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The Influence of Self-Reported Degree of Masculinity/Femininity on Condom Use Among Black Men Who Have Sex with Men in the Deep South

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THE INFLUENCE OF SELF-REPORTED DEGREE OF MASCULINITY/FEMININITY
ON CONDOM USE AMONG BLACK MEN WHO HAVE SEX WITH MEN IN THE
DEEP SOUTH

by

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Bachelor of Science
Appalachian State University, 2013

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DEDICATION

To my loving family and friends who always believe in me even when I doubt myself and to the countless teachers, professors, and mentors who have helped paved the path I stand on now.

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ABSTRACT

In the United States, 50,000 Americans are diagnosed with HIV each year (CDCa, 2014). The HIV/AIDS epidemic has had a particularly devastating impact on the southern U.S., especially the Deep South – Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina (Reif, Whetten, Wilson, McAllaster, Pence, Legrand, & Gong, 2014). The Deep South, while only composing of 36% of the national population, accounts for 50% of all people living with HIV/AIDS in the nation (Human Rights Watch, 2010). No other population has been hit harder than men who have sex with men (MSM; Prejean, Tang, & hall, 2013). Black MSM have been disproportionately affected by HIV, with 1 in 5 Black MSM diagnosed with HIV compared to 1 in 22 White MSM (Lieb, Prejean, Thompson, Fallon, Cooper, Gates, Liberti, Friedman, & Malow, 2011). A number of hypotheses have been proposed to explain the disparity seen between Black and White MSM (Millet, Malebranche, & Peterson, 2007; Kraut-Becher, Eisenberg, Voytek, Brown, Metzger, & Aral, 2007; Millet, Peterson, Wolitski, & Stall, 2008), but very few have considered the influence of self-reported degree of masculinity/femininity on condom use among Black MSM.

This study aimed to examine the consistency of condom use in receptive anal intercourse (RAI) and insertive anal intercourse (IAI) among Black MSM in relation to

the self-reported degree of masculinity/femininity. After completing secondary data analysis of the Sexual Health In Faith Tradition (SHIFT) Study, self-reported degree of masculinity/femininity was not associated with consistency of condom use in both RAI and IAI. The findings support to Malebranche, Gvetadze, Millet, and Sutton's (2010) results that indicated gender role conflict does not predict unprotected RAI and IAI. Further research is needed to better understand the influence of gender role among Black MSM and the possible ramifications gender role conflict may have on sexual behaviors, especially consistency of condom use.

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LIST OF ABBREVIATIONS

AIDS.....	Acquired Immunodeficiency Syndrome
CDC.....	Centers for Disease Control and Prevention
HIV.....	Human Immunodeficiency Virus
IAI.....	Insertive Anal Intercourse
MSM.....	Men who have Sex with Men
RAI.....	Receptive Anal Intercourse
REF.....	Reference
SHIFT.....	The Sexual Health in Faith Traditions Study
U.S.....	United States of America

CHAPTER 1

INTRODUCTION

In the United States (U.S), 1.2 million people are living with the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) with a majority of those individuals residing in the South (CDCa, 2015). The South refers to the states of Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and East Texas (Reif, Whetten, Wilson, McAllaster, Pence, Legrand, & Gong, 2014). The Deep South - Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina – carry a disproportionate prevalence and incidence of HIV in the South (Reif et al., 2014). The prevalence of HIV in the Deep South is 14.7 per 100,000 while in the rest of the U.S the prevalence of HIV is 11.6 per 100,000 (Reif, Lowe-Geonnotti, & Whetten, 2006). The population that has been hardest hit in the Deep South by HIV is men who have sex with men (MSM).

Overall, MSM living with HIV is currently at a rate of 1 in 14 compared to non-MSM living with HIV with a rate of 1 in 496 (Lieb et al., 2011). The Deep South accounts for only 34% of MSM in the U.S but accounts for 43% of AIDS cases in 2007 (Prejean, Tang, & Hall, 2013). While there has not been a significant change in the incidence of HIV in MSM in the South, the age groups 13-19 (+9.4%) and 20-29 (+6.7%) increased significantly while the incidence of HIV in those 30-39 (-4.1%) and 40-49 (-6.5%) decreased significantly (Prejean, Tang, & Hall, 2013). Most of these transmission

can be accounted to male-to-male sexual contact (Prejean, Tang, & Hall, 2013). Racial disparities have also been noted among MSM in the Deep South. In fact, the Deep South is the only region where the number of Black MSM living with HIV is greater than the number of White MSM living with HIV (Prejean, Tang, & Hall, 2013). Compared to the general population, Black MSM are more than six times more likely to be diagnosed with HIV compared to White MSM in the Deep South (Southern HIV/AIDS Strategy Initiative, 2012). As well, Black MSM have greater than 50% of being exposed to at least one partner with the risk of contracting HIV (Kelley, Rosenberg, O'Hara, Frew, Sanchez, Peterson, et al., 2012). In the Deep South, young Black MSM are nine times more likely than young White MSM to be HIV positive (Millet, Peterson, Wolitski, & Stall, 2006). Black MSM are also nine times more likely to be diagnosed with AIDS than White MSM (Kraut-Becher, Eisenberg, Voytek, Brown, Metzger, & Aral, 2008). In this region, the HIV prevalence is 7,280.4 per 100,000 MSM, which means 1 in 5 Black MSM and 1 in 22 White MSM are infected with HIV (Lieb, Prejean, Thompson, Fallon, Cooper, Gates, Liberti, Friedman, & Malow, 2011). When compared to statistics across the Deep South, the lowest rate of prevalence of HIV in Black MSM was still higher than the highest rate of prevalence for White MSM (Prejean, Tang, & Hall, 2013). While high sexually transmitted infections/diseases (STIs/STDs) rates, poverty, race/ethnicity, and culture may describe the high prevalence of HIV in the Deep South, it does not completely address the health disparities commonly seen between Black MSM and White MSM in the Deep South.

Different explanations for this racial disparity have been presented in the literature. The cause of racial disparity is recognized as very complex (Kraut-Becher et.

al., 2008). Based on the literature, twelve main hypotheses have been proposed along with twelve different factors that may help to explain the racial disparities between HIV transmission among Black and White MSM populations. These different hypotheses focus on the differences in high-risk sexual behaviors, sexual identity, substance abuse, STD transmission rates, testing behaviors, genetics, circumcision, length of infectious transmission, racial mixing, sexual networks, incarceration, and anorectal douching between Black and White MSM (Millet, Peterson, Wolitski, and Stall, 2006). Additional factors that may explain the cause of racial disparity includes socioeconomic and demographic factors, political factors, social networks, STI rates, host biologies, access to health care and quality of health care, couple dynamics, individual behavior, circumcision, age of sexual debut, and sex work (Kraut-Becher et al., 2008).

Previous studies have examined the sexual health of Black MSM in urban settings (Fields, Bogart, Smith, Malebranche, Ellen, & Schuster, 2015; Fields, Bogart, Smith, Malebranche, Ellen, & Schuster, 2011; Malebranche, Gvetadze, Millet, Sutter, 2011; Malebranche, Fields, Bryant, & Harper, 2009), but study participants are rarely recruited from the Deep South. While many different hypothesizes have been presented as possible causes for the disproportionately high rate of HIV among Black MSM, very little research has been conducted that focuses on the role of gender identity and the possible effects on individual safe sex behaviors. In response to these gaps in the literature, the specific aims of this thesis are:

1. To determine how level of masculinity is associated with condom use during insertive anal sex among Black MSM in the Deep South.

2. To determine how level of masculinity is associated with condom use during receptive anal sex among Black MSM in the Deep South.

This results gained from this thesis will add to the current body of literature surrounding Black MSM, as well as add to the limited literature that surrounds the role played by gender identity on condom use. To our knowledge, this will be the first known study that examines this relationship in Black MSM in the Deep South. Results gathered from this thesis will allow public health officials tackle the epidemic of HIV in Black MSM in the Deep South through intervention programs aimed at condom negotiation.

CHAPTER 2

LITERATURE REVIEW

The United States (U.S) has not been immune to the HIV pandemic as such have developed programs and interventions to address the specific issues that surround at-risk populations in the U.S. In the U.S, the incidence of HIV is 50,000 per year with 1.2 million individuals living with HIV and AIDS with a majority of those patients living in the southern U.S especially in the Deep South (CDCa, 2015.).

The population hardest hit in the Deep South by HIV is Men who have Sex with Men (MSM) population. Within the MSM population notable racial disparities have been noted between Black MSM and White MSM. Young Black MSM are nine times more likely than young White MSM to be HIV positive and be diagnosed with AIDS (Millet, Peterson, Wolitski, & Stall, 2006). A number of hypotheses have been proposed to account for the complexity surrounding racial disparities in the transmission of HIV in the MSM population. These different hypotheses addressed the differences in high-risk sexual behaviors, sexual identity, substance abuse, STD transmission rates, testing behaviors, genetics, circumcision, length of infectious transmission, racial mixing, sexual networks, incarceration, and anorectal douching between Black and White MSM (Millet, Peterson, Wolitski, and Stall, 2006). Factors that also may explain the cause of racial disparity includes socioeconomic and demographic factors, political factors, social networks, STI rates, host biologies, access to health care and quality of health care, couple dynamics, individual, behaviors, circumcision, age of sexual debut, and sex work

(Kraut-Becher et al., 2008).

None of the literature reviews surrounding the racial disparities surrounding Black and White MSM in HIV prevalence examine the role of masculinity in condom-decision making in insertive and receptive anal intercourse among Black MSM. Currently, only two studies have examined the role of masculinity on condom use among Black MSM. None of these studies have taken place in the Deep South. By examining the role of masculinity on condom use among Black MSM, further information could be gained to explain the racial disparities seen between Black and White MSM in the Deep South.

HIV in the Deep South – Prevalence & Incidence

While composing of only 36% of the U.S population, the South accounts for half of all people living with HIV/AIDS live in the region (Human Rights Watch, 2010). In 2011, the South accounted for 49% of HIV and AIDS diagnoses (Reif et al., 2014). Southern states and D.C accounted for 7 of the 10 states with the highest HIV prevalence rates as well as represented 6 of the 10 states with the highest AIDS prevalence rates (Reif et al., 2014). The South has double the proportion of those living with AIDS in rural areas than all other geographical regions combined and survival rates are the lowest in the nation (Reif et al., 2014).

The Deep South encompasses Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina (Reif et al., 2006). These six states have very similar HIV/AIDS epidemics and are disproportionately affected by the impact of the disease. Between 2000 and 2003 the Deep South saw an increase of AIDS cases by 35.6% while the rest of the nation rose 5.2% (Human Rights Watch, 2010). While the prevalence in the U.S is 11.6 per 100,000, in the Deep South the prevalence is 14.7 per 100,000

(excluding Georgia) (Reif et al., 2006). Not only does the Deep South have a higher prevalence of HIV, it also has the highest rate of death from AIDS in the country as well as the largest number of adults and adolescents living with HIV/AIDS (Reif et al., 2006; Human Rights Watch, 2010). HIV transmissions affect minorities disproportionately. African Americans encompasses 30% of the population of the South while representing 65-75% of HIV cases in the region (Human Rights Watch, 2010).

These states all share the similar characteristics of overall poor health, high poverty rates, and poor health outcomes, which has allowed for a high prevalence of HIV to exist (Reif, et al., 2014). Also contributing to the prevalence of HIV is the lack of funding for the health care needs of HIV patients in the Deep South. 51% of all HIV patients in the U.S receive Medicare for health care expenses, but in the Deep South 23% of patients are enrolled in Medicare, which is below the national average of 26% (Reif et al., 2014). Not only do Southern states receive less funding for Medicare, but also receive less funding from the Ryan White Program (Reif et al., 2014). On average Deep South states receive \$3,990 per AIDS case compared to the U.S average of \$4,529 and receive \$2,467 per HIV case whereas national average is \$2,555 per HIV case (Reif et al., 2014). By not being provided with adequate funds for HIV treatment, 71% of HIV patients in the Deep South had less than the recommended four visits per year to a HIV clinic (Whetten & Reif, 2006).

Health Determinants of the HIV Epidemic in the Deep South

The significant factors that have caused geographic and demographic disparities in HIV in the Deep South include high sexually transmitted infections/diseases (STIs/STDs) rates, poverty, race/ethnicity, and culture (Reif et al., 2014). Not only does

the South have the highest incidence of HIV but also some of the highest incidence rates of STIs/STDs (Reif et al., 2014). Additionally, the Deep South contains states with the lowest median incomes in the country, which leads to a lack of resources and growth (Reif et al., 2014). It is a known fact that poverty is associated with poor health due to the lack of resources available to patients. Not only does poverty affect the manner in which individuals are able to receive health care, but also can cause difficulties for the states to provide quality health care and education due to limited funds to draw upon for taxes (Reif et al., 2014). All of these factors lead to higher risk of contracting HIV. Factors such as unstable housing, stigma, lack of trust in health care and government intervention, and high rates of incarceration has lead to a higher incidence of cases in the African-American population (Reif et al., 2014).

A commonly overlooked factor that contributes to the high prevalence of HIV in the Deep South is the culture. As a traditionally conservative culture, sexuality – especially homosexuality – is considered to be taboo. Many states in the Deep South do not provide public schools with comprehensive sexual education as other non-Southern states. Instead, Deep South states have established “comprehensive” sexual education programs in public schools, but abstinence is “stressed” or “strongly emphasized” (Human Rights Watch, 2010). Abstinence-based sexual health education has been proven to be ineffective in preventing STDs/STIs including HIV (Reif et al., 2014). However, Alabama, Arkansas, Louisiana, and Mississippi do not require sexual health education and as a result have some of the highest rates of STD infections and teen pregnancy (Human Rights Watch, 2010). These abstinence-based sexual health education programs also do not cover LGBT sexual health and in some states mandate

the use of negative messages about homosexuality, which leads to discrimination against LGBT youths and negatively impacts their sexual health leading to an increased risk in HIV infection (Human Rights Watch, 2010).

Laws in Southern states also criminalize HIV-related sexual behaviors and programs that provide sterile syringe exchanges for intravenous drug users while also implementing prison policies, that leads the at-risk populations of contracting HIV (Reif et al., 2014; Human Rights Watch, 2010). Criminalizing HIV-related sexual behaviors has also lead to the criminalization of HIV exposure. 32 states in the U.S, including those in the Deep South, those who knowingly know their positive HIV status and do not disclose their status to their partner can be arrested (Human Rights Watch, 2010). As noted by the Human Rights Watch, prosecuting only those who know their HIV status discourages HIV testing and may affect access to treatment (2010). With the highest incarceration rates in the U.S, states in the Deep South also have implemented prison policies that may hamper decreasing transmission rates (Human Rights Watch, 2010). Alabama and South Carolina are the two only states that segregate HIV-positive patients from the rest of the prison population, which has been established based on unfounded science (Human Rights Watch, 2010). Most HIV-positive prisoners have contracted the disease before entering the penal system. There is evidence very few infections of HIV occurs in prisons (Human Rights Watch, 2010). Those who wish to prevent new infections in IUD through clean syringe programs are unable to do so in the Deep South due laws in these states prohibiting the possession and transfer of drug paraphernalia (Human Rights Watch, 2010). Only 4 syringe exchange programs exist in the Deep South in Florida, Georgia, Louisiana, and North Carolina (Human Rights Watch, 2010).

HIV in the Deep South Among MSM

HIV in the MSM Population

According to the CDC, the at-risk populations for HIV infection are men who have sex with men (MSM), African-Americans, Hispanics/Latinos, intravenous drug users (IUD), and those who are transgender (2015). MSM accounts for 79% of HIV diagnoses among all males 13 years old and older (CDCb, 2015). Though MSM accounts for just 2% of the population in the U.S, the population accounted for 61% of new cases in 2009 and 78% of new cases in 2010 (CDCb, 2015). The increase in new cases was due mostly to young (aged 13-24), African-American MSM (CDCb, 2015). While MSM represents approximately 2% of the population in the U.S, the subpopulation accounts for 61% of all new cases of HIV (CDCc, 2015). White MSM accounted for 38% of all new cases of HIV while Black MSM accounted for 36% of all new cases of HIV in the U.S (CDCc, 2015).

The largest number of new infections occurred in the Black MSM population of those aged 13 to 24 accounting for 45% of cases in the Black MSM population (CDCc, 2015). In comparison to population sizes of smaller population of Black MSM to the larger population size of White MSM, Black MSM accounted for almost as many cases of HIV as White MSM (CDCc, 2015). In 2010, there were 10,600 new HIV infections between Black MSM and 11,200 new cases of HIV in White MSM (CDCc, 2015). As of 2012, 145,707 of Black MSM were living with HIV compared to 207,849 White MSM living with HIV (CDCc, 2015). Other than this sub-set population, the incidence of HIV has remained stable over the past decade with more individuals living longer with HIV (DHHS, n.d.).

MSM in the Deep South

When compared to the prevalence rates seen between Black MSM and White MSM a different story unfolds in the Deep South. The Deep South accounts for only 34% of MSM in the U.S but, as noted before, accounted for 43% of AIDS cases in 2007 (Prejean, Tang, & Hall, 2013). The regional HIV prevalence is 7,280.4 per 100,000 MSM, which leads to 1 in 5 Black MSM or 1 in 22 White MSM being infected with HIV (Lieb, Prejean, Thompson, Fallon, Cooper, Gates, Liberti, Friedman, & Malow, 2011). Overall, MSM living with HIV is currently at a rate of 1 in 14 compared to non-MSM living with HIV with a rate of 1 in 496 (Lieb et al., 2011). The Deep South is the only region where the number of Black MSM living with HIV is greater than the number of White MSM living with HIV (Prejean, Tang, & Hall, 2013). When compared to statistics across the Deep South, the lowest rate of prevalence of HIV in Black MSM was still higher than the highest rate of prevalence for White MSM (Prejean, Tang, & Hall, 2013). Lieb et al. attribute this fact to a smaller percentage of Black MSM are aware of their serostatus and may engage in risky behaviors longer than if they knew their serostatus (2011).

While there has not been a significant change in the incidence of HIV in MSM in the South, the age groups 13-19 (+9.4%) and 20-29 (+6.7%) increased significantly while the incidence of HIV in those 30-39 (-4.1%) and 40-49 (-6.5%) decreased significantly (Prejean, Tang, & Hall, 2013). Most of these transmissions can be accounted to male-to-male sexual contact (Prejean, Tang, & Hall, 2013). While high sexually transmitted infections/diseases (STIs/STDs) rates, poverty, race/ethnicity, and culture may describe the high prevalence of HIV in the Deep South, it does not completely address the health

disparities commonly seen between Black MSM and White MSM in the Deep South. Black MSM compared to the general population is more than six times as likely to be diagnosed with HIV compared to White MSM in the Deep South (Southern HIV/AIDS Strategy Initiative, 2012). As well, Black MSM have greater than 50% of being exposed to at least 1 partner with the risk of contracting HIV (Kelley, Rosenberg, O'Hara, Frew, Sanchez, Peterson, et al., 2012). While there has been limited research on the causes of the prevalence rate in the populations in the Deep South, other research can be implicated in explaining the reason between the disproportionate rates of HIV in Black MSM and White MSM.

Health Disparities Among Black and White MSM

Different hypotheses have been proposed to explain the prevalence of racial disparities which addressed the differences in high-risk sexual behaviors, sexual identity, substance abuse, STI transmission rates, testing behaviors, genetics, circumcision, length of infectious transmission, racial mixing, sexual networks, incarceration, and anorectal douching between Black and White MSM (Millet et al., 2006).

Kraut-Becher et al. identified 15 different factors that could help to explain the racial disparities seen in HIV through analyzing STI research (2008). Of these 15 factors, three themes can be seen in explaining racial disparities in HIV. These themes include behavioral, prevention participation, and biological explanations (Kraut-Becher et al., 2008). The twelve factors that are mostly likely to the explain racial disparities between Black and White MSM in the Deep South includes socioeconomic factors, demographic factors, political factors, social networks, STI rates, host biologies, access to health care

and quality of health care, couple dynamics, individual behavior, circumcision, age of sexual debut, and sex work (Kraut-Becher et al., 2008).

Millett, Malebranche, and Peterson examined the health disparities among Black MSM finding seven main factors that may help to explain the racial disparities seen between Black and White MSM (2006). The authors determined demographic (including education level, socioeconomic level, and age) factors, interpersonal factors, behavioral factors, psychological factors, sociocultural factors, structural-level factors, and genetic or biological factors could be exacerbating the racial disparities (Millett, Malebranche, & Peterson, 2007).

Examining health disparities between Black and White MSM in the Deep South can help to explain the disproportionately rates of HIV as seen in the populations. While most research examining health disparities between Black and White MSM have not occurred in the Deep South the research is still relevant in determining the causes and factors of the disparity in the rates of HIV transmission and infection in the MSM population. Based on Millet et al., Kraut-Becher et al., and Millett, Malebranche, and Peterson's literature reviews, 10 factors stand out as possible contributions to the difference in racial disparities among Black and White MSM in the Deep South. These factors include socioeconomic and demographic factors, access to health care and HIV treatment, sociocultural factors, sexual networks (including racial mixing), sexual behavior, sexual identity, sexually transmitted infection rate, genetics and biologic, circumcision, and incarceration rates.

Socioeconomic & Demographic Factors

Black MSM from lower socioeconomic levels were found to engage in greater sexual risk behaviors than Black MSM from higher socioeconomic levels (Millet et al., 2007). Older Black MSM were more likely to be tested for HIV than their younger counterparts. While older Black MSM were more likely to be tested, in one study it was found that older Black MSM engaged in more risky sexual behaviors than younger Black MSM (Millet et al., 2007). Older MSM are more likely to be HIV-positive than their younger counterparts (Harawa, Greenland, Bingham, Johnson, Cochran, Cunningham, Celentano et al., 2004). As Black MSM tend to be younger than White MSM, they tend to have a higher rate of STI infection (Kraut-Becher et al., 2008). Young Black MSM are more likely to debut sexually at a younger age, report history of childhood sexual abuse, have older sex partners (≥ 5 years), and a low income (Millett, Peterson, Flores, Hart, Jefferies, Wilson, Rourke, Heilig, Elford, Fenton, & Remis, 2012). Black MSM were more likely to have low education ($<$ high school), low income, to ever be incarcerated, or be currently unemployed than other MSM (Millett et al., 2012). Education level nor employment record were associated with sexual risk taking for Black MSM and neither were education level, employment status, or sexual identity related to HIV testing (Millet et al., 2012). Low socioeconomic status has been associated with a number of negative health outcomes especially in infectious diseases (like HIV) and at the neighborhood or zip code level with reported AIDS rates (Harawa et al., 2004).

Access to Quality Health Care & HIV Treatment for HIV-Positive MSM

Access to Quality Health Care

HIV-positive Black MSM are as likely as HIV-positive White MSM to have health insurance (Millett et al., 2006). However, the racial disparities are magnified by greater odds of poverty (<\$20,000 per year), lower odds of having health insurance, and fewer health care visits for HIV-positive Black MSM (Millett et al., 2012). The difference between the two populations can be seen in where HIV-positive MSMs receive their care. HIV-positive Black MSM tend to receive care at public clinics and are less likely to discuss with their health care provider HIV-related concerns than their counterparts as they have limited access to private clinics (Millett et al., 2006; Millett, Malebranche, & Peterson, 2007). Black MSM reported in one study to feeling frustrated with health care providers due to discriminatory practices of outpatient settings as well as distrusted the health care provider and medical staff and the quality of care (Millett, Malebranche, & Peterson, 2007). Black MSM in the Deep South may also feel distrust towards medical personnel and the health care system due to historic incidences like the Tuskegee Syphilis Study where African Americans were abused (Reif et al., 2012). This distrust found in Black MSM could have far reaching effects on the health care they receive especially those who are HIV-positive. Independent of race, those who distrust the government or health care systems have decreased ART use and poorer mental and physical health (Reif et al., 2012). White MSM with CD4 counts greater than 500 (cells per mm³) were 10 times more likely to report an outpatient visit during the past 6 months compared to Black MSM with comparable CD4 counts (Millett et al., 2006). Black

MSM were also significantly less likely to visit the dentist in the past 6 months (Millett, Malebranche, & Peterson, 2007).

Access to ART

HIV-positive Black MSM are less likely to see a health care provider for HIV care within 3 months of their HIV diagnosis as well as less likely to initiate anti-retroviral therapy (ART), combination anti-retroviral therapy (cART), or highly active anti-retroviral therapy (HAART) at the appropriate time (Oster, Wiegand, Sionean, Miles, Thomas, Melendez-Morales, Le et al., 2011). ART, cART, and HAART decrease the viral load lowering HIV infectivity (Millet, Flores, Peterson, & Bakeman, 2007). In general, Black MSM are less likely to be on ART than White MSM (Oster et al., 2011). By expanding access to health care and appropriate treatment could decrease the community viral load, which could lead to decrease in HIV incidence in the population (Oster et al., 2011). By not having adequate health care access, Black MSM may have higher viral loads that can lead to an increase in the community viral load due to lack of appropriate HIV treatment (Millett et al., 2006). Concerning, Black MSM are more likely to be diagnosed later in the disease when ART is recommended than White MSM (Millett et al., 2007). Adherence to the ART regimen could also partially explain the disproportionately high rates of HIV infections but studies have been inconclusive as a nonadherence pattern has not been clearly defined in Black MSM (Millett et al., 2006). Without proper adherence to the ART regimen, viral load of HIV can increase causing an increased risk of transmitting HIV into the population. Inconsistent health care access, higher poverty, and lower education of Black MSM can explain the racial disparity in the

difference in ART use and adherence to achieve viral suppression (Beer, Oster, Mattson, & Skarbinski, 2013).

Sociocultural Factors

The most common sociocultural factors related to Black MSM in HIV transmission through risky sexual behaviors includes social support, racial discrimination, homophobia, racial stereotypes, and racism (Millett, Malebranche, & Peterson, 2007; Kraut-Becher et al., 2008). Black MSM who report significant social support are more likely to be tested for HIV compared to Black MSM who report lower levels of social support (Millett, Malebranche, & Peterson, 2007). High levels of social support has also been found to inhibit the practice of unprotected anal intercourse in the past 6 months compared to those who reported low levels of social support (Millett, Malebranche, & Peterson, 2007). Interestingly, those who are HIV-positive Black MSM with high levels of social support engaged in more unprotected sexual risk activities than HIV-positive Black MSM with low levels of social support (Millett, Malebranche, & Peterson, 2007). However, compared to HIV-positive White MSM with low levels of social support was associated with higher levels of risky sexual behaviors (Millett, Malebranche, & Peterson, 2007). While racism, racial stereotypes, homophobia, and racial discrimination does affect the overall health of Black MSM none of these factors have been related to sexual risk taking that has lead to increase in the incidence of HIV in Black MSM (Kraut-Becher et al., 2008; Millett, Malebranche, & Peterson, 2007).

Sexual Networks

As noted by Oster et al., the prevalence of HIV infection within one's sexual network may play a greater influence than an individual's risk behavior on acquiring HIV

(2011). Black MSM who were newly diagnosed with HIV were less likely than White MSM to report having a partner known to be HIV-positive (Oster et al., 2011). As well, Black MSM are less likely to know the serostatus of their partners (Oster et al., 2011). When looking at the awareness of MSM serostatus, 59% of HIV-positive Black MSM and 25% of HIV-positive White MSM were unaware of their serostatus (Oster et al., 2011). This leads to the assumption that the proportion of MSM with HIV-positive partner, especially in Black MSM, is artificially low due to the lack of knowledge of serostatus (Oster et al., 2011). There is a correlation between young MSM whose sexual partners are older are more likely to be HIV-positive than younger sexual partners (Millett et al., 2006). It has been suggested that the transfer of HIV from older to younger cohorts continues to perpetuate the HIV epidemic among young MSM (Harawa et al., 2004). The relationship status of MSM was associated with HIV risk-taking and HIV-protective behavior (Millett, Malebranche, & Peterson, 2007). Black MSM who reported a main sexual partner are more likely than Black MSM with casual sex partners to engage in insertive (IAI) and receptive anal intercourse (RAI) (Millett, Malebranche, & Peterson, 2007).

Raymond and McFarland found Black MSM were the least preferred as sex partners by other MSM as well Black MSM are perceived by other MSM as having a higher risk for HIV (2009). By being perceived as having a higher risk for HIV, Black MSM are avoided by other MSM (Raymond & McFarland, 2009). White MSM are significantly less likely to have sexual partners of other ethnicities (Raymond & McFarland, 2009). By having limited access to other sexual networks, Black MSM are sexually segregated from other ethnicities which leads to a higher level of

interconnectivity that could be causing the prevalence of HIV among Black MSM to remain so high even though Black MSM tend to have fewer sex partners, practice protective sex, fewer HIV-positive sex partners, and lower use of illicit drugs, Black MSM still are at higher risk of acquiring HIV due to a limited sexual network (Raymond & McFarland, 2009; Harawa et al., 2004). The increase in intraracial mixing among Black MSM may be recycling the phenotypic representation of HIV that have been successful in establishing transmission of HIV causing higher transmission rates among Black MSM (Van Griensven & Stall, 2012). The limited racial mixing between Black and White MSM could be considered as a co-factor in facilitating the racial disparities in HIV transmission (Van Griensven & Stall, 2012).

Sexual Behavior

When investigating the racial disparities among Black and White MSM, Black MSM were found to engaged in fewer HIV risk behaviors. While UAI is one of the biggest risk factors for contracting HIV, Black MSM have reported lower rates of UAI than White MSM (Millett et al., 2006). During the first phases (1981-1990) of the HIV epidemic, higher rates of UAI was found in Black MSM while in the second (1991-2000) and third (2001-2006) phase of the epidemic the rates of UAI among Black and White MSM have been found comparable (Millett et al., 2007). Black MSM report fewer sex partners in their lifetime, fewer current sex partners, and fewer causal sex partners (Millett et al., 2006). Black MSM have found to have fewer sex partners, engaging in unprotected UAI, and using condoms more frequently during anal intercourse than White MSM (Millett et al., 2012).

Black MSM were also less likely to use illegal drugs than White MSM especially drugs that are commonly associated with HIV transmission (Millett et al., 2012; Millett et al., 2007). Lifetime drug use was also significantly less reported in Black MSM than White MSM (Millett et al., 2007). Black MSM were more likely to engage in preventive behavior against HIV including condom use, HIV testing, fewer sex partners, less amphetamine use, less drug use before or during sex, or disclosure of serostatus to partners than White MSM (Millett et al., 2012). Black MSM were significantly less likely than White MSM to report using diazepam, hallucinogens, or nitrites (Millet et al., 2006). One study did find Black MSM did report greater use of marijuana and heroin than other MSM (Millet et al., 2006).

Black MSM were even found in Millet et al. study to have a history of repeat HIV testing or using post-exposure or pre-exposure prophylaxis (pREP) (Millett et al., 2012). Black MSM were more likely than White MSM to report anal sex but less likely than White MSM to report oral sex or mutual masturbation (Harawa et al., 2004). In examining the relationship between sex work and Black MSM studies have found no racial difference in the prevalence of sex work (Millett et al., 2006). Millet et al. also found that HIV-positive Black MSM were more likely than HIV-negative Black MSM to seek help for risky sexual behaviors (2007). Black MSM also engage in anorectal douching more than other MSM populations (Millett et al., 2006). Black MSM who have been found to engage in anorectal douching are more than 5 times as likely to be HIV positive (Millett et al., 2006). With the sexual behaviors reported by White MSM, the incidence of HIV should be higher in White MSM instead of Black MSM. Even though Black MSM do not engage in high risk behaviors that can lead to HIV infection, Black

MSM are three times as likely as testing positive and six times as likely of having an undiagnosed HIV infection compared to White MSM (Millett et al., 2012).

Sexual Identity

Black MSM who disclose their sexuality to others were more likely to be tested than those who do not disclose their sexuality (Millett et al., 2007). Black MSM were also less likely than White MSM to identify as gay as well as to join gay-related organizations (Millett et al., 2007; Millett et al., 2006). Black MSM may not identify as gay due to numerous cultural factors. Located in the “Bible Belt,” the Deep South is a deeply religious, conservative culture Black MSM may perceive a higher level of stigma than other areas of the U.S for being gay or homosexual (Reif et al., 2012). As well, Black MSM may feel discriminated against for not only being gay but also as a Blackman. As education increases, White MSM were more likely to disclose their sexuality unlike Black MSM (Millett et al., 2006). For either Black or White MSM, sexual identity did not predict participation in receptive or insertive UAI (Millett et al., 2006). Black MSM who reported lower sexuality disclosure were found to partake in fewer sexual risks (Millett et al., 2006). Black MSM who disclose their sexual identity were more likely to have 5 or more sexual partners in a lifetime, having UAI, and having a positive HIV test (Millett et al., 2006).

Sexually Transmitted Disease (STD) Rates

The U.S the highest STD rates are in the states of the Deep South. 7 of the 10 states with the highest syphilis rates are located in the Deep South and 5 of the 10 states with the highest chlamydia rates are located in the Deep South (Reif et al., 2012). As well, 5 of the 10 states with the highest rates of gonorrhea are found in the Deep South

(Reif et al., 2012). The transmission of HIV can be facilitated by gonorrhea or syphilis due to increased immune vulnerability (Millet et al., 2007; Millett et al., 2006). Black MSM are 2.12 more likely to be diagnosed with a current STI than White MSM (Millett et al., 2007). As well Black MSM are significantly more likely to report ever having gonorrhea, syphilis, or hepatitis B (Millett et al., 2007). By being diagnosed for a STD it can be assumed protected sex was not practiced, as well as there is a risk another STD was transmitted – including HIV (Millet et al., 2007). STD rates are higher for Black MSM than White MSM regardless of serostatus and could explain the racial disparities between Black and White MSM (Millett et al., 2006). The increase in STD incidences and HIV may be associated with waxing fear of HIV, use of Internet to meet sex partners, use of erectile dysfunction drugs, and the role of oral sex in spreading STDs (Mayer, 2011). As the incidence of syphilis, chlamydia, and gonorrhea in the region is so high it may help explain the higher incidence of HIV in the Deep South (Reif et al., 2012).

Genetics and Biologics

A number of different biological factors have been discovered that may determine how susceptible a person is to HIV. One of those biological factors is a allele deletion, CCR5 Δ 32 protein, that causes those who are homozygous for the deletion do not express CCR5 receptors which does not allow for the HIV virus to attack the CD4 cells (Millet et al., 2006). The CCR5 chemokine receptor is fundamental for HIV to attach to the CD4 cells. The deletion makes the CD4 resistance to HIV by preventing the expression of the CCR5 receptor (Galvani & Slakin, 2003). The allele is virtually absent in African, Asian, Middle Eastern, and American Indian populations, which suggests an earlier origin of the deletion perhaps around the time of the bubonic plague (700 years ago) (Galvani &

Slakin, 2003). The deletion is very rare with those who are homozygous account for less than 1% of the global population (Millett et al., 2006). The allele can also be heterozygous and accounts for 15% of the global population (Millett et al., 2006). For those who are of Asian or African descent, less than 0.1% are homozygous or less than 1% heterozygous (Millet et al., 2006).

Circumcision

Though circumcision is more of a cultural practice, studies have found associations between circumcision and HIV. Circumcised men were found to be less likely than uncircumcised men to become infected with HIV (Millett et al., 2007). Blackmen are less likely than White men to be circumcised (Millett et al., 2006). In one study, 76% of White men and 18% of Blackmen were circumcised (Millett et al., 2006). The circumcision rate for both White men and Blackmen converged in the later 1990s (Milliett et al., 2006). When examining circumcision in the MSM population, one study found no association between circumcision and HIV infection while two other studies found circumcision had a protective effect against HIV infection (Millett et al., 2006). None of these studies were stratified for Black MSM.

Incarceration Rates

The Deep South region has the highest incarceration rates in the U.S especially for African American males (Human Rights Watch, 2010). As such it is important to note if there is an association between incarceration and Black MSM. Subsequent homosexual activities do occur in the prison system, which could act as a possible way for the transmission of HIV or other STDs. Those who enter the penal system as HIV-positive report difficulty in establishing care and obtaining medication after release to

prevent increased risk of HIV transmission (Reif et al., 2012). The HIV infection rate is 5 times higher in prisons than in the general population (Millet et al., 2006). To add to the burden of the transmission of the disease, less than 1% of prisons permit the distribution of condoms (Millet et al., 2006). Examining the racial disparities in incarceration history of Black and White MSM, there is conflicting data with one study finding no racial differences while another study found Black MSM were significantly more likely than other young MSM with a history of incarceration (Millet et al., 2006). Looking at the rate of homosexual activity within the prison system, men reported more anal intercourse outside of the prison system than inside (Millet et al., 2006). Incarceration can affect the sexual networks of both populations of MSM, leading to an increase in risky sexually behaviors (Millet et al., 2006).

Masculinity and Gender Roles

While all of these factors may play a role in the racial disparity between Black and White MSM, none of the authors examined the role of gender identity or gender role conflict in their discussion. The agents of masculinity socialization include family, media, church, and peers that perpetuate the continuation of masculine ideology (Malebranche, Fields, Bryant, and Harper, 2009). Male gender role conflict occurs when “prescriptive gender roles [are] learned and socially reinforced [which results] in personal restraint” (Malebranche et al., 2009). Hypermasculinity is a result to the years of oppression and racism among Black men, especially Black MSM (Malebranche et al., 2009). To overcome the “denied privileges of white masculinity,” some Black men have embraced a coping strategy to overcome the hundreds of years of oppression and racism through a strategy called “cool pose” (Malebranche et al., 2009). “Cool pose” is defined

as a “ritualized form of masculinity that entails behaviors, scripts, physical posturing, impression management, and a single, critical message: pride, strength, and control” (Majors and Billson, 1993). Being “cool” is described as having expressive style of dress and speech while also restricting emotions to seem dispassionate (Malebranche et al., 2009). Some black men see their masculinity reinforced by the number of children they have which can lead to inconsistent condom use (Malebranche et al., 2009).

Malebranche et al. examined the “cool pose” in relation to Black MSM (2009). The authors found Black MSM described “cool pose” attributes which included “hustling, athletics, and heterosexual prowess” (Malebranche et al., 2009). Due to the influence of “cool pose,” the majority of the Black MSM rejected the title of “gay” since they did not feel that title belonged to them (Malebranche et al., 2009). Many Black MSM saw the title “gay” belong to White MSM that are effeminate and promiscuous (Malebranche et al., 2009). As well, those who are labeled “gay” tend to be viewed as “more-feminine” or “more woman-like” (Wilson et al., 2010). This may help explain why Black MSM do not identify with “gay” as it goes against the “cool pose” and the hypermasculinity they have be surrounded in their life.

Not only does “cool pose” help to explain the gender role conflict commonly seen in Black MSM but also the presence of masculinity ideology (Wilson, Harper, Hidalgo, Jamil, Torres, and Fernandez, 2010). The current masculinity ideology is described as heterosexual, physical strength, athleticism, control over situations, head of the household, financial success, and lack of emotions (Wilson et al., 2010). The current masculinity ideology also describes men as homophobic and allows for the continuation of homoantagonism and homophobia as the normative behavior among men (Wilson et

al., 2010). This may also help to explain why Black MSM tend to not identify as “gay” due to the normative of homophobia in society due to the current masculinity ideology.

Black churches that use theology to perpetuate the fear of homosexuals, which causes hypermasculinity, as a result further drive homophobia in the culture. Those who express hypermasculine behaviors tend to have increased self-confidence and self-esteem, social acceptance, and lessen anxiety surrounding their manhood (Fields, Bogart, Smith, Malebranche, Ellen, and Schuster, 2015). However, the fear of homophobia exudes itself through the high-risk sexual behaviors demonstrated by some Black MSM through internalized homophobia (Ward, 2005). Hypermasculinity has been noted among Black MSM as a manner in which to be perceived to others as heterosexual “in order to avoid being labeled as a ‘fag’ or ‘queer’” due to homophobia (Ward, 2005). While hypermasculine behaviors can have a protective factor, to a degree, it is also common for both Black MSM and straight black men to experience gender role strain (GRS) (Fields et al., 2015).

GRS is comprised of three different strains – discrepancy strain, dysfunction strain, and trauma strain (Fields et al., 2015). Discrepancy strain is the “psychological strain that results when one fails to meet external or internalized masculine expectations or manhood ideals” (Fields et al., 2015). Dysfunction strain is the “psychological strain or negative consequences that result from maintaining normative masculine expectations” (Fields et al., 2015). Trauma strain is the “psychological strain resulting from experiencing the masculine socialization process” (Fields et al., 2015). Not only do Black MSM undergo GRS but also experience Gender Role Conflict (GRC) due to the cultural and internal expectations of masculinity (Malebranche et al., 2011). GRC can be

measured by the Gender Role Conflict Scale (GRCS) that measures the level of psychological conflict with traditional gender roles with four subscales (Malebranche et al., 2011). These four subscales includes 1) success, power, and competition, 2) restrictive emotionality, 3) restrictive and affectionate behavior between men, and 4) conflict between work and family relations (Malebranche et al., 2011).

To date, only two studies have examined the role of masculinity and Gender Role Conflict among Black MSM in HIV transmission risk. None of these studies were predominately was located in the Deep South. The combined results of these studies were found to be inconclusive. Fields, Bogart, Smith, Malebranche, Ellen, and Schuster conducted a qualitative, 3-stage study with 35 young Black MSM (18-24 year olds) to examine the perception of masculinity and the effects it has on partner selection, risk assessment, and condom usage (2011). Fields et al. found participants to have greater preference for partners that are perceived as masculine compared to those who are more feminine and discomfort in those who are perceived as more feminine being the insertive partner during anal sex (2011). When examining the power dynamics in partners with condom-use decisions, the more masculine partner made the condom-use decision (Fields et al., 2011). The participants also noted they perceived more feminine men to be at higher risk of contracting or transmitting HIV to partners (Field et al., 2011).

Unlike Fields et al., Malebranche, Gvetadze, Millet, and Sutton found among 456 Black MSM that GRCS did not predict unprotected insertive anal intercourse nor unprotected receptive anal intercourse (2012). Through these results Malebranche et al. noted that the GRCS may not be a good measure to predict condom use or that gender role conflict does not manifest itself in reducing condom use in Black MSM (2012).

Malebranche et al. also notes that the GRCS may be outdated any may not be able to measure the current gender role strain that is present (2012). As well, GRCS was developed to measure gender role strain among heterosexual White males and not for Black MSM which may not “capture the specific racial and cultural gender roles issues” currently facing Black MSM in today’s society (Malebranche et al., 2012).

With such limited research examining the role of gender role conflict and gender role strain in Black MSM it is important to examine this relationship among Black MSM in the Deep South. The following results from this study hopes to shed light on the role of masculinity on condom use in insertive and receptive anal sex partners. By examining these factors, HIV prevention interventions can be created and tailored to address the needs of the population and help decrease the rate of HIV prevalence in the Deep South in the Black MSM population.

CHAPTER 3

METHODOLOGY

The current study was a secondary data analysis of data collected by Dr. Stacy W. Smallwood as part of his dissertation project: the Sexual Health in Faith Traditions (SHIFT) Study. The SHIFT Study is a cross-sectional, quantitative study with all data collected through a self-administered survey.

The aims of this secondary data analysis were to:

1. Determine how level of masculinity is associated with condom use during insertive anal sex among Black MSM in the Deep South.
2. Determine how level of masculinity is associated with condom use during receptive anal sex among Black MSM in the Deep South.

Sample

The sample of the SHIFT Study includes 348 participants who met the study eligibility requirements. To be included in the study, participants had to: 1) self-identify as an African-American man; 2) report a sexual encounter with a man at least once in the past 12 months, or self-identify as gay or bisexual; 3) be aged 18 years or older; and 4) reside in the Deep South, defined as the states of Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina.

Recruitment

Participants were recruited through a number of means including reactive recruitment through flyers distributed through community-based HIV prevention organizations, AIDS service organizations, LGBT-serving organizations, LGBT-friendly businesses, and LGBT email listservs. Social media (Facebook & Twitter) was also utilized in the reactive recruitment process.

Proactive means of recruitment included recruiting at Black Gay Pride celebrations in the Deep South. The participants from this study were recruited from the 2011 South Carolina Black Pride (Columbia, SC; June 23-26, 2011), North Carolina Black Gay Pride (Charlotte, NC; July 14-17, 2011), Triangle Black Pride (Raleigh, NC; July 28- August 1, 2011), Atlanta Black Gay Pride (Atlanta, GA; September 2-5, 2011), and Jackson Black Pride (Jackson, MS; November 17-20, 2011). The Principal Investigator (PI), Dr. Smallwood, received permission from each event organizers to recruit participants. As Greenville, SC and Greensboro, NC did not have official Black Gay Pride celebrations, “survey parties” were held through gatekeepers of the target population. Purposive snowball sampling was also used to recruit participants from religious communities. The PI used existing contacts to help identify potential participants (Smallwood, 2013).

Measures

The data used for this study were collected using a self-administered “paper and pencil” survey. The survey included 77 items that measured sociodemographic characteristics, religiosity, spirituality, perceived affirmativeness, internalized

homonegativity, and sexual risk behaviors (Smallwood, 2013). For the purpose of this study only data on sociodemographic characteristics, gender identity, and sexual risk behavior were used.

Sociodemographic Characteristics

The sociodemographic characteristic measures included age (years), highest education level attained (8th grade or lower; some high school, but no diploma; high school diploma or GED; some college but no degree; Associate's degree; Bachelor's degree; some graduate school but no advanced degree; advanced degree (Master's or Doctoral degree), annual income (less than \$10,000, \$10,000-24,999, \$25,000-39,999, \$40,000-49,999, \$50,000-74,999, \$75,000-99,999, \$100,000 or more), sexual identity (gay/homosexual, same-gender-loving, bisexual, straight/heterosexual, other), and HIV status (yes, no, I have never been tested for HIV). All of the sociodemographic characteristics were used except sexual identity and HIV status.

Self-reported Masculinity/Femininity

The degree of respondent's masculinity/femininity was measured with a single item: "Which statement best describes you?" with response options including "extremely masculine," "masculine," "equally masculine and feminine," "feminine," and "extremely feminine." The degree of masculinity/femininity was collapsed into three categories: "masculine" ("extremely masculine" + "masculine"), "equally masculine and feminine," and "feminine" ("extremely feminine" + "feminine").

Sexual Risk Behaviors

Consistency of condom use during the previous three months was also measured through assessing respondent's frequency of condom use for insertive and receptive

intercourse adapted from the National Household Survey of Drug Abuse (SAMHSA, 1997; Smallwood, 2013). The frequency of condom use for IAI and RAI for the previous 3 months was presented on a 4-point Likert scale (1=Every Time , 2=Most Times, 3=Some Times, 4=Never). There were also response choices of “never” or “I have not done this in the past 3 months.” The items were reverse-coded for analysis and collapsed into inconsistent condom use (2=Most Times, 3= Some Times, 4=Never) and consistent condom use (1=Every Time) for both IAI and RAI. Number of sexual partners were also measured in the past three months with an open-ended question.

Procedure

Provision for Human Subjects

The SHIFT Study protocol was submitted and approved by the Institutional Review Board of the University of South Carolina’s Office of Research Compliance on June 15, 2011. At the request of the Institutional Review Board, participants did not sign informed consent forms but were given a copy for their own personal records to ensure there were no name-based markers to identify participants (Smallwood, 2013).

Data Collection

The survey was pilot tested before being distributed to participants. Data were collected by the PI or by a trained data collector. The first step in the data collection was to administer a brief screening tool to see if the participant was eligible for the study. Each participant was given a copy of the informed consent form before given a survey to complete. Each completed survey was placed in a sealable file folder and the participant was given a \$5 cash incentive for participating. Data collection was performed the same way for snowball sampling but participants were asked to share the study with at least 3-5

other members of the target population. All data was collected June 25 – December 31, 2011 (Smallwood, 2013).

Data Management

All surveys were collected and stored by the PI in a locked file cabinet. After data were entered in SPSS IBM © software, the files were encrypted by a password only known by the PI. The PI granted Ms. Peeler permission to access the data.

Analysis

Descriptive statistics included crosstabs and frequencies to examine sociodemographic characteristics (i.e., age, education, income, and degree of masculinity/femininity). T-tests (for continuous variables) and χ^2 (for categorical variables) were used to measure group differences in these variables. Two binary logistic regression models were used to examine the association between degree of masculinity/femininity (independent variable) on the dependent variable of consistency of condom use in IAI and RAI, respectively, while adjusting for the covariates of age, education, and number of male sex partners in the past three months. Age and number of male sex partners in the last three months were treated as continuous while education was treated as categorical. IBM© SPSS software was used to analyze the data.

CHAPTER 4

MANUSCRIPT¹

THE INFLUENCE OF THE DEGREE OF MASCULINITY/FEMININITY ON CONDOM USE AMONG BLACK MEN WHO HAVE SEX WITH MEN (MSM) IN THE DEEP SOUTH IN INSERTIVE ANAL INTERCOURSE (IAI) AND RECEPTIVE ANAL INTERCOURSE (RAI)

¹ Peeler, E.D, Smallwood, S.W., and Spencer S. M. To be submitted to *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*

Abstract

The Deep South is the only region where the number of Black MSM living with HIV is greater than the number of White MSM living with HIV (Prejean, Tang, & Hall, 2013). When compared to statistics across the Deep South, the lowest rate of prevalence of HIV in Black MSM was still higher than the highest rate of prevalence for White MSM (Prejean, Tang, & Hall, 2013). There have been a number of proposed hypothesis to describe the racial disparities seen between Black and White MSM. However, none of these literature reviews examine the role of masculinity in condom-decision making in insertive and receptive anal intercourse among Black MSM. Currently, only two studies have examined the role of masculinity on condom use among Black MSM. None of these studies have taken place in the Deep South. By performing a secondary data analysis of The Sexual Health in Faith Traditions (SHIFT) Study to examine the relationship between the degree of self-reported masculinity/femininity and the use of condoms in insertive anal intercourse (IAI) and receptive anal intercourse (RAI), there were no significant findings suggesting the degree of masculinity/femininity of Black MSM did not influenced the use of condoms in IAI or RAI.

Keywords

HIV/AIDS, Black MSM, Deep South, Condom Use, Masculinity, Insertive/Receptive Anal Intercourse (IAI/RAI)

Introduction

The population that has been hardest hit in the Deep South by HIV is the men who have sex with men (MSM) population. Within the MSM population notable racial disparities have been noted between Black MSM and White MSM. Young Black MSM are nine times more likely than young White MSM to be HIV positive (Millet, Peterson, Wolitski, & Stall, 2006). Black MSM are also nine times more likely to be diagnosed with AIDS than White MSM (Kraut-Becher, Eisenberg, Voytek, Brown, Metzger, & Aral, 2008). With this large disparity seen in a population, a number of hypotheses have been proposed to account for this disparity in the transmission of HIV in the MSM population. A number of studies have tried to explain this disparity with no avail. The cause of racial disparity is recognized as very complex (Kraut-Becher et al., 2008).

Based on the literature, twelve main hypotheses have been proposed along with twelve different factors that may help to explain the racial disparities seen between HIV transmissions in Black and White MSM populations. While none of the literature has been aimed at the Deep South, the findings can be generalized to help explain the racial disparities seen in the Deep South. These different hypotheses addressed the differences in high-risk sexual behaviors, sexual identity, substance abuse, STD transmission rates, testing behaviors, genetics, circumcision, length of infectious transmission, racial mixing, sexual networks, incarceration, and anorectal douching between Black and White MSM (Millet, Peterson, Wolitski, and Stall, 2006). The factors that may explain the cause of racial disparity includes socioeconomic and demographic factors, political factors, social networks, STI rates, host biologies, access to health care and quality of health care, couple dynamics, individual behavior, circumcision, age of sexual debut, and sex work

(Kraut-Becher et al., 2008). Currently, only two studies have examined the role of masculinity on condom use among Black MSM. None of these studies have taken place in the Deep South. By examining the role of masculinity on condom use among Black MSM, further information could be gained to explain the racial disparities seen between Black and White MSM in the Deep South.

Hypermasculinity has been noted among Black MSM as a manner in which to be perceived as heterosexual “in order to avoid being labeled as a ‘fag’ or ‘queer’” due to homophobia (Ward, 2005). This fear of homophobia exudes itself through the high-risk sexual behaviors demonstrated by some Black MSM through internalized homophobia (Ward, 2005). To date, only two studies have examined the role of masculinity and Gender Role Conflict among Black MSM in HIV transmission risk. None of these studies were predominately was located in the Deep South. The combined results of these studies were found to be inconclusive. Fields, Bogart, Smith, Malebranche, Ellen, and Schuster conducted a qualitative, 3-stage study with 35 young Black MSM (18-24 year olds) to examine the perception of masculinity and the effects it has on partner selection, risk assessment, and condom usage (2011). Fields et al. found participants to have greater preference for partners that are perceived as masculine compared to those who are more feminine and discomfort in those who are perceived as more feminine being the insertive partner during anal sex (2011). When examining the power dynamics in partners with condom-use decisions, the more masculine partner made the condom-use decision (Fields et al., 2011). The participants also noted they perceived more feminine men to be at higher risk of contracting or transmitting HIV to partners (Field et al., 2011).

Unlike Fields et al., Malebranche, Gvetadze, Millet, and Sutton found among 456 Black MSM that Gender Role Conflict Scale (GRCS) did not predict unprotected insertive anal intercourse nor unprotected receptive anal intercourse (2012). The Gender Role Conflict Scale measures beliefs about traditional masculine roles by using four subscales which includes 1) success, power, and competition; 2) restrictive emotionality; 3) restrictive and affectionate behavior between men; and 4) conflict between work and family relations (Malebranche et al., 2012). Through these results Malebranche et al. noted that the GRCS may not be a good measure to predict condom use or that gender role conflict does not manifest itself in reducing condom use in Black MSM (2012). Malebranche et al. also notes that the GRCS may be outdated any may not be able to measure the current gender role strain that is present (2012). As well, GRCS was developed to measure gender role strain among heterosexual White males and not for Black MSM which may not “capture the specific racial and cultural gender roles issues” currently facing Black MSM in today’s society (Malebranche et al., 2012).

With such limited research examining the role of gender role conflict and gender role strain it is important to examine this relationship among Black MSM in the Deep South. This study specifically aims to examine how the level of masculinity is associated with condom use during insertive anal sex among Black MSM in the Deep South and determine how level of masculinity is associated with condom use during receptive anal sex among Black MSM in the Deep South to further add to the limited research on the role of gender identity on condom use in Black MSM.

Methods

Sample

The sample of the SHIFT Study includes 348 participants who met the study eligibility requirements of being a Black MSM aged 18 years and older living in the Deep South. The Deep South is defined in the study as the states of Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina. To be included in the study participants had to 1) self-identify as an African-American man; 2) report sexual encounter with a man at least once in the past 12 months, or self-identify as gay or bisexual; 3) aged 18 years or older; and 4) reside in the Deep South. All participants gave informed consent to be included in the SHIFT Study. All identifiers of participants had been removed before gaining access to the data for confidentiality.

Measures

For the purpose of this study, sociodemographic variables, degree of the respondent's masculinity/femininity, and frequency of condom use will be used. Sociodemographic variables used includes age, highest educational level attained, income, relationship status, and degree of masculinity/femininity. The degree of respondent's masculinity/femininity was measured by "Which statement best describes you?" with response options including "extremely masculine," "masculine," "equally masculine and feminine," "feminine," and "extremely feminine." Frequency of condom use during the previous 3 months was also measured through assessing respondent's frequency of condom use for insertive and receptive intercourse. The frequency was presented on a 4-point Likert scale (1=Every Time – 4=Never). Number of sexual partners were also measured in the past three months with an open-ended question.

Analysis

IBM© SPSS software was used to analysis the data for the relationship between degree of masculinity/femininity and condom use during RAI and IAI through logistic regression as the dependent variable being the degree of masculinity/femininity and the independent variables being condom use during RAI and condom use during IAI. Variables were recoded as necessary. T-tests and χ^2 Test was used to measure variance among the variables as a quality control measure. To examine the relationship between age, degree of masculinity/femininity, and condom use in RAI and IAI binominal logistic regression was used. Degree of masculinity/femininity was collapsed into three categories (masculine, equally masculine/feminine, and feminine). Condom use for both RAI and IAI was collapsed into two categories (consistent use and inconsistent use).

Results

Demographics of Participants

The age range of the participants is 18-51. The ages were collapsed into the following age ranges for data analysis; 18-24 (n=136, 39.4%), 25-29 (n=95, 27.5%), and 30-51 (n=114, 33.0%). Participants' states of residence include Georgia (n=72, 20.9%), Louisiana (n=4, 1.2%), Mississippi (n=87, 25.2%), North Carolina (n=90, 26.1%), and South Carolina (n=92, 26.7%). (Table 1) No participants listed Alabama as a state of residence. The majority of the participants had some college education or higher. (Table 4.1) The majority of the participants' annual income is less than \$40,000 (< \$10,000, 21.8%; \$10,000 – 24,999, 21.8%; \$25,000 – 39,999, 27.9%). (Table 1) The majority of the participants (n=210, 60.9%) are single (Table 4.1).

Table 4.1. Demographic Characteristics of Participants who Engaged in Insertive and/or Receptive Anal Intercourse

Variable	Receptive (n = 256)		Insertive (n = 276)	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Age				
18-24	110	43.0	108	39.1
25-29	95	27.5	80	29.0
30+	76	29.7	88	31.9
State of Residence				
Georgia	48	18.8	55	19.9
Louisiana	3	1.2	2	.7
Mississippi	70	27.3	72	26.1
North Carolina	59	23.0	66	23.9
South Carolina	75	29.4	80	29.0
Highest Education Level				
High School Diploma or Less	55	21.5	54	19.6
Some College, No Degree	95	37.1	100	36.2
Associate/Bachelors	69	27.0	71	25.7
Some Graduate School/Advanced Degree	37	14.5	51	18.5

Degree of Masculinity/Femininity

48.4% of participants identified as equally masculine and feminine, 37.8% masculine, 7.7% feminine, 3.7% extremely masculine, and 2.4% extremely feminine (Figure 4.1). Degree of masculinity and femininity was collapsed into 3 categories (masculine, equally masculine and feminine, and feminine) (Figure 4.1). These results were used in analyzing inconsistent and consistent condom use in RAI and IAI.

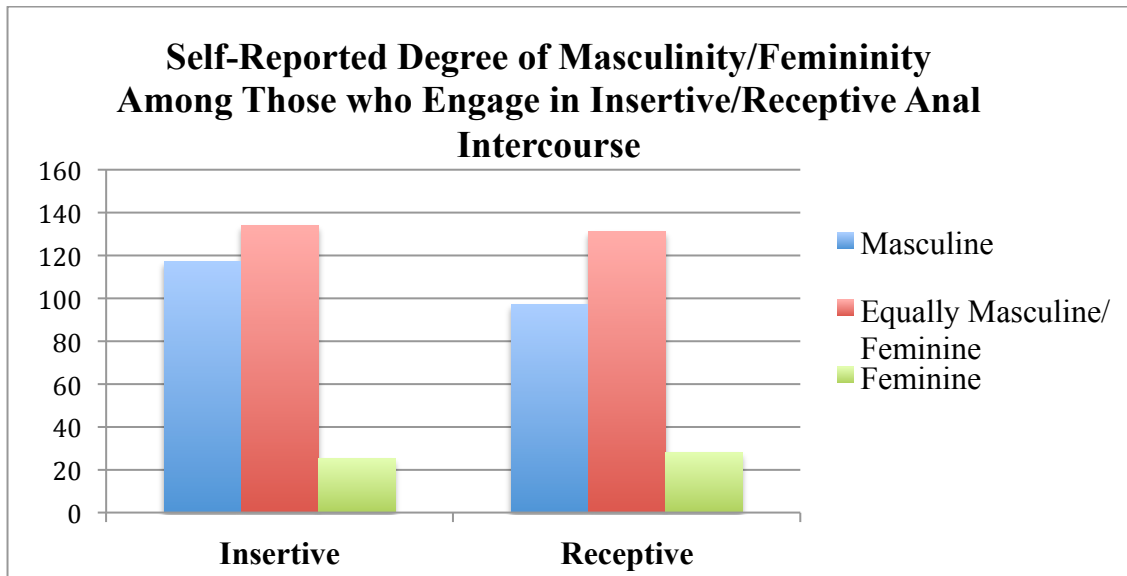


Figure 4.1. Self-Reported Degree of Masculinity/Femininity Among Those who Engage in Insertive/Receptive Anal Intercourse

Inconsistency/Consistency of Condom Use in RAI

Black MSM who self-identified as equally masculine and feminine used condoms consistently and inconsistently in RAI (Figure 4.2). The χ^2 test (.538) is greater than α (.05) identifying there is no statistical significance between the degree of masculinity/femininity and the use of condoms consistently and inconsistently in RAI (Figure 4.2). When examining the covariates of education, number of male sex partners in past 3 months, and degree of masculinity/femininity the p values were all greater than α (Table 4.2).

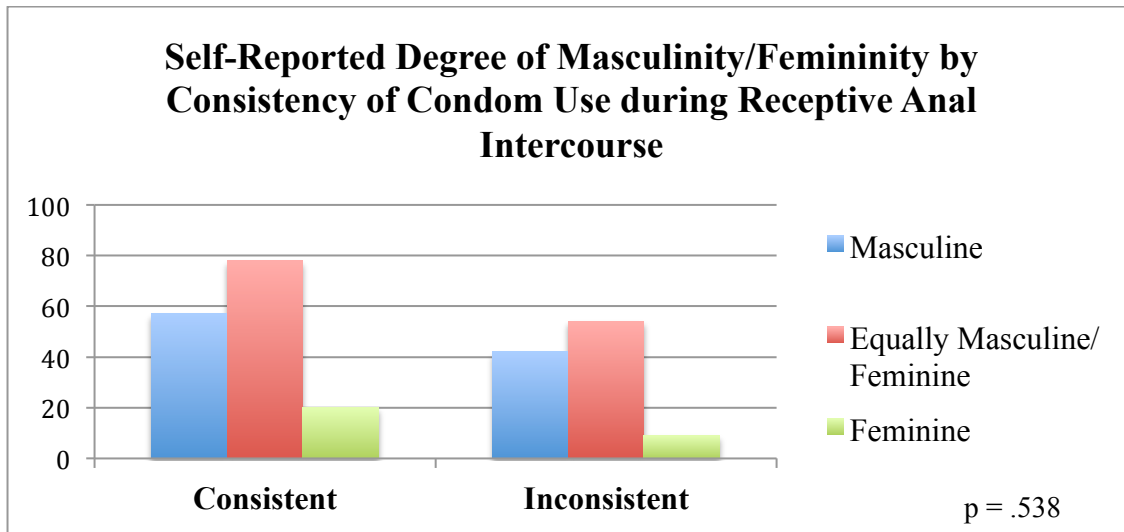


Figure 4.2. Self-Reported Degree of Masculinity/Femininity by Consistency of Condom Use during Receptive Anal Intercourse

Table 4.2. Consistency of Condom Use in Receptive Anal Intercourse with Covariates of Education, Number of Males Partners in the Past 3 Months, and Degree of Masculinity/Femininity

Variable	B	S.E	Wald	df	Sig.	Exp (B)	95% Confidence Interval
Education			4.821	3	.185		
HS Degree or Less	.203	.486	.174	1	.676	1.225	.473-3.173
Some College, No Degree	.138	.431	.102	1	.750	1.147	.493-2.671
Associates/Bachelors	.818	.447	3.354	1	.067	2.266	.944-5.441
Some Graduate School/Advanced Degree						REF	
Number of Male Partners in the Past 3 Months	-.164	.090	3.323	1	.068	.849	.712-1.012
Degree of Masculinity/Femininity			1.327	2	.515		
Masculine	.036	.483	.006	1	.940	1.037	.403-2.671
Equally Masculine/Feminine	-.284	.465	.373	1	.541	.753	.302-1.873
Feminine						REF	

Inconsistency/Consistency of Condom Use in IAI

Black MSM who self-identified as equally masculine and feminine used condoms consistently and inconsistently in IAI (Figure 4.3). Those who identified as masculine use condoms as consistently as those who identified as equally masculine and feminine in IAI (Figure 4.3). The p value (.384) is greater than α (.05) identifying there is no statistical significance between the degree of masculinity/femininity and the use of condoms consistently and inconsistently in IAI (Figure 3). When examining the covariates of education, number of male sex partners in past 3 months, and degree of masculinity/femininity the p values were all greater than α (Table 4.3).

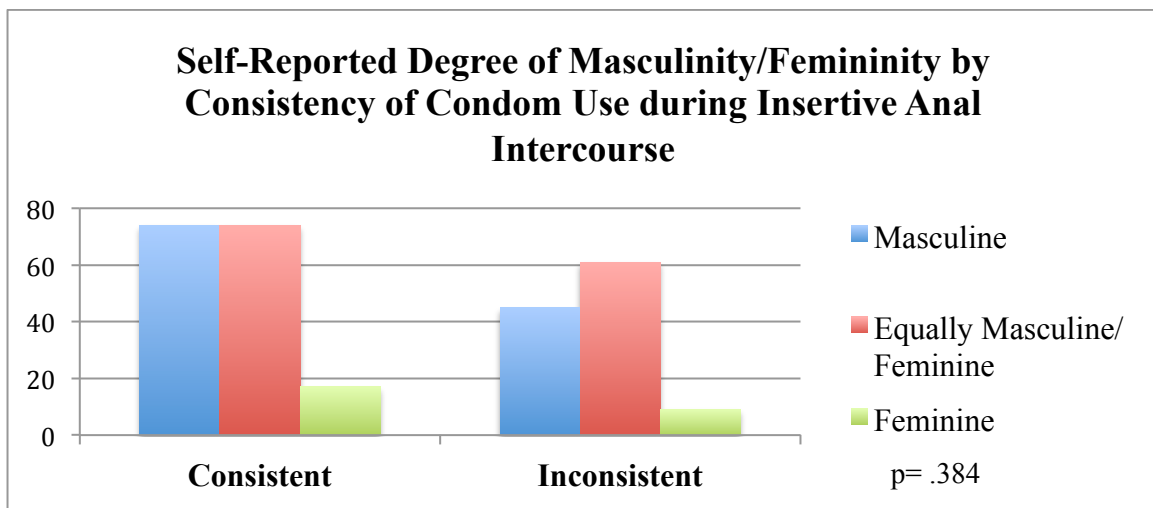


Figure 4.3. Self-Reported Degree of Masculinity/Femininity by Consistency of Condom Use during Insertive Anal Intercourse

Table 4.3. Consistency of Condom Use in Insertive Anal Intercourse with Covariates of Education, Number of Males Partners in the Past 3 Months, and Degree of Masculinity/Femininity

Variable	B	S.E	Wald	df	Sig.	Exp(B)	95% Confidence Interval
Education			3.326	3	.344		
HS Diploma or less	-.307	.441	.485	1	.486	.736	.310-1.746
Some College, no Degree	-.302	.381	.627	1	.428	.739	.350-1.561
Associates/Bachelors	.278	.389	.510	1	.475	1.320	.616-2.828
Some Graduate School/Advanced Degree						REF	
Number of Male Partners in the Past 3 Months	-.097	.075	1.655	1	.198	.908	.783-1.052
Degree of Masculinity/Femininity			1.862	2	.394		
Masculine	.058	.471	.015	1	.901	1.060	.421-2.666
Equally Masculine/Feminine	-.294	.458	.413	1	.521	.745	.303-1.830
Feminine						REF	

Conclusion and Discussion

Compared to the two previous studies (Malebranche et al., 2011; Fields et al., 2011) examining the roles of gender identity to condom use in RAI & IAI, the results of this study gives support to Malebranche et al.'s findings of no predictive value of gender identity to condom use (2012). Unlike Malebranche et al. we did not examine condom use of MSM in vaginal intercourse with women (2012). This study did not examine condom decision-making in relation to partner perception of masculinity or femininity. Fields et al. found, in a qualitative study of 35 young Black MSM, that those who were perceived as masculine as “safe partners” from HIV (2011). The findings from this study

does not support the results from Fields et al. that receptive partners were “high risk because they were less proactive about condom use and engaged in anal intercourse with multiple partners” more than insertive partners (2011). We agree with Malebranche et al. that the relationship between gender role conflict and condom use may not have a direct causation but that gender role conflict may play a larger influence on “partner selection, sexual networking, and [engagement of] sexual behaviors like IAI and RAI (2012).

There are many limitations to this study especially since this study is based on a secondary data analysis. The original study design was not designed to measure the relationship between the degree of masculinity/femininity and inconsistent/consistent condom use in IAI/RAI. As well, we did not distinguish between participants preference for a masculine or feminine partner neither did we ask participants if they were the receptive or insertive partner. Further research needs to be done to add to the limited literature on the role of gender identity on condom use in Black MSM in the Deep South.

CHAPTER 5

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The Deep South is the only region where the number of Black MSM living with HIV is greater than the number of White MSM living with HIV (Prejean, Tang, & Hall, 2013). When compared to statistics across the Deep South, the lowest rate of prevalence of HIV in Black MSM was still higher than the highest rate of prevalence for White MSM (Prejean, Tang, & Hall, 2013). There have been a number of proposed hypothesis to describe the racial disparities seen between Black and White MSM. However, none of these literature reviews examine influence of gender role conflict or the degree of masculinity/femininity on condom-decision making in insertive and receptive anal intercourse among Black MSM. Currently, only two studies have examined the role of gender role conflict and masculinity on condom use among Black MSM. None of these studies have taken place in the Deep South.

The current study undertaken for this thesis included a secondary data analysis of the Sexual Health in Faith Traditions (SHIFT) Study which only targeted the population of Black MSM in the Deep South to further examine the relationship between the degree of self-reported masculinity/femininity and the use of condoms in insertive anal intercourse (IAI) and receptive anal intercourse (RAI). After different models of analysis were implemented, including linear regression and binary linear regression, no significant

findings were found suggesting the self-reported degree of masculinity/femininity of Black MSM does not influenced the use of condoms in IAI or RAI.

Limitations

There are many limitations to this study especially since this study is based on a secondary data analysis. The sample size of the study was reduced from 348 to 276 and 256 for IAI and RAI, respectively. The original study design was not designed to measure the relationship between the degree of masculinity/femininity and inconsistent/consistent condom use in IAI/RAI. By collapsing data as such, it is possible the behavioral patterns surrounding condom negation and use may have been lost or reduced. By only using a single item measure of the degree of masculinity/femininity, the complexity of gender role identities has not been fully explored as a variable in condom negotiation or use. As well, we did not distinguish between participants preference for a masculine or feminine partner neither did we ask participants if they were the receptive or insertive partner. Further research needs examine the role of gender role conflict and degree of masculinity to add to the current limited literature on the role of gender identity on condom use among Black MSM.

Implications

The findings from this study does not support the results from Fields et al. that receptive partners were “high risk because they were less proactive about condom use and engaged in anal intercourse with multiple partners” more than insertive partners (2011). We agree with Malebranche et al. that the relationship between gender role

conflict and condom use may not have a direct causation but that gender role conflict may play a larger influence on “partner selection, sexual networking, and [engagement of] sexual behaviors like IAI and RAI (2012). However, further research is need to definitely determine whether or not gender role conflict or the degree of masculinity/femininity influences condom decision making of individuals or condom negation in partners in Black MSM. As well, research needs to examine whether or not geographical location may be a covariate along with consistency of condom use and degree of masculinity/femininity.

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