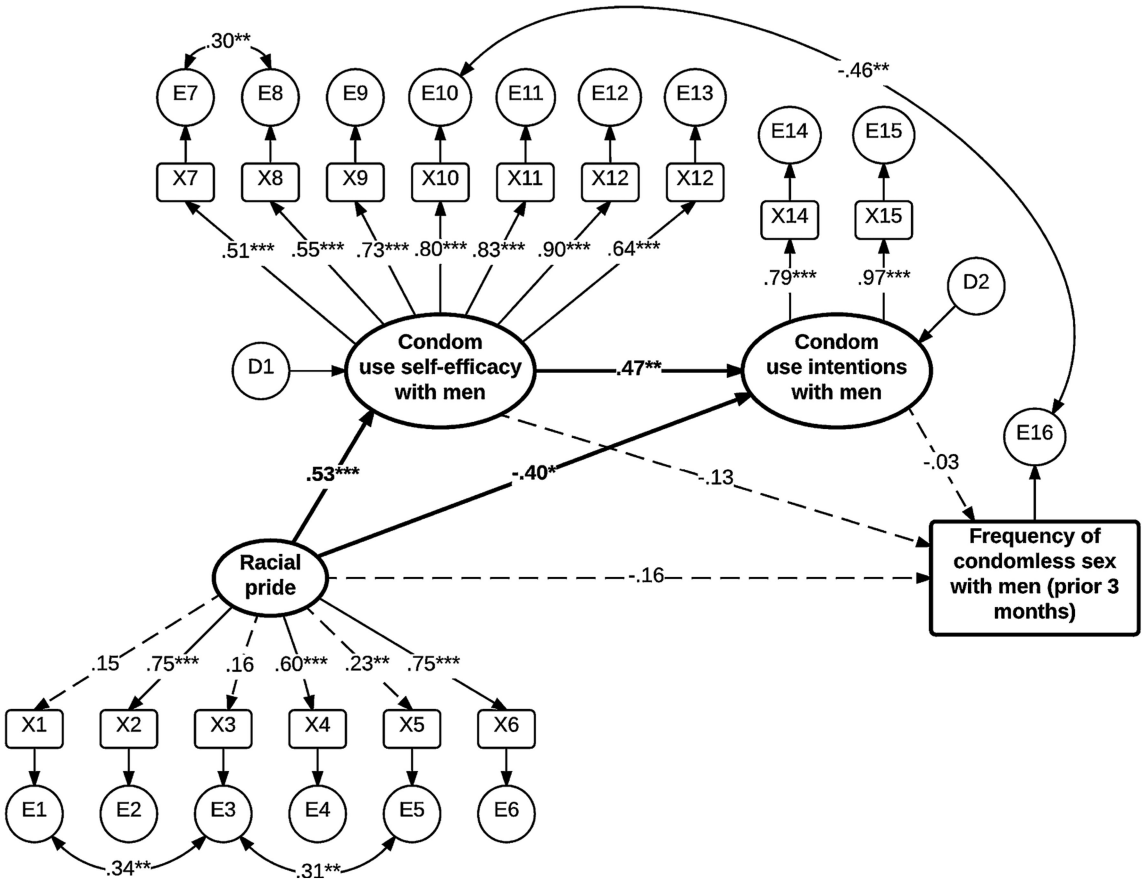

Fig. 5.

Racial pride, self-efficacy and intentions to use condoms, and frequency of anal intercourse (insertive and receptive) without condoms among HIV-positive African-American MSMW (n = 65) with male partners, displaying standardized coefficients (β) for direct associations only. E = error, X = indicator, and D = disturbance. Indirect effects are reported in the"Results"section. *p<.05, **p<.01, ***p<.001

Table 1

Descriptive statistics of sociodemographics and study variables (n = 212)

Characteristic	*M*	*SD*	Scale range
Age	40.53	10.58	
Racial pride	10.61	2.72	0-15
Condom use self-efficacy			
With female partners	18.85	8.24	0-28
With male partners	17.89	8.27	0-28
Condom use intentions			
With female partners	2.75	2.66	0-6
With male partners	2.97	2.60	0-6
Frequency of sex without condoms in prior 3 months			
With women (vaginal and anal)	16.65	29.45	
With men (insertive and receptive anal)	10.41	14.35	

	n	%
Annual income		
Less than $5000	131	61.79
$5000 to $9999	36	16.98
$10,000 or more	37	17.45
Unknown	8	3.77
Homeless in the prior 12 months		
No	79	37.26
Yes	133	62.74
Marital status		
Married to a woman	13	6.13
Married to a man	5	2.36
Not married	194	91.51
Living with female partner	16	8.25
Living with male partner	23	11.86
Not cohabiting	155	79.90
Sexual orientation		
Heterosexual or straight	16	7.55
Homosexual or gay	35	16.51
Bisexual	151	71.23
Other	10	4.72
HIV status		
Negative or unknown	147	69.34
Positive	65	30.66