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# The Stigma Effect: The Role of Internalized Racism and Internalized Homophobia in Risky Sexual Behavior Among Black Gay Men

## Abstract

Black gay, bisexual, queer, and same-gender-loving (GBQSG L) men account for less than 1% of US population, yet account for 36% of all new HIV infections. While, Black GBQSG L men experience higher rates of HIV infection compared to other gay, bisexual, and men who have sex with men (MSM) from other racial groups, they are no more likely to report engaging in condomless anal sex (CAS). These findings suggest that one possible explanation is that the context of sexual behavior for Black GBQSG L men may be riskier because of the prevalence of HIV in the community. Furthermore, research suggests that racism and homophobia experienced by Black GBQSG L men because of their social identities may contribute to engaging in CAS. Informed by cultural theory of risk perception and stigma theory, this study examines the role of internalized homophobia and internalized racism on CAS among Black GBQSG L men with respect to the serostatus of their sexual partners. In addition, the study investigates how the relationship between internalized homophobia, internalized racism, and CAS changes depending on the level of perceived masculinity and racial identity of the sexual partners of Black GBQSG L men.

This quantitative study of Black GBQSG L men ( $N=443$ ) consists of a self-administered web-based survey about the sexual histories, drug histories, HIV risk behaviors, and experiences with social stigma of Black GBQSG L men. The results indicate that while neither internalized homophobia nor internalized racism were related to condom use, other demographic characteristics are associated with CAS. These findings explore the role that identity and intersectionality play when it comes to HIV risk behavior among Black GBQSG L men. Furthermore, both social work practitioners and public health interventions must address psychosocial factors associated with HIV in order to reduce the prevalence of HIV among Black GBQSG L men in the United States.

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THE STIGMA EFFECT: THE ROLE OF INTERNALIZED RACISM AND  
INTERNALIZED HOMOPHOBIA IN RISKY SEXUAL BEHAVIOR AMONG  
BLACK GAY MEN

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Presented to

the Faculty of the Graduate School of Social Work

University of Denver

---

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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by

Darren L. Whitfield

June 2016

Advisor: N. Eugene Walls, Ph.D.

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INTERNALIZED HOMOPHOBIA IN RISKY SEXUAL BEHAVIOR AMONG  
BLACK GAY MEN  
Advisor: N. Eugene Walls, Ph.D.  
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### **Abstract**

Black gay, bisexual, queer, and same-gender-loving (GBQSG) men account for less than 1% of US population, yet account for 36% of all new HIV infections. While, Black GBQSG men experience higher rates of HIV infection compared to other gay, bisexual, and men who have sex with men (MSM) from other racial groups, they are no more likely to report engaging in condomless anal sex (CAS). These findings suggest that one possible explanation is that the context of sexual behavior for Black GBQSG men may be riskier because of the prevalence of HIV in the community. Furthermore, research suggests that racism and homophobia experienced by Black GBQSG men because of their social identities may contribute to engaging in CAS. Informed by cultural theory of risk perception and stigma theory, this study examines the role of internalized homophobia and internalized racism on CAS among Black GBQSG men with respect to the serostatus of their sexual partners. In addition, the study investigates how the relationship between internalized homophobia, internalized racism, and CAS changes depending on the level of perceived masculinity and racial identity of the sexual partners of Black GBQSG men.

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## **Chapter One: Introduction**

### **History of HIV in the United States**

It has been more than three decades since the first cases of human immunodeficiency virus (HIV) was reported in New York and California (Centers for Disease Control and Prevention [CDC], 1981). In 1983, the retrovirus now known as HIV was first identified by the National Cancer Institute and the Pasteur Institute (Barre-Sinoussi et al., 1983, Gallo et al., 1984, Marx, 1984; Popovic et al., 1984). Since then, HIV has become a pandemic, with more than 34 million people dying from HIV-related causes globally (World Health Organization [WHO], 2015). It is estimated that currently more than 36.9 million people are living with HIV worldwide with 2 million people becoming infected with the virus annually (WHO, 2015).

HIV is a virus that targets and weakens the immune system in human beings. The virus impairs and destroys cells in the human body designed to protect it from infection and disease, making individuals more susceptible to a wide range of infections and diseases that people with healthy immune systems can fight off (Kilmarx, 2008). Without medical intervention, individuals living with HIV can develop illnesses they are unable to fight and might die due to HIV/AIDS-related complications (CDC, 2015). HIV is only known to be transmitted through certain bodily fluids – blood, semen, pre-seminal fluid, rectal fluids, vaginal fluids, and breast milk – that are infected with the virus (CDC,

2015). In order for HIV transmission to occur, the infected fluids must come in contact with a mucous membrane, damaged tissue, or enter directly into the bloodstream (CDC, 2015). Research suggests there are several risk factors that contribute to the spread of HIV including having anal or vaginal sex without using a condom, sharing needles, syringes, or other drug equipment for injection drug use, and/or having an untreated sexually transmitted infection (CDC, 2015; WHO, 2015).

In the United States, there is an estimated 1.2 million people living HIV/AIDS, with an additional 150,000 people who are unaware of their HIV infection (Hall et al., 2015). Men who have sex with men (MSM) comprise the largest group of individuals who are affected by HIV in the United States. While MSM represent about 4% of the United States population, they accounted for 63% of all new HIV infections in 2010 (CDC, 2012). Within the MSM population, Black and Latino/Hispanic men are disproportionately infected with HIV/AIDS. In 2010, Black MSM accounted for 36% of all new HIV infections among new MSM HIV infections, and Latino/Hispanic men represented 22% of all new MSM HIV infections (CDC, 2012). Among MSM ages 13-29, there was a 34% increase in the infection rate between 2006-2009 (CDC, 2012) with young Black MSM experiencing a 48% increase in the infection rate among (CDC, 2012). Based on the current rate of new diagnoses, new projections of new HIV infections suggest that 1 in 2 Black MSM and 1 in 4 Latino MSM will be diagnosed with HIV in their lifetime (CDC, 2016). These alarming rates of HIV infections among MSM of color call for a need to examine potential differences for this population in order to slow the growth in the epidemic.

## **Relevant Terminology**

### **Men Who Have Sex with Other Men (MSM)**

MSM is an acronym used to describe gay, bisexual, and other men who have sex with men. The term developed to address the growing concern that HIV prevention efforts that targeted gay men were focused on sexual orientation and sexual behavior, thus ignoring risk factors associated with MSM who do not identify as gay (Rust, 2000). Previous studies suggest that the discrepancy between self-identified sexual orientation and sexual behavior was, additionally, associated with greater risk for HIV infection (Earl, 1990; Seibt et al., 1991) and a shift in the paradigm was needed to fully address the issue of risky sexual behavior for men regardless of their sexual orientation.

While the term was created to address the issue of inclusion of men regardless of their sexual orientation in HIV prevention services, combining men who identify as heterosexual yet have sex with other men with gay and bisexually identified men also presents challenges for HIV prevention and research. Unfortunately, the term disconnects identity and behavior. The grouping oversimplifies the individuals in the group and does not allow for an examination of the potential differences between MSM based on sexual orientation. While behavior drives an individual's risk for HIV infection (e.g., having condomless sex and engaging in illicit drug use), the focus of this study is to understand how these behaviors are grounded in the context of social identities. In addition, examining behavioral characteristics, research findings suggest that the composition of MSM who do not identify as gay or bisexual is a small percentage in the total MSM population (Malebranche, Gvetadze, Millett, & Sutton, 2012).



### **Same-gender-loving (SGL)**

Same-gender-loving (SGL) is a term used to describe people with same-sex attraction and sexual behaviors in the African American community (Jourian, 2015; Lassiter, 2014). The term emerged in the early 1990s as a culturally affirming Afrocentric alternative to the traditional White-identified terms gay and lesbian, that encompasses the uniqueness of the experiences of African American life and culture (Jourian, 2015; Lassiter, 2014; Parks, 20001; Parks et al., 2001). In addition, research suggests that both racial identity and sexual orientation play an important role in the lives of Black gay men (Cohen, 2005; Crichlow, 2004; Beam, 1986; Hemphill, 1991; Hunter, 2010) and the term same-gender-loving is an identity that acknowledges the complex relationship between racial identity and sexual orientation in the sexual identity of Black gay men.

### **Condomless Anal Sex (CAS)**

Condomless anal sex (CAS) refers to engaging in anal sex without the use of a condom as a form of prophylaxis to reduce the risk of acquiring sexually transmitted infections (STIs) including HIV (Darrow, Jaffe, & Curran, 1983; Detels, Schwartz, Greene, Vischer, & Gottlieb, 1983). CAS is a potential risk factor for MSM and therefore has been emphasized by public health practitioners and researchers since the beginning of the HIV epidemic (Jin et al., 2015). The term was introduced in HIV prevention by the CDC as a response to the shift in prevention strategies that recognizes CAS is not necessarily “unprotected” in regard to HIV transmission (HIV Prevention Justice Alliance, 2014). Historically, CAS has been used as the primary indicator of risk behavior for both surveillance and research in HIV prevention (Jin et al., 2015). With the advancements in biomedical interventions to prevent HIV infections and treat people

living with HIV, using a condom for anal sex is one of several HIV prevention strategies suggested by the CDC and health professionals for MSM (Grant et al., 2010; Mao et al., 2006; Kippax, Crawford, Davis, Rodden, & Dowsett, 1993; Van de Ven et al., 2005).

### **Biopsychosocial Drivers of the Health Syndemic in MSM**

HIV has had the most profound impact on MSM in the United States, however the virus does not occur in isolation. Scholars suggest that HIV infections among MSM are intrinsically tied to other health and social conditions that MSM experience including psychological comorbidities, substance abuse, poverty, and discrimination (Halkitis, 2012; Halkitis et al., 2011; Wolitski, Stall, & Valdiserri, 2008). Examining the relationship between these multiple health and social conditions, researchers suggest these epidemics have resulted in the creation of a syndemic of HIV for this community (Halkitis, 2010; Singer, 1996; Stall, Friedman, & Cantania, 2008) and that biological, behavioral, and psychosocial/structural factors undermine the health of MSM (Wolitski & Fenton, 2011).

The biopsychosocial drivers of the syndemic model (see Figure 1) is grounded in the seminal work of Singer (1996) and Link & Phelan (1995). Examining the intersections of racism, poverty, substance abuse, and violence in elevated HIV infection risk among urban communities of color, researchers found experiencing multiple conditions was associated with greater risk for HIV infection (Singer, 1996). Based on this framework, researchers found links between experiencing two or more health or social conditions (e.g., racism, poverty, substance abuse, violence, discrimination, mental health conditions) and sexual risk taking (i.e., CAS) or being diagnosed with HIV among MSM (Ayala, Bingham, Kim, Wheeler, & Millett, 2012; Halkitis et al., 2013; Jie,

Ciyong, Xueqing, Hui, & Lingyao, 2012; Mustanski, Garofalo, Herrick, & Donenberg, 2007; Stall et al, 2003). Furthermore, Link and Phelan (1995) suggest that a health disparity is best understood as emanating from social conditions (distal factors) rather than as individually produced (proximal factors), and interventions should focus on the distal factors rather than solely addressing the proximal factors. Based on this paradigm, to adequately address the HIV epidemic among MSM, scholars must focus on the biopsychosocial drivers of the syndemic and its relationship to HIV and other health and social conditions.

### **Purpose of the Dissertation**

The primary way in which HIV is transmitted among Black GBQSGM men is through CAS, thus the behavior of engaging in CAS puts Black GBQSGM men in greater risk for HIV infection. The purpose of this study is to examine if the psychosocial factor of stigma (i.e., internalized racism and internalized homophobia) influences the decision of Black GBQSGM men to engage in CAS; putting them at greater risk for HIV acquisition. The present study will examine the relationship between internalized racism, internalized homophobia, and willingness to engage in CAS with partners of unknown HIV status for Black GBQSGM men. Additionally, the study seeks to understand how differences in one's sexual partner's characteristics (i.e., race, perceived level of masculinity), might influence the relationship between internalized stigma and likelihood of engaging in CAS with partners of unknown status.

The aims of the study include 1) examining the relationship between internalized homophobia, internalized racism, and anal sex with sexual partners of unknown HIV serostatus for Black GBQSGM men, 2) examining the relationship between internalized

homophobia, internalized racism, and CAS with sexual partners of unknown HIV serostatus for Black GBQSGM men, and 3) testing the moderating effect of partner characteristics (i.e., race and masculinity) on the relationship between internalized stigma (i.e., internalized racism and internalized homophobia) and CAS with partners of unknown HIV serostatus for Black GBQSGM.

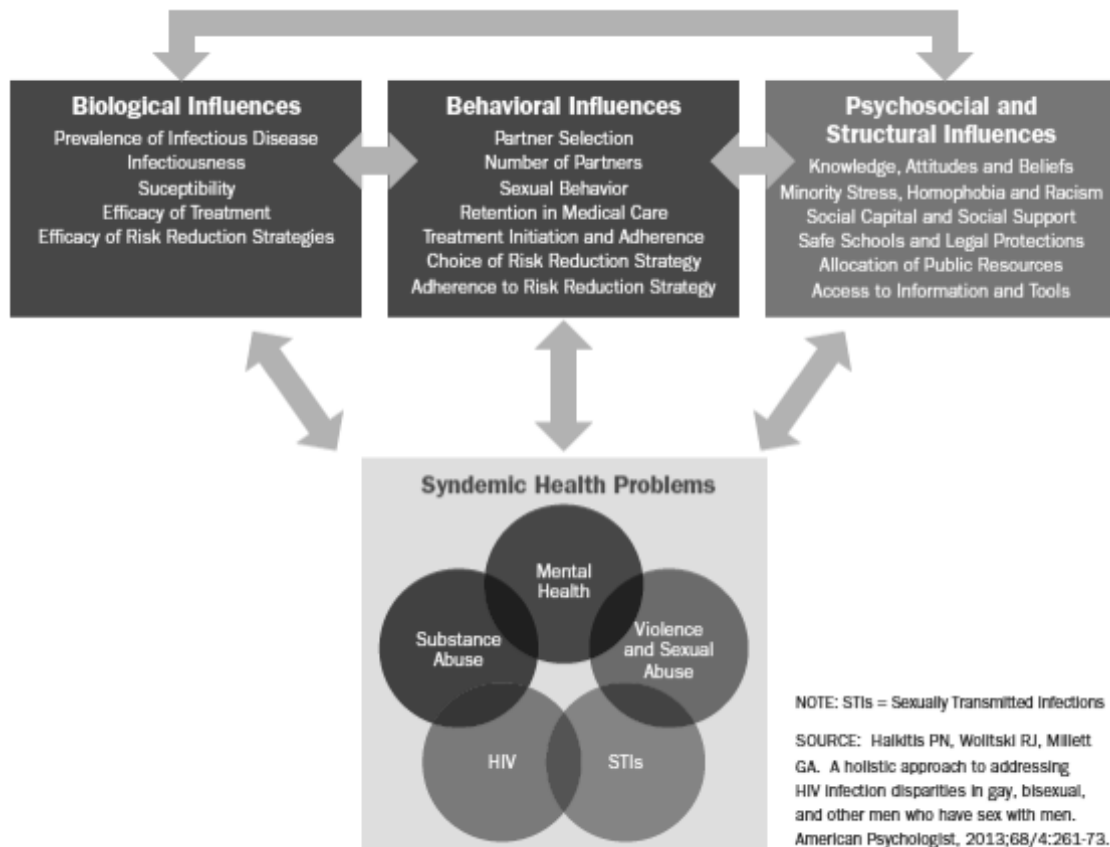


Figure 1: Biopsychosocial Drivers of the Syndemic in Gay, Bisexual, and other Men who have sex with Men

## Organization of the Dissertation

This dissertation is divided into six chapters. This chapter provides a brief introduction to the history of HIV in the United States, a summary of relevant terminology, a presentation of the biopsychosocial drivers of the health syndemic in

MSM model, and the purpose of the study. The second chapter presents a comprehensive review of the literature, including sections on the HIV epidemic among Black GBQSGM men, internalized racism, internalized homophobia, the dual role of internalized racism and internalized homophobia among Black GBQSGM men, and partner characteristics in risky sexual behavior among this population. The chapter also provides recommendations for future research with Black GBQSGM men and an examination of the gaps in our knowledge in this area. The third chapter summarizes the theoretical foundation of the study that includes a discussion on cultural theory of risk perception, stigma theory, and intersectionality. The fourth chapter describes the research methods; including the description of the study population, survey construction, recruitment of research participants, analytic approach to the data, and the potential risk to participants. The fifth chapter presents the findings from the analyses. Finally, the sixth chapter discusses the results of the study, the implications for social work practice, the potential for future research, and the strengths and limitations of the study.

## **Chapter Two: Literature Review**

This chapter will review the relevant literature about the prevalence of HIV among Black GBQSGM men, the occurrence of internalized racism and internalized homophobia among Black GBQSGM men, the effects of internalized stigma on health outcomes and HIV risk behavior (i.e., CAS), and the influence of social identities (i.e., racial identity and perceived masculinity) of sexual partners on sexual risk taking among Black GBQSGM men. The chapter will conclude with an examination of the gap in the knowledge base and an overview of the aims and research questions for this dissertation.

### **HIV Rates Among Black GBQSGM Men**

Despite a fairly stable HIV epidemic in the United States in recent years, Black GBQSGM men continue to experience disproportionate rates of HIV infection (CDC, 2012). In 2010, Black MSM accounted for 36% of all new HIV infections among new MSM HIV infections. While other racial and ethnic groups of gay and bisexual men have seen either a decrease or plateau effect in annual cases of new HIV infections, Black GBQSGM men, particularly young Black GBQSGM men, have experienced an increase in new HIV infections (CDC, 2012). Among MSM ages 13-29, there was a 34% increase in the infection rate between 2006-2009 (CDC, 2012). Within this age range, Black MSM are infected at disparate rates, with the group experiencing a 48% increase in the infection rate among 13-29 year olds between 2006-2009 (CDC, 2012).

Upon investigation of the cause of the disproportionate rates of HIV, researchers have found results that contradict the established understanding of risk behaviors associated with increased HIV infection rates. Across studies, meta-analyses, and systematic reviews, Black GBQSGM men are no more likely to report CAS or alcohol/drug use before/during sex, the two leading factors associated with HIV infection, compared to other racial or ethnic groups of gay and bisexual men (Clerkin, Newcomb, & Mustanski, 2011; Eaton, Kalichman, & Cherry, 2010; Millett et al, 2012; Millett, Peterson, Wolitski, & Stall, 2006; Oster et al., 2011).

The lack of differences in the level of CAS among Black GBQSGM men compared to other groups of MSM suggests that the actual *context* of CAS among this group must play a role in shaping the risk of contracting HIV. Several contextual differences (e.g., more likely to have a sexually transmitted infection (STI), delayed or infrequent HIV testing, and homogenous sexual networks) may account for the disparate rates of HIV infection among Black GBQSGM men (Millett et al., 2006). One of the contextual factors that may contribute to the increased HIV infection rates is that Black GBQSGM men are more likely than other MSM to contract a STI (Easterbrook et al., 1993; Heckman et al, 1999; Torian et al., 2002; Valleroy et al., 1999) which makes them more susceptible to HIV infection due to weakened mucosal. Research has well documented that being infected with an STI increases vulnerability and transmissibility of HIV (CDC, 2004; Fleming & Wasserheit, 1999). In a large study of HIV-positive MSM, researchers found that Black MSM were significantly more likely to be coinfecting with gonorrhea, syphilis, and nongonococcal urethritis than White MSM (Torian et al., 2002). In a similar study, researchers found that while there were no differences in the

rates of urethral gonorrhea, Black MSM were more likely to be coinfecting with syphilis (Easterbrook et al., 1999). Furthermore, regardless of HIV serostatus, Black MSM have higher rates of STIs compared to other groups of MSM (Valleroy et al., 2002).

In addition to differences in STI infection rates among Black GBQSGM men, there is a difference in the HIV testing patterns among Black GBQSGM men compared to other racial and ethnic groups of MSM. While Black GBQSGM men are equally likely to report ever having been tested for HIV (CDC, 2005), they are also more likely to be tested less frequently. In a study of young MSM, researchers reported that young (ages 15-22) Black GBQSGM men were tested less frequently than White MSM of a similar age (CDC, 2001). In addition, significantly more HIV-positive Black GBQSGM men were unaware of their HIV infection compared to Latino and White MSM (Bingham et al., 2003; MacKellar et al., 2005). Moreover, Black GBQSGM men are more likely to report having sex with a person of unknown HIV status (Oster et al., 2011). The infrequency of HIV testing combined with having sexual partners of unknown HIV status makes the context of having CAS regardless of the frequency riskier for Black GBQSGM.

Furthermore, Black GBQSGM men are more likely to be part of sexual networks with a higher incidence of HIV, which puts them at greater risk for HIV infection regardless of the level of condom use not being different than other groups of MSM. Several studies have suggested sexual mixing facilitates the spread of STIs (Gorbach et al., 2002; Morris et al., 1995). In a study of sexual mixing, the authors found that racial differences in the selection of sexual partners partially explained elevated rates of HIV infection among Black GBQSGM men as they were more likely to report having sex with other Black males (Bingham et al., 2003). Another study also found that due to the racial



homogeneity in sexual partners of Black GBQSGM men, they were more likely to be infected with HIV (Oster et al., 2011). These studies suggest that due to the incidence of HIV among Black GBQSGM men, having closed sexual networks may be associated with higher rates of HIV infection among this group regardless of differences in levels of condom use compared to other racial and ethnic groups of MSM.

Since these contextual factors matter in terms of risk for HIV infection, studying the role of decision-making from a psychosocial perspective is important. Several studies have suggested that internalized racism and internalized homophobia influence condom use (Huebner, Davis, Nemeroff, & Aiken, 2022; Meyer & Dean, 1998; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001). Given these findings and findings that suggest that the context of CAS among Black GBQSGM men is important, focusing on the relationship between internalized racism, internalized homophobia, and condom use may uncover a relationship between internalized stigma and sexual risk-taking among Black GBQSGM men.

### **Internalized Racism**

Internalized racism is a psychological process that affects all racial minorities, that involves acceptance of hegemonic hierarchical stratification of race that places racial/ethnic minorities beneath White/Europeans (Jones, 2000). Internalized racism is the tolerance of negative stereotypes about one's racial group and leads to self-degradation and self-alienation, incorporating shame about one's racial identity (Watts-Jones, 2002). Specifically, for African Americans, internalized racism is the agreement of negative stereotypes about African Americans concerning their abilities and intrinsic worth (Bryant, 2011; Cokley, 2002; Jones, 2000). One of the manifestations of

internalized racism is the abandonment of characteristics associated with one's racial identity in favor of White European culture and values in an effort to acculturate to a racist society (Hipolito-Delgado, 2010; Pyke, 2010).

As noted, internalized racism occurs within all racial minority groups, and is manifested in similar ways (Asanti, 1996; Cokley, 2002; Pyke, 2010). Internalized racism is associated with revering European physiognomy and degrading indigenous features among Latinos (Fortes de Leff, 2002) Asians (Pyke & Dang, 2003), and African Americans (Jones, 2000). Furthermore, internalized racism leads to the devaluing of the heritage of one's racial groups in favor of acculturating to White cultural beliefs (Asanti, 1996; Bryant, 2011; Hipolito-Delgado, 2010; Pyke & Dang, 2003).

Internalized racism has been shown to have negative impacts on the overall health and well-being of racial minorities. Researchers have found that internalized racism has an adverse effect on the physical health of people of color including increased abdominal body fat (Bulter et al., 2002), and waist circumference (Chambers et al., 2004). In a study of African American women, researchers found that higher levels of perceived internalized racism were associated with higher levels of cortisol levels and other stress hormones (Tull et al., 2005). Furthermore, internalized racism has been linked to depressive symptoms (Taylor et al., 1991) and higher rates of drug use (Choi et al, 2006; Borrell et al., 2007). In African Americans, internalized racism is associated with a greater risk of depression (Tomes & Brown, 1986), lower levels of self-esteem, and higher levels of aggressive behavior (Taylor, 1990).

Similar to the impacts of internalized racism on people of color, internalized racism has adverse effects on gay and bisexual men of color. In a study examining how

racial discrimination impacts the mental health of African American, Asian, and Latino gay and bisexual men (Choi, Paul, Ayala, Boylan, & Gregorich, 2013), researchers found internalized racism to be associated with depression and anxiety irrespective of racial identity. Furthermore, internalized racism is related to increased psychological distress and illicit drug use among Black gay and bisexual men. In a study of Black gay and bisexual men in Washington DC, researchers found that men who encountered more racism were more likely to present psychological distress (Smith, 2013). Moreover, a study of Black gay and bisexual men in New York found that individuals use methamphetamine as a way to cope with racism and internalized racism (Jerome & Halkitis, 2009).

Internalized racism is also associated with engaging in riskier sexual behavior and increased risk of HIV infection among gay men of color. In a study of Latino gay men in three US cities, researcher found that Latinos who experienced racism and internalized racism were more likely to engage in CAS (Díaz, Ayala, & Bein, 2004). In a qualitative exploration of internalized racism and CAS among Asian Pacific Islander (API) gay men in the US, researchers found that high levels of internalized racism were associated with CAS for API gay men (Han, 2008). This study empirically supported theoretical suggestions that API gay men were more likely to engage in CAS because of internalized racism (Choi et al, 1999; Wilson & Yoshikawa, 2004). Similarly, in a study of Black and Latino gay and bisexual men, researchers found that racism and internalized racism were associated with CAS among Black and Latino men in the study (Ayala et al., 2012).

## **Internalized Homophobia**

Internalized homophobia has been defined as lesbian, gay, and bisexual individual's internalization of society's negative social attitudes and beliefs about their sexual orientation (Meyer, 1995; Meyer & Dean, 1998). Internalized homophobia includes global negative attitudes about same-sex sexuality, discomfort with disclosure of one's sexual orientation, disconnectedness from other LGB individuals, and disgust with same-sex activity (Newcomb & Mustanski, 2010). Internalized homophobia is characterized by an intrapsychic conflict between experiences of same-sex affection or desire and feeling a need to be heterosexual (Herek, 2004). Similar to internalized racism internalized homophobia leads to an individual having lower self-regard, and higher self-depreciating attitudes (Meyer & Dean, 1998).

Internalized homophobia is linked to poor health and mental health outcomes including anxiety, suicide, depression, alcoholism, and poor overall health (Meyer, 2003; Szymanski, Kashubeck-West, & Meyer, 2008; Williamson, 2000). In a study of lesbian women and gay men, researchers found that internalized homonegativity was associated with self-mutilation and suicidality (Remafedi et al., 1991). Similarly, a study of LGB young adults found that internalized homophobia was linked to drug and alcohol use to cope with problems associated with their sexual orientation (Hammelman, 1993). In a meta-analysis of internalized homophobia and mental health outcomes for LGB individuals, Newcomb and Mustanski (2010) found a moderate correlation between internalized homophobia and depression and anxiety, with individuals with higher levels of expressed internalized homophobia exhibiting more depressive symptomology. In the

analysis, researchers found no differences across gender and race, however older individuals were more likely to have mental health symptomology.

In addition to the adverse effects of internalized homophobia on health outcomes, internalized homophobia is also associated with riskier sexual behavior and potential risk of HIV infection among gay and bisexual men. Findings suggest that gay and bisexual men who display a higher rate of internalized homophobia are more likely to engage in CAS compared to individuals who present less internalized homophobia (Ayala et al., 2012; Bird & Voisin, 2013; Jeffries et al., 2013; Mizuno et al., 2012; Newcomb & Mustanski, 2011). In studying access to STI and HIV testing, researchers found that individuals with high levels of sexual stigma were less likely to engage in STI/ HIV testing (Fortenberry et al., 2002). In a study of HIV-positive MSM, researchers found an indirect relationship between internalized homophobia and CAS (Ross et al., 2008). The authors found that there was a relationship between not being “out”, internalized homophobia, and CAS. In another study of gay men, researchers found that internalized homophobia was associated with inconsistent condom use (Sandfort, 1995). Jeffries et al. (2013) found that men who had experienced severe homophobic events in the previous 12 months were more likely to engage in CAS in a sample of Black gay and bisexual men. In a national study of 202 Black MSM, as the level of internalized homophobia increased, participants were more likely to engage in risky sexual practices (e.g., inconsistent condom use and multiple sexual partners) (Amola, 2011).

### **Interaction of Internalized Racism and Internalized Homophobia**

The pronounced psychological effects of internalized stigma have prompted scholars to research the impact of internalized homophobia and internalized racism on

behaviors that may increase the risk of Black GBQSGM men becoming infected with HIV/AIDS. Scholars have attempted to understand the relationship between condom use and internalized stigma; however, the results of these studies have been mixed. Several researchers have shown an association between internalized homophobia and internalized racism with CAS (Huebner, Davis, Nemeroff, & Aiken, 2002; Meyer & Dean, 1998; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001). Smith (2012) found evidence that internalized racism and internalized homophobia were related to inconsistent condom use among Black gay and bisexual men. In another study conducted with Black and Latino MSM in the New York City house ball community, researchers found that individuals reporting CAS reported higher levels of perceived stigma and enacted stigma regarding their racial identity, sexuality, and gender identity (Finlayson, 2007). Moreover, in a study of Black and Latino MSM, researchers found that both internalized racism and internalized homophobia were associated with CAS or inconsistent condom use (Ayala et al, 2012).

Conversely other scholars have conducted similar studies on the association between internalized homophobia, internalized racism, and condom use but have not found the same results. In studies looking at the relationship between internalized stigma and CAS, scholars have found either weak or indirect relationships between the two variables (Kashubeck-West & Szymanski, 2008; Newcomb & Mustanski, 2011; Preston et al., 2004; Shidlo, 1994). In a study examining internalized homophobia, masculinity, gender role conflict, and condom use among Black gay and bisexual men, researchers found that these psychological factors had an indirect relationship with condom use (Malebranche, Gvetadze, Millett, & Sutton, 2012). The findings suggest that other factors

may moderate the relationship between condom use and stigma for Black gay and bisexual men.

## **Partner Selection, Characteristics, and HIV Risk**

### **Racial Identity**

The existence of racial hierarchy and racial homophily in the United States is well documented. Racial hierarchy studies have found that in the general population, Whites are perceived to be racially superior and more desirable as sexual and romantic partners, followed by Asians and Hispanics sexual and romantic partners, and then finally African Americans at the bottom of the hierarchy (Blauner, 2001; Bonilla-Silva, 2004; Lin & Lundquist, 2013). In addition, racial homophily (i.e., having a sexual or romantic partner of the same race) continues to be the norm in our society. Studies have found that while there has been an increase in interracial dating and marriages, the majority of individuals in our society date and marry individuals of the same race (Lichter & Qian, 2004; Wang, Kao, & Joyner, 2006).

Similar partner selection patterns related to race exist among Black GBQSGM men as well. In a study of young Black GBQSGM men in Los Angeles, researcher found that Black GBQSGM men were more likely than other racial groups to have sex with partners of their own racial group (Bingham et al., 2003). Furthermore, the researchers found that Black GBQSGM men were more likely to engage in CAS with partners of the same racial identity than with partners of a different racial identity (Bingham et al., 2003). Other studies have suggested a relationship between same-race partners of Black GBQSGM men and CAS (Celentano et al., 2005; Valleroy et al., 2000). However, while other studies have found a similar pattern related to the racial identity of sexual partners

for Black GBQSGM men, they have not replicated findings of a relationship with CAS. For example, in another study of racial preferences of MSM, researchers found that while sexual partnerships were mostly racially homogenous, they also found that the incidence of CAS was lowest when both sexual partners were Black and highest when both partners were non-Black (Clerkin, Newcomb, & Mustanski, 2011). Similarly, a study of Black GBQSGM men in New York City found that Black GBQSGM men were more likely to have Black male partners, but they were no more likely to have CAS (Tieu et al., 2009). Empirical evidence suggests that there may be a relationship between partner racial identity and condom; however, the relationship is not clear and needs further investigation.

### **Masculinity and Gender Roles**

There has been extensive research examining the affects of masculine socialization on Black men (Majors & Billson, 1992; O'Neil, 1990; O'Neil & Nadeau, 2004), in particular heterosexual Black men (Hammond & Mattis, 2005; Harper, 2004). These studies suggest that Black men, regardless of their sexual orientation, are socialized to uphold stereotypical masculine and hypermasculine gender role expectations that include being overtly sexual, dominating, showing limited emotions, and protecting one's family (Fields, Fullilove, & Fullilove, 2001; Harper, 2004; Peterson et al., 2003; Majors and Billson, 1992). Furthermore, perceptions of masculinity have been associated with risky sexual behavior men of color (Griffith et al., 2012), gay men (Halkitis et al., 2004), and Black GBQSGM men (Crawford et al., 2002). Studies have shown that internalized racism is associated with more gender role conflict and psychological distress. In a study of Black men, researchers found that internalized



racism partially mediated the relationship between masculine values and psychological distress (Wester et al., 2006). In this study Black men who had higher levels of internalized racism were more likely to uphold traditional values of masculinity and gender roles. These men also experienced greater levels of psychological distress (Wester et al., 2006).

Among Black GBQSGM men, masculinity has been linked to sexual partner selection and HIV risk behavior. In studies of Black GBQSGM men, researchers have found that men often avoid self-identifying as gay as a strategy to maintain their masculine identity (Malebranche et al., 2009; Peterson & Bakeman, 2001). Similarly, in a study of Black non-gay identified MSM, researchers found that men placed a strong emphasis on upholding strong masculine roles and perceived being gay as contradictory to being a responsible Black man (Operario et al., 2008). Masculinity also plays a role in partner selection and sexual roles among Black GBQSGM men. In a qualitative study of the influence of masculinity on Black GBQSGM men, researchers found that men were more likely to date men whom they perceived to be more masculine (Malebranche et al., 2009), and in a study of Black non-gay identified MSM, researchers found that men preferred to have sexual partners whom they perceived to be masculine (Operario et al., 2008). There is contradictory evidence, however, that masculinity is associated with greater levels of CAS among Black GBQSGM men. In a study of Black GBQSGM men in New York City, researchers found that issues of masculinity were associated with engaging in CAS and methamphetamine use (Jerome & Halkitis, 2009). Similarly, other researchers have shown that Black GBQSGM men are more likely to engage in CAS with men whom they perceive as masculine (Operario et al., 2008) and their female partners

among bisexual Black men (Malebranche et al., 2009; 2012) because of masculine social norms. However, other studies suggest that masculine social norms are not associated with CAS for Black GBQSGM men. In one study of Black GBQSGM men, researchers found that higher scores on a gender role conflict scale (i.e., predicting adherence to masculine social norms) was not associated with greater likelihood of CAS (Malebranche et al., 2012). Comparably, a qualitative study of Black GBQSGM men found that participants described multiple factors associated with CAS but none of them were related to perceptions of masculinity of their sexual partners (Malebranche et al., 2009). Additionally, a study of gay and non-gay identified Black MSM revealed that individuals who identified as non-gay and adhered to masculine social norms were no more or less likely to engage in CAS with their sexual partners (Bond et al., 2009). These findings suggest a need for further research in understanding the relationship between masculinity and CAS among Black GBQSGM men.

### **Gaps in Existing Knowledge Base**

Scholarly research has provided researchers with vital information on the behavioral, psychological, and social factors associated with HIV risk for Black gay and bisexual men. Empirical evidence suggests that Black gay and bisexual men are no more likely to report engaging in CAS or drug use – two primary indicators associated with higher rates of HIV infection – compared to gay and bisexual men of other racial/ethnic groups when you look across multiple studies. Other studies have demonstrated the relationship between internalized stigma and HIV risk behavior, risk behavior, and the role of racism and homophobia in the development of relationships. These studies

provide important insight into how different factors may influence the overall risk for HIV infection for Black gay and bisexual men.

Research suggests that Black gay and bisexual men are more likely to experience racism and homophobia from the larger social environment and within groups associated with their social identities (i.e., homophobia in the Black community and racism in the gay community). These experiences are linked to internalized homophobia and internalized racism among Black gay and bisexual men. There is, however, conflicting evidence about whether internalized homophobia and internalized racism are linked to engaging in CAS and drug use for Black gay and bisexual men.

Examining social factors, social scientists have identified several relationship patterns that impact CAS. Black gay and bisexual men are more likely to not disclose their sexual orientation or discuss HIV serostatus with their sexual partners. Young Black gay and bisexual men are more likely to have sexual partners who are older, which has been linked to an increased probability of having CAS. Within sexual relationships, trust in one's sexual partner is associated with greater likelihood of inconsistent condom use (Malebranche et al., 2009).

The empirical research provides a foundational understanding of the different experiences that Black gay and bisexual men encounter in their social environment. These findings demonstrate how these experiences may be linked to increased rates of HIV infection. They also illuminate several limitations in our current understanding and suggest areas for further exploration to more adequately comprehend what factors are associated with CAS for Black gay and bisexual men. If researchers hope to reduce the rate of HIV infection among Black gay and bisexual men, it is imperative that future

researchers address the limitations found in current research projects and design more complex studies that address the array of factors that have been attributed to potential HIV risk behavior for Black gay and bisexual men including behavioral, psychological, and social factors.

One of the challenges to the current knowledge base in understanding potential factors associated with HIV risk behavior for Black gay and bisexual men has been methodological issues. In large scale studies of gay and bisexual men, the proportion of the sample who identify as Black gay and bisexual men has been relatively small, making meaningful analysis questionable. In studies where Black gay and bisexual men were the population being examined, the studies have been limited to large urban areas as the investigative location. Typically studies of Black gay and bisexual men are concentrated in the following cities: Atlanta, Chicago, New York City, Washington DC, or Los Angeles. These limited geographical parameters do not allow for greater generalization of the findings to men in non-urban settings or in other areas of the US. While convenient sampling is acceptable for studying hard to reach and vulnerable populations, it poses a limitation to the findings of studies involving Black gay and bisexual men. Most studies of Black gay and bisexual men use convenience sampling to recruit from gay-specific venues including bars, gay events (e.g., Pride festivals), AIDS service organizations, and LGBTQ community organizations. These venues are traditionally frequented by Black gay and bisexual men who have more integrated social identities, thus biasing the findings and narrowing the scope of the results to individuals who fit the psychosocial profile of these individuals. The impact of the sampling bias is important particularly

when researchers hope to understand those most at risk for HIV risk behavior, which has been associated with more marginalized Black gay and bisexual men.

Another limitation of research on Black gay and bisexual men is related to how different factors are conceptualized. In studies of the effect of internalized homophobia and internalized racism, the findings that associate internalized stigma with greater rates of CAS have not been substantiated through replication because internalized stigma has been conceptualized and operationalized differently in each study. In some studies, researchers have conceptualized internalized stigma as a perception by the participants, while other studies conceptualize internalized stigma as actual experiences that were measured using psychological measures. Depending on how these important factors are conceptualized, the findings change dramatically.

From an intersectional framework, current empirical studies of Black gay and bisexual men ignore that these individuals have multiple social identities that may influence their experiences. In studies measuring the effect of internalized stigma, often researchers focus on only one factor (i.e., internalized racism or internalized homophobia) ignoring the fact that individuals may conflate the experiences of one of these forms of stigma depending on how it is measured. For instance, in studies of internalized racism, measures that require participants to rate an experience of racism may not be able to accurately determine if the experience was based on racism or homophobia depending on the social context. Furthermore, when researchers measure both of these factors, measurement issues arise related to the interconnectedness of both experiences.

A major limitation to the current research being conducted to better understand the experiences of Black gay and bisexual men and factors related to HIV risk is that we have not fully examined phenomena, or connected different factors to HIV risk behavior. In studies of both internalized stigma and internalized racism, these studies have been conducted to understand how they affect psychological functioning. These studies have not investigated how psychological functioning influences condom use among Black gay and bisexual men. Several studies have been conducted with heterosexual couples to better comprehend how racial hierarchy influences partner selection; yet, currently no studies look at racial hierarchy among Black gay and bisexual men from an empirical standpoint. Any academic work addressing this issue has been conceptual or has analyzed anecdotal data. Furthermore, there have been no academic studies identifying how racial hierarchy influences sexual risk decision-making (i.e., CAS).

These limitations and gaps in the literature present several questions for future research. The first question prompted by the current state of research is how psychological functioning and internalized stigma influence condom use for Black gay and bisexual men. Another inquiry of importance is determining the relationship between racial hierarchy and sexual behavior for Black gay and bisexual men. From a methodological standpoint, it is important to think about intersectional concepts and how they can be applied to both qualitative and quantitative analysis of Black gay and bisexual men and CAS. In addition, social scientists have to think about sampling and how to adequately recruit a spectrum of Black gay and bisexual men, using multiple methods of recruitment. Conceptually, the question of how to measure internalized stigma to better capture the experiences of Black gay and bisexual men has to be

addressed. It is clear that addressing the problem of increased HIV infection rates among Black gay and bisexual men is complicated, requiring sophisticated analysis and diverse tools to garner a more comprehensive understanding of the multiple factors linked to Black gay and bisexual men and the risk factors contributing to increase HIV infection rates. Future research in the area of understanding how different factors influence Black gay and bisexual men has to be robust and holistic, framing the issues associated with HIV risk from multiple perspectives.

### **Research Question**

The current study seeks to examine the relationship between levels of internalized racism, levels of internalized homophobia, and willingness to engage in sex with partners of unknown HIV status for Black GBQSGM men. Additionally, based on findings that suggest willingness to take different risks based on characteristics of one's sexual partner (i.e., race and masculinity), the study seeks to examine whether characteristics of one's sexual partner moderate the relationship between internalized stigma and likelihood of engaging in sex with partners of unknown status. The research questions for this study are 1) does internalized racism and internalized homophobia increase the likelihood of having anal sex with a partner of unknown HIV status? 2) Does internalized racism and internalized homophobia increase the likelihood having CAS with a partner of unknown HIV status? and 3) Does the likelihood of having CAS with a partner of unknown HIV status vary depending on the racial identity and level of perceived masculinity?

### **Chapter Three: Theoretical Framework**

This chapter will provide an overview of three theories of importance in understanding how internalized racism and internalized homophobia may influence condom use among Black GBQSGM men in the United States – *cultural theory of risk perception, stigma theory, and intersectionality*. For each, there will be a brief description and history of the theory, how the theory has been applied, critiques of the theory, and how its related to the theoretical conceptualization of the dissertation.

#### **Cultural Theory of Risk Perception**

##### **Background**

In the study of risk perception there are two different mechanisms to explain how individuals determine the level of risk associated with their behavior: the psychometric paradigm of risk perception and the cultural theory of risk perception. The psychometric paradigm focuses on cognitive factors that influences individual perceptions of risk (Slovic, 1980). In the psychometric paradigm individuals base perception of risk on reasoning: dread risk and unknown risk (Fischhoff, 1978). Dread risk is conceptualized as the perceived lack of control over the risk, dread potential, and likelihood of fatality (Slovic, 1987). Unknown risk is related to knowledge. Unknown risks are based on the novelty of a risk, the severity of the risk, and the knowledge of the risk by the scientific community (Slovic, 1987). Anthropologists and sociologists were concerned with



classical psychometric paradigm's inability to address differences in risk perceptions based on cultural and ethnic differences. In response to this limitation of psychometric paradigm of risk perception, Douglas and Wildavsky (1982) developed the cultural theory of risk perception.

### **Constructs of Cultural Theory of Risk Perception**

Unlike classical psychometric paradigm of risk perception, cultural theory of risk perception is based on the understanding that the social environment influences how individuals perceive risk. Cultural theory states that the values, norms, and worldview of societies and cultural groups shape the individual perception and evaluation of potential risk (Douglas & Wildavsky, 1987). In cultural theory of risk perception, the underlying assumptions and biases of a society or cultural group influences the cognitive processes in analyzing risks. From this perspective, cultural biases have a greater control over individual perceptions of risk than do cognitive processes such as fear, dread, or controllability (Wildavsky & Drake, 1990).

Cultural theory of risk perception recognizes that the degree to which an individual adheres to the cultural biases of a society impacts the influence of the societal norms on the individual's perception of risk. The "grid-group" prototypical pattern depicts the level of social integration of an individual and how it influences risk perception (Douglas & Wildavsky, 1982). Grid refers to control. It denotes the degree of social control by external prescriptions on an individual (Thompson et al., 1990). Group refers to social commitment. The greater the social commitment of the individual the more individual choices are subject to group norms and the greater the social binding

(Thompson et al., 1990). In the grid-group typologies there are four distinct cultural groups: *individualistic*, *hierarchies*, *egalitarian*, and *fatalistic*. Depending on the strength of the cultural worldview of the individual, risk perception based on cultural norms is altered (Oltedal & Rumdmø, 2006).

An individual with an individualistic worldview has an emphasis on individual freedom and there is little social control or social commitment. Hierarchic individuals have high social commitment and experience high social control. These individuals support the societal norms and adopt socially acceptable risks. Egalitarian individuals have high social commitment and low social control. Individuals in this group have a high commitment to the society but believe it cannot be trusted and there is low social control. Fatalistic individuals have low social commitment and low social control. These individuals believe that risks are unavoidable and do not believe in the societal norms about which risks are acceptable by the cultural group. Individuals in this group tend to have individualistic approaches to risks. The grid-group typologies are outlined in Appendix 1.

On the individual level, people assess risk-taking based on several factors. When determining if one will take a risk the individual assesses the social meaning of the risk and their social position within the social environment (Lupton, 2013). The individual assesses their values and the values of the social environment in deferring risk-taking. The individual makes a judgment based on affective and aesthetic sensibilities, group membership, assumptions, and social norms (Binkley, 2009; Lash, 2000; Lupton, 2013; Tulloch & Lupton, 2003).

## **Application of Theory**

Studies using cultural theory of risk perception have mainly focused on examining the relationship between an individual's worldview and the acceptance of risk hazards (Xue, Hine, Loi, Thorsteinsson, & Phillips, 2014). Emphasizing a key construct of the theory – that individuals exhibit risk perceptions based on their preferred structure of social organization (Kahan, 2012) – these studies have largely investigated risk hazards related to the environment, technology, and large societal risk (Marris, Langford, & O'Riordan, 2008; Peters & Slovic, 1996; Sjoberg, 2003; Xue et al., 2014) to assess the validity of the constructs of worldviews, proposed by cultural theory of risk perception. For example, Carlisle & Smith (2005) investigated the relationship between cultural worldview and attitudes related to using nuclear energy in the United States. The results suggest that individuals with an egalitarianism worldview were more likely to be in favor of using nuclear energy compared to individuals with an individualism worldview (Carlisle & Smith, 2005). The results are congruent with the theorized worldviews.

The results of these studies confirm that worldview orientation is associated with risk perceptions among individuals. Across several studies, researchers found that individuals who scored high on the egalitarianism measure were more likely to allow for greater risk hazards (Xue et al., 2014). Those who fell into the hierarchism and individualism categories were less likely to allow for risk hazards and there was no relationship between individuals who were categorized into the fatalism category and risk hazards (Xue et al., 2014). The worldview typologies of cultural theory were significantly associated with perception of environmental risks. The typologies proposed by the theory

are congruent with the findings that suggest individualism and hierarchism individuals tend to perceive fewer risks because doing so would invite regulation in the case of individualism and potentially undermine the existing power structure of the social elite in the case of hierarchism (Xue et al., 2014). Furthermore, the posited egalitarianism typology tended to perceive more risk because of the suspicions that the underlying motives of the social elite seem to be a greater threat to society than the perceived environmental risks. (Xue, et al., 2014). These studies found that the fatalism typology was unrelated to environmental risk perception, which is consistent with the general indifference to societal and environmental issues associated with this typology in the theory (Dake, 1992).

While there is an existing body of literature that supports the relationship between cultural worldviews and risk perceptions, there are few studies that have examined how an individual's worldview translates into addressing public health issues (Nan & Madden, 2014). Previous studies have primarily observed the impact of message framing using gain versus loss approaches to changing health behavior (Dillard & Shen, 2005; Rains & Turner, 2007; Rothman et al., 2006). Employing cultural theory of risk perception, several studies have examined worldview typologies and the reaction to public health policies (e.g., mandated vaccinations) (Bednarczyk et al., 2012; Caskey et al., 2009; Kahan et al., 2010). In these studies, research found that people with hierarchical and individualistic worldviews perceived mandated Human Papillomavirus (HPV) vaccinations policies as less beneficial and riskier (Kahan et al., 2010) than the other typologies. Furthermore, findings suggest that the risks associated with the mandate

either intensified or were alleviated over time (Bednarczyk et al., 2012; Caskey et al., 2009). Therefore, as individuals gained more information about the mandate, their fears about the role of government in social policy were either alleviated or heightened. However, in both of these research areas, studies were not specifically focused on the role of cultural worldviews in the direct or indirect relationship on influencing health behavior at the individual level.

### **Theoretical Limitations**

Cultural theory of risk perception suggests that perceptions of risk are culturally bound and the assumption of risk are dependent upon the worldview of the individual that reflects their preferences about how society should be organized (Dake, 1992; Wildavsky & Dake, 1990). The theory provides an understanding that risk perception is not universal and varies within a society. It provides a framework for interpreting the differential response to risks and risk-taking behaviors that extends beyond individual cognition. While the theory provides contextual knowledge of risk perceptions, there are limitations to the scope of the theory in terms of perspective and application of the theory into practice.

Cultural theory of risk perception is rooted in the structural functionalist theoretical perspective. The framers of cultural theory were influenced by Durkheim's work (Tansey, 2004). The role of individual agency is an area of contention in cultural theory of risk perception. In the classical psychometric paradigm individuals are agency-centered and ability to determine risk is based on complex equations; however, in cultural theory there is a focus on social constraints to the individual's ability to determine risks.

In writing about cultural theory, Douglas (1992) states that institutions constrain the individuals' ability to determine risk by creating system of norms that have both benefits and rewards for working within the confounds of the values of the society and vice versa has consequences for working outside of the socially accepted conditions of a society.

Cultural theory of risk perception assesses the individual's perception of larger societal risks that are undertaken by individuals in power in relation to their worldview (Xue et al., 2014). The utility of the theory is that it can be used to understand the drivers of risk perceptions on a macro level and as seen in studies of messaging potentially influence individual level behavior (Nan & Madden, 2014); however, there is not existing literature that investigates the direction of the relationship between worldview and individual level risk-taking behavior (e.g., smoking, dangerous driving, sexual risk behavior, etc.). Based on the key construct of the theory, individual level risk is influenced by their perception of society and then level of integration into the status quo thus, depending on how the risk is labeled in a society an individual may be more or less likely to engage in the behavior. However, there has been limited empirical evidence that examines the direction of the relationship of individual behavior and cultural theory's risk perception worldview (e.g., is someone with a specific worldview more or less likely to engage in a particular risk behavior). Future research should emphasize individual-level risk behavior and the cultural worldview, examining the relationship between the individual and their cultural worldview orientation.

Another limitation of cultural theory is the superficial examination of culture. The definition of culture is conceptualized on the societal level, grouping everyone as part of

a society into a monolithic category, which ignores the cultural diversity and cultural stratification that occurs within a society. In addition, the theory and constructs were developed using Western cultural contexts, neglecting Asian, African, and South American societies and cultures (Xue et al., 2014). The issue of cross-cultural generalization represents a significant limitation for understanding cultural worldviews and risk perception outside a Western cultural context (Xue et al., 2014), and within Western society with complex cultural diversity. Future research should explore cultural diversity and cultural stratification within societies and examine the conceptualization of culture in non-Western societies.

## **Stigma Theory**

### **Goffman's Theory of Stigma**

Goffman (1963) theorized a conceptual link between the internal response of shame and embarrassment to the internal and external manifestation of social identities. He argues that individuals who experience embarrassment or shame based on their identities go through a process called stigmatization (Goffman, 1963). Stigma is an attribute that is deeply discrediting (Goffman, 1963). Often stigma is associated with stereotypes. Societies use stereotypes to create stigmatized identities and conversely, stereotype individuals based on stigmatized identities (Goffman, 1963). Because stigma is a mark of difference from the “normal” of a society, individuals who are stigmatized experience being deemed as less than a “normal” human. Individuals in a society treat stigmatized individuals as inferior (Goffman, 1963). Stigmatized identities have ramifications for individuals in society. Stigma often leads to stereotypes, prejudice,

discrimination, and social isolation (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Pescosolido, Martin, Lang, & Olafsdottir, 2008; Link & Phelan, 2001).

In stigma theory, individuals in interpersonal exchanges take on the role of actors. The stigmatized individual and the individual deemed normal by societal standards both play a role in reinforcing the stigmatization of a social identity. The individual with the stigmatized identity holds the same perception of stigmatized identities as the non-stigmatized individual (Goffman, 1963). Stigma theory suggests that individuals do not passively accept the stigma assigned to their social identity (Scheff, 2005). Stigmatized individuals try to control or avoid social situations that perpetuate stigmatization. Stigma management is the attempt by individuals with stigmatized identities to minimize the social cost of their social identities in interpersonal interactions (O'Brien, 2011). There are different strategies for an individual to manage their stigma; passing, disclosure, and disavowal. The interaction between individuals with "spoiled identities" and those without stigmatized identities is important for the development of self-esteem and the concept of self (Goffman, 1963; Link & Phelan, 2001; Major & O'Brien, 2005). The outcome of interpersonal interactions between individuals with stigmatized identities and those with non-stigmatized identities varies depending on the management strategy and the response from the person with the non-stigmatized identity.

### **Sexual Stigma & Homophobia**

Sexual stigma is an extension of Goffman's stigma theory that specifically addresses the unique social stigma LGBT individuals experience. Herek (2007) argues one way in which LGBT people experience stigma is through sexual stigma. The goal of



sexual stigma is to perpetuate the belief of inferiority of LGBT individuals through sexual prejudice (Herek, 2007). In this framework, sexual stigma is constructed on the structural level and then is circulated on the individual level. The emphasis of sexual stigma is the socially collective belief that non-heterosexual behavior, identity, relationships, and communities are devalued (Herek, 2007).

Herek (2007) conceptualizes three key manifestations of sexual stigma; enacted, felt, and internalized. Enacted stigma is overt anti-LGBT behavior including discrimination and violence against LGBT individuals or those perceived to be LGBT (Herek, 2007). At each level of sexual stigma there are effects on all members of society regardless of their sexual orientation. Sexual stigma results in negative attitudes about homosexuality and the societal acceptance of heterosexuality as the norm.

Enacted stigma affects everyone but is particularly problematic for the targets of the stigma. Enacted stigma significantly impacts the physical and mental health of the victims of the related crime (Herek, 2007). Although enacted stigma has the greatest effect on the victims of crime related to the stigmatized identity it also impacts non-stigmatized others because it reinforces the norms of a society (Herek, 2007).

Felt stigma is directly related to enacted stigma. Felt stigma is individual expectations of the likelihood that stigmatizing experiences will occur to them (Herek, 2007). As in stigma management, individuals try to avoid experiences that lead to being stigmatized. LGBT individuals are motivated by felt stigma to use various stigma management techniques to conceal their identities to avoid felt stigma (Herek, 1996).

Internalized homophobia is the result of both enacted and felt stigma. Internalized homophobia is the individual's acceptance of sexual stigma as part of his or her own values (Herek, 2007). Internalized homophobia directly affects the individual's value of their sexual orientation. This causes the individual to develop negative attitudes and feelings about their sexual orientation (Herek, 2007). For heterosexuals, internalized homophobia manifest itself as sexual prejudice, where their attitudes toward LGBT individuals is congruent with a stigmatizing response towards LGBT individual in interpersonal interactions (Herek, 2007).

### **Racial Stigma and Racism**

Racism is the unfair treatment or bias towards an individual or group based on their racial identity (Williams et al., 2010). Racism is founded on the assumptions that some biological racial categories are intrinsic, that the racial categories are related to the self-worth of different racial groups, and that some racial groups are naturally superior to other groups (Williams et al., 2010). Racism is linked to poor health outcomes for people of color who experience racism due to their marginalized racial identity. A meta-analysis of 138 empirical population-based studies found a strong relationship between experiencing racism and poor physical health (Paradies, 2006), while other studies show a similar pattern for both physical and mental health (Gee & Ford, 2011; Paradies, 2006; Williams et al., 2010).

Similar to other marginalized groups, racial minorities may internalize the stigma associated with experiencing racism. Internalized racism is the adopting of racist stereotypes, values, and ideologies that perceives racial minorities as inferior to White

dominant society (Pyke, 2010; Williams & Williams-Morris, 2000). Internalized racism leads to self-doubt, disgust, and disrespect because of one's race (Pyke, 2010).

Internalized racism occurs over time and is the result of hegemony. Through daily exposure to the erosion of racial minorities' culture, language, and history, and the imposition of White dominant culture, racial minorities begin to see themselves as inferior (Hardiman & Jackson, 1997).

As with other stigmatized identities, racial minorities try to minimize the dissonance of internalized racism by attempting to separate themselves from the negative stereotypes of their racial group. Individuals may try to become part of the dominant group and distance themselves from the minority group in an attempt to assimilate to the cultural norms of the dominant group (Pyke, 2010; Schwalbe et al., 2000). One way that individuals create a distinction between themselves and the others in their racial group is to create sub-ethnic groups. Racial minorities create a spectrum of individuals based on the level of assimilation to the dominant racial group norms (Gilman, 1986). Individuals who embrace the cultural norms of the dominant racial group mark themselves as superior within their racial group and classify those who embody the negative stereotypes of the dominant group as inferior. The action creates a way for individuals in racial minority groups to demonstrate their dislike for their racial group's cultural norms and assimilation of the dominant group's cultural norms as an attempt to join the dominant group (Pyke, 2010).

The negative effects of internalized racism have been studied since the 1930s. The impact of internalized racism includes poor self-esteem, self-identity, and self-image

(Bloom, 1972; Clark & Clark, 1939; Taylor & Grundy, 1996), poor mental and physical health (Chambers, Tull, Fraser, Mutuhu, Sobers & Nile, 2004), and psychological injury (Carter, 2007). Psychological injury is the feeling that one is worthless, unintelligent, and inferior due to one's race prior to experiencing racial incidents that cause distress. It is directly related to internalized racism because it is the shame of being shamed (Watts-Jones, 2002). Psychological injury maintains a self-perpetuating cycle of oppression because it prevents critical consciousness to eliminate one from seeing the destructive social context and acceptance of the dominant group's exploitation as the way things are (Freire, 1999).

### **Stigma and HIV**

As noted above, stigmatization due to racism and homophobia are associated with poor physical and mental health outcomes. In particular, research scholars have examined the relationship between stigma (i.e., internalized racism and internalized homophobia) and HIV risk behavior. Researchers suggest that stigma leads to mental health conditions such as depression and anxiety among gay men of color (Lelutiu-Weinberger et al., 2013; Mustanski et al., 2007; Mustanski et al., 2011; Parson et al., 2013). These conditions have been positively associated with HIV risk behavior such as CAS and drug use. In a study of Latino gay men, participants who perceived stigma associated with their ethnicity and sexual orientation were more likely to engage in CAS with casual sex partners (Díaz, Ayala, & Bein, 2004) and more likely to have sex while under the influence of substances (Bruce et al., 2008). Gay-related stress (i.e., internalized homophobia) has also been

found to be associated with likelihood of engaging in CAS for Black MSM (Jeffries et al., 2012).

### **Theoretical Limitations**

The classic definition of stigma proposed by Goffman (1963) has been used to understand the experiences of individuals with marginalized identities and has been the foundation for other theories that more precisely describe and conceptualize stigma (Phelan et al., 2014). The framework proposed by stigma theory was the basis for theories such as modified labeling theory (Link et al., 1989) and status characteristics theory (Berger, Fisek, Norman, & Zelditch, 1977). These theories were put forth to address some of the limitation of Goffman's original work on the concept of stigma (Link & Phelan, 2001; Phelan et al., 2014). The areas of the stigma theory that have been critiqued by scholars are the emphasis on the distinction between "normal" individuals and individuals who are stigmatized or "abnormal," (Link & Phelan, 2001), the social ordering schemas that cause interactions between stigmatized and non-stigmatized individuals to be disrupted (Goffman, 1963), and the concept of social rejection of stigmatized individuals in the society (Goffman, 1963).

Stigma theory suggests that there is sharp distinction between "normal" and "abnormal" people in society. Based on the work of Goffman (1963) society sees individuals who are stigmatized as deviant and "abnormal", those deserving of unfair treatment in society. However, this distinction may not be sharply demarcated. For instance, women occupy a lower status in our society; however, as a group they are not classified as abnormal which calls into question the notion that being stigmatized

necessarily makes an individual be perceived as abnormal. In the instance of racial minorities, normalcy is relative to level of marginalization in society (Phelan et al., 2014). Moreover, in the case of race, race has been typically classified as a status not a stigmatizing characteristic; however, all of the stigmatizing characteristics described appear to apply to racial minorities (Link & Phelan, 2001). Thus the concept of normalcy and its effect on stigmatization is vague and does not offer an understanding of how normalcy impacts the level of stigmatization an individual will experience in society.

In addition, stigma theory posits that because of the presence of stigmatizing characteristics the interactions between those who are stigmatized and those who are not stigmatized are disrupted (Goffman, 1963). Accordingly, this disruption causes discomfort and awkwardness because individuals are unclear about how to behave and what to expect in these situations. This notion is classically seen in situations where individuals of mixed statuses interact for the first time. The limitation of stigma theory is that it does not identify the resolution of these social schemas. As society evolves and individuals of both stigmatized and non-stigmatized statuses interact with each other, psychologically, these individuals may develop new schemas for encountering one another, however it does not change the social status of the stigmatized groups or communities (Ridgeway, 2006).

Finally, Goffman (1963) suggests that due to the social order schema, individuals (both stigmatized and non-stigmatized) will seek to create social distance. However, similar to the principle of social ordering schema, a criticism of this concept is that as society becomes more integrated, individuals are less able to create social distance. In

addition, regardless of the concepts of social ordering schema and social distance, individuals who are labeled as stigmatized are unlikely to experience a change in their social status (i.e., move from a marginalized or stigmatized group), even though there may be a change in the social ordering schema or level of social distance between stigmatized groups and non-stigmatized groups (Phelan et al., 2014).

While these critiques of stigma theory have been noted, the importance of the theory is not diminished. The central concept of the theory argues that individuals in society may experience stigma which is an attribute that is deeply discrediting, and that stigmatized individuals experience status loss and social rejection continues to be a relevant theoretical construction in the understanding of the hierarchical landscape of society (Phelan et al., 2014). Moreover, research demonstrates that stigma does occur based on social position (Cohen & Roper, 1972, Lucas & Phelan, 2012; Ridgeway & Erickson, 2000) and that stigma is linked to poor health outcomes (Dickerson & Kemeny, 2004; Gesquiere et al., 2011; Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010). In relationship to gay and bisexual men, stigma theory, in particular sexual stigma has been associated with increased risk for HIV infection via risky sexual behavior (Díaz, Ayala, & Bein, 2004; Earnshaw, Bogart, Dovidio, & Williams, 2015; Han, Ayala, Paul, Boylan, Gregorich, & Choi, 2015; Valdiserri, 2002).

### **Intersectionality**

This dissertation was grounded in intersectionality and the conceptual framework of the study is grounded in the tenants of intersectionality. The central tenant of intersectionality is that social identities are not independent but they are interdependent

and collective (Bowleg, 2013; Collins, 1991; Crenshaw, 1989; Davis, 2008). Each social identity an individual possesses carries varying degrees of power and privilege in the social environment. Intersectionality emphasizes how multiple social identities reflect collective macro-level social inequalities (Bowleg, 2013; Collins, 1991; Crenshaw, 1989). According to the theory, there is an additive component to the experience of oppression related to the multiple marginalized identities and that these levels of inequality are interconnected and cannot be separated (Baca Zinn & Dill, 1996; Bowleg, 2013; Collins, 1993, 2000; King, 1988). Black GBQSGM men experience the social environment as racialized individuals and as individuals who are considered a sexual minority by the larger society. This basic idea is important because it sets the foundation for understanding how the identity of Black GBQSGM men may influence their behavioral decisions.

### **Theoretical Framework**

Combining the principles and concepts of both stigma theory and cultural theory of risk perception, I propose that Black GBQSGM men experience stigma based on both their racial identity and sexual orientation. In turn, the effects of the stigma may lead them to engage in higher risk behavior (i.e., CAS and sex with a partner of unknown HIV status). Based on the social cues about stigma and risk perception, the relationship between stigma and CAS may change based on the social identities of one's sexual partners. Thus, Black GBQSGM men may be willing to take different sexual risk with their sexual partners based on their social identities (i.e., racial identity and perception of



their partner's gender expression). The theoretical frameworks and how they are applied to the hypothesis of the study are illustrated in Figure 1.

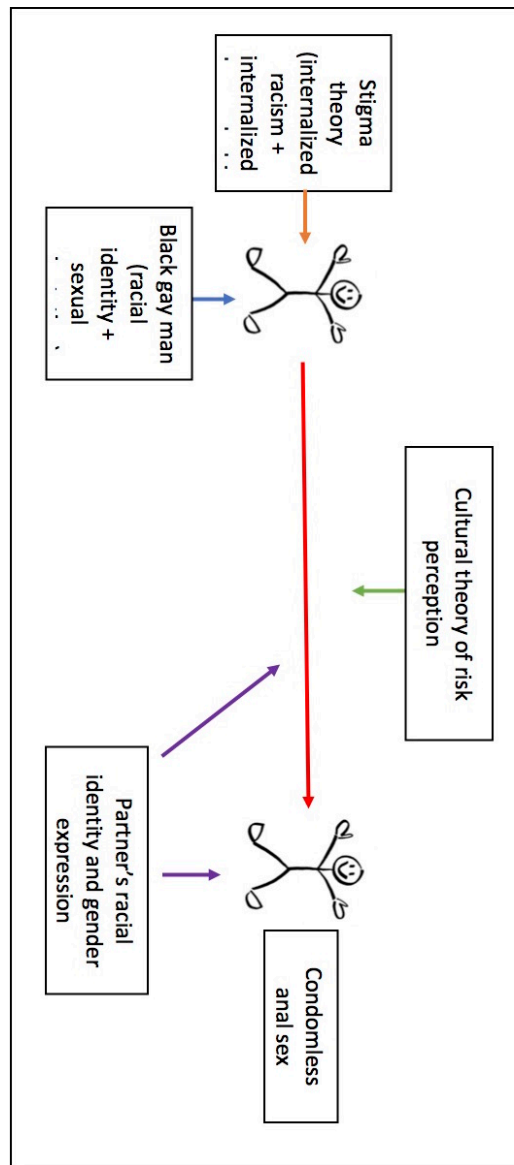


Figure 2: Theoretical Framework for Condomless Anal Sex among Black GBQSG men

## **Chapter Four: Method**

This chapter describes the methods used in the research study. The purpose of this study was to examine the relationship between levels of internalized racism, levels of internalized homophobia, and willingness to engage in sex with partners of unknown HIV status for Black GBQSGM men, as well as CAS. Additionally, based on findings that suggest willingness to take different risks based on characteristics of one's sexual partner (i.e., race, masculinity, and sexual identity), the study examined whether characteristics of one's sexual partner moderate the relationship between internalized stigma and likelihood of engaging in sex with partners of unknown status.

### **Research Questions**

The study utilized an anonymous, Internet-based, self-report survey administered to Black GBQSGM men to determine if there was a relationship between internalized racism, internalized homophobia, and CAS with partners of unknown HIV status to answer the following three questions:

- Does internalized racism and internalized homophobia increase the likelihood of having CAS?
- Does internalized racism and internalized homophobia increase the likelihood of having CAS with a partner of unknown HIV status?

- Does the likelihood of having CAS with a partner of unknown HIV status vary depending on the perceived racial identity and the level of perceived masculinity of one's sexual partner?

## **Research Design**

When considering the type of research methodology to use for a study, the researcher considers the research question and matches the study design to the problem being explored. The quantitative approach is preferable when the researchers aim to test a specific hypothesis, the relationship between multiple factors, and the research is largely causal and deductive (Neuman, 2004, 2011). For this study, a quantitative methodological approach was utilized to study the effects of internalized racism and internalized homophobia on CAS with partners of unknown HIV status among Black GBQSGM men. The variables of interest were explored using an Internet-based survey design. A survey design is used when the researcher wants to obtain a description of behavior, attitudes, opinions, characteristics, expectations, and knowledge of a population based upon a sample of the population (Fowler, 2009; Neuman, 2011). Internet-based surveys offered the advantages of being cost-effective, efficient, and easy to replicate (Neuman, 2011), and greater confidentiality (Rea & Parker, 2005; Fricker & Schonlau, 2002). Internet-based surveys may be preferable when conducting research on a sensitive topic because it offers a sense of social distance that allows the respondent to be more honest and self-disclosing (Daley, McDermott, Brown, & Kittleson, 2003). An Internet-based survey approach was selected because of the benefits it offered in collecting data from a large sample of the population across a large geographical area and the

participants in study (i.e., ease of accessing a large sample, cost-effective, anonymity of participation).

Although there are advantages to an Internet-based survey design, there are also disadvantages. Using an Internet-based survey design may introduce sampling bias, because the sample is limited to individuals who access the Internet, who are computer literate, and are members of the specific Internet community being targeted by the survey (Daley et al., 2003; Granello & Wheaton, 2004; Fricker & Schonlau, 2002).

Furthermore, Internet-based surveys have a high attrition rate (Neuman, 2011; Solomon, 2001).

Given the population targeted for the research study, the advantages of using an Internet-based survey outweighed the disadvantages. Participant anonymity was a priority for the study because the collected data included information about the sexual behavior of a highly stigmatized population. In addition, Black GBQSGL are a population that is hard to access through traditional research methods due to the social stigma they experience in society, therefore, an Internet-based approach allowed for greater access to the population.

### **Pilot Testing**

Before data collection began, the survey was pilot tested to obtain feedback about the clarity and sensitivity of the questionnaire. Twenty experienced researchers and members of the study population provided feedback on the study procedures. Persons who assisted with beta testing were prohibited from participating in the actual study. The feedback from beta testing was used to revise and refine the language of the

questionnaire, change the order of the questions, and ensure the survey logic was correct prior to implementation. Members of the Emory Center for AIDS Research (CFAR) provided their expertise in conducting studies with the population in advising about the study implementation in order to maximize exposure to the study population.

### **Participants**

Participants in the study were 446 Black GBQSGM men over the age of 18 years. The sampling frame for study included individuals who identified as Black, identified as GBQSGM, who had engaged in oral or anal sex with another male in the previous 12 months, and resided in the United States.

### **Recruitment**

A multi-phase recruitment process was utilized to increase the likelihood of capturing a diverse population of Black GBQSGM men. The recruitment strategy included working with community partners in Denver, Chicago, New York, Dallas, Atlanta, and Washington DC. These community partners were established by soliciting HIV/AIDS community-based organizations, general LGBTQ community-based organizations that engage in HIV prevention and care services with Black GBQSGM men, and community-based organizations who specifically provide HIV prevention and care services to Black GBQSGM men. After establishing rapport with each organization, a memorandum of understanding was created between the researcher and the organizations. Each community partner committed staff support to recruit for the study in exchange for the research expertise, recruitment materials, and financial resources to assist with recruitment. The community partners for the study included It Takes a Village Inc.,

(Denver, CO), Denver Colorado AIDS Project, Brothers Health Collective (Chicago, IL), Gay Men of African Descent (New York, NY), Abounding Prosperity Inc. (Dallas, TX), Emory University, and Us Helping Us Inc. (Washington, DC).

During the face-to-face recruitment process, organizations posted flyers at their organization, handed out palm-sized recruitment materials during outreach to the community, and posted advertisements on their websites and social media outlets connected to their organization to recruit participants. Upon interacting with potential research participants, the individuals were given information about the study and instructions on how to access the Internet-based survey.

In addition to face-to-face recruitment, virtual recruitment was conducted using Internet-based social networking sites and geosocial network apps. Internet-based website recruitment took place using Facebook. Facebook recruitment ads ran from July 31, 2015 to December 31, 2015. Facebook ads were placed on both the Internet and mobile application site, targeting Black men over the age of 18 in the United States. Keywords associated with Black gay men were used to increase likelihood of reaching the study sampling frame (i.e., bisexual, gay pride, lesbian community, LGBT history, pride parade, homosexuality, LGBT culture, Gay Times, LGBT community, gay news, Human Rights Campaign, same-sex marriage in the United States, gay bar, same-sex marriage, same-sex relationships).

In addition, the geosocial network application Grindr was used to recruit men for the study: 1.5 million impressions of Grindr banner ads were broadcast and 6 direct message blasts were sent to users who identified as Black/African American in several

US markets (i.e., Atlanta, Austin, Houston, Dallas, New Orleans, Los Angeles, Chicago, Baltimore, Boston, Nashville, Memphis, San Francisco, Ft. Lauderdale, Charlotte, and Washington DC.) Grindr ads ran from October 1, 2015 to October 31, 2015 and from December 1, 2015 to December 31, 2015.

The enrollment and data collection period for the study was between June 16, 2015 and December 31, 2015. Between the face-to-face, Internet, and geosocial network recruitment, 1558 individuals were recruited for the study, with 611 individuals being dropped due to ineligibility (due to either, race, sexual orientation, or most recent sexual experiences) and 511 self-withdrawing or not completing the study. The final sample size for the study was 446 individuals.

### **Internet-based Data Collection Platform**

SurveyGizmo is a secure, web-based tool that provides an easy-to-use interface for accurate data collection, storage, and exportation into a statistical software package. SurveyGizmo servers are securely housed with a third party Tier 1 data center service provider which is in a secure production environment that uses a firewall and other technology to reasonably prevent access from outside intruders. The servers and operators meet HIPPA compliance. Further, Emory University has a HIPPA Business Associate Agreement with SurveyGizmo. All data were transmitted encrypted and access to the data is restricted to authorized personnel who have individual user ids and passwords that allow access to only designated projects. The data management system is overseen by Emory University and the Center for AIDS Research. The proposed study was overseen and approved by the IRB at the University of Denver.

## **Informed Consent**

The informed consent form provided participants with a brief description of the study, a description of the procedures, a discussion of confidentiality, a discussion of the risk and the ethical considerations involved with participation in the study, a description of the safeguard measures to protect their information, and contact information for the principal investigator. The researcher received a waiver for documentation of informed consent to ensure that the study was anonymous for research participants. The informed consent was the first page of the Internet-based survey. An affirmative response of YES was required to continue to the subsequent screening questionnaire that ensured only individuals who fit the inclusion criteria were participants in the study. If a respondent answered NO, they were taken to the final page of the study, and thanked for their time. Individuals who wished to pause the study and resume later were asked for an email address that was not stored by either the researcher or the survey platform, in order to continue at another date. Individuals were prompted to print a copy the informed consent form should they wish.

## **Measures**

Descriptive information for measures, including internal consistency reliability estimates when appropriate and available, is provided in Table 1.

### **Control Variables**

The study included several control variables to isolate the effects of demographic factors and the effects of social desirability on the outcome variable of CAS with a



partner of unknown HIV status. These demographic variables included age, income, educational level, employment status, and relationship status.

### ***Demographic Variables***

Age is a continuous variable and was captured in an open-ended response (i.e., *What is your current age?*). Sexual orientation is a categorical variable that asked participants to indicate their sexual orientation (i.e., *Do you consider yourself [heterosexual, gay, same-gender-loving, bisexual, queer, or other]?*). Income is a categorical variable that asked participants to indicate their income bracket (i.e., *What is your household income [0 –\$5,000; \$5,000 - \$10,000; \$10,000 - \$20,000; \$20,000 - \$30,000; \$30,000 - \$40,000; \$40,000 - \$50,000; \$50,000 - \$75,000; \$75,000 or more]?*). Education is assessed with a categorical question: *What is the highest level of education you have completed (i.e., never attended school; less than high school; high school diploma or GED; some college, associates degree, vocational/technical college; college graduate; or post graduate degree)?* Relationship status is assessed with a categorical question: *What is your current relationship status (i.e., single, casually dating, in a monogamous relationship, in an open relationship, married, or divorced?)*.

### ***Social Desirability***

The Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1988) is an inventory designed to measure two constructs (i.e., self-deceptive positivity and impression management) related to social desirability in answering questionnaires. The 40-item instrument is divided into two subscales (i.e., self-deceptive positivity subscale, and impression management subscale) with 20 items that measure each construct. The

higher the scores on the subscales, the more biased the respondents' responses. The internal consistency for the total measure is  $\alpha = .83$ , the internal consistency for the self-deceptive positivity subscale ranges from  $.68 \leq \alpha \leq .80$ , and the internal consistency for the impression management subscale during psychometric testing during the development of the scale was ranges from  $.75 \leq \alpha \leq .86$  (Li & Li, 2008).

### **Internalized Homophobia**

Internalized homophobia was operationalized as internalization of negative attitudes and beliefs gay men have about their sexual orientation identity which stems from the dominant society. Two scales were used to assess the level of internalization of negative attitudes and beliefs about one's sexual orientation by gay men; the Internalized Homophobia Scale (IHS) and the Reaction to Homosexuality Scale (RHS). The IHS is a 20-item scale designed to measure the degree of internalization of negative attitudes and beliefs about homosexuality in gay, lesbian, and bisexual individuals (Wagner, Brondolo, & Rabkin, 1996; Wagner, Serafini, Rabkin, Remien, & Williams, 1994). Each item uses a Likert response scale ranging from 1= strongly disagree to 5 = strongly agree for each statement. The higher the score on the IHS, the more internalized negative views participants have about their sexual orientation. The internal consistency of the scale is  $\alpha = .92$  (Wagner, Serafini, Rabkin, Remien, & Williams, 1994).

The RHS is a 26-item that measures the covert negative attitudes that gay men internalize from society about their sexual orientation which were operationalized as internalized homophobia (Ross & Rosser, 1996). The 7-point rating scale ranges from 1= strongly disagree to 7 = strongly agree. The scale was revised and shortened to 7-items

using the same scoring mechanism that related to three factors; personal comfort with a gay identity, social comfort with gay men, and public identification as gay (Ross & Rosser, 1996). A higher score on the RHS indicates less internalized negative attitudes and beliefs the participants have about their sexual orientation. The internal consistency of the three factors is  $\alpha = .73$  (Smolenski, Diamond, Ross, & Rosser, 2010).

### **Internalized Racism**

Internalized racism was operationalized as the internalization of negative attitudes and beliefs Black men have about their racial identity. Two scales were used to assess the internalization of negative attitudes and beliefs about one's racial identity by Black men: The Natanolization Scale (NAD) and the Internalized Racial Oppression Scale (IROS). The NAD is a 49-item scale designed to measure the extent to which Blacks internalized negative and positive stereotypes about African Americans (Taylor & Grundy, 1996). The scale has two subscales that measure racist items and social items. The scale uses a 9-point rating scale ranging from 0 = not-at-all-agree to 8 = entirely agree. There are also two subscales that can be computed: The Racist subscale and the Social subscale. The Racist subscale measures attitudes and behaviors that suggest that African Americans are inferior. The Social subscale measures attitudes or behaviors that suggest that African Americans are interpersonally different from other groups. Higher scores on the NAD reflect higher levels of internalized racism in participants. The internal consistency of the scale is  $\alpha = 0.81$  (Cokley, 2005).

The IROS is a 28-item survey designed to measure the level of internalized racial oppression among Black individuals based on thoughts, beliefs, and behaviors that

contribute to the negative portrayal of Black individuals in society (Bailey, Chung, Williams, Singh, & Terrell, 2011). The measure uses a 5-point Likert response scale ranging from 1 = strongly disagree to 5 = strongly agree. The scale has four subscales; belief in the biased representation of history (BRH), alteration of physical appearance (APA), internalization of negative stereotypes (INS), and, hair change (HC). Higher scores on the scale indicate higher degrees of internalized racial oppression. The internal consistency of the total measure is  $\alpha = .87$ . The internal consistency of the subscales ranges during psychometric testing during the development of the scale was from  $.69 \leq \alpha \leq .81$  (Bailey et al., 2011).

### **Moderating Variables**

#### ***Partner Characteristics***

Partner characteristics are operationalized as two independent variables: perceived partner's racial identity and perceived level of masculinity in one's partner. These variables are expressed in two questions that ask participants to categorically classify their last partner's perceived racial identity (i.e., *White, Black, Asian, Hispanic/Latino, Native American, or Multiracial*) and then assess the perceived level of masculinity on a continuous scale for masculine identity. These variables will be treated as potential moderating variables in data analysis.

### **Outcome Variable**

#### ***CAS and HIV Status of Last Sexual Partner***

The dependent variable is CAS with a partner of unknown HIV status. The variable is expressed in the following categorical questions: *During the last time you had*

*anal sex with your partner when you were the insertive partner “top” did you use a condom (did not use a condom/ used a condom part of the time/ used a condom the whole time/ used a condom but it broke)? During the last time you had anal sex with your partner when you were the receptive partner “bottom” did you use a condom (did not use a condom/ used a condom part of the time/ used a condom the whole time/ used a condom but it broke)? Did you and your sexual partner share both of your HIV statuses before you had sex (yes/no/don’t know)?* For analysis, the outcome variables were dichotomized into yes/no categories. More information about the coding of variables is provided in Chapter 5.

### ***Interactions***

Based on the theoretical model of the study, it is hypothesized that there will be interaction effects of the independent variables and moderating variables (i.e., partner characteristics). These interactions include the interactions of internalized racism x partner racial identity, internalized racism x partner perceived level of masculinity, internalized homophobia x partner racial identity, and internalized homophobia x partner perceived level of masculinity.

The original survey included two measures of social identity; the *Multidimensional Inventory of Black Identity (MIBI)* (Sellers, Rowley, Chavous, Shelton, & Smith, 1997) which measures Black racial identity and the *Gay Identity Questionnaire (GIQ)* (Brady, 1983; Brady & Busse, 1994) which measures gay sexual orientation in males. The MIBI describes the significance of racial identity for African Americans on the individual level and the social interpretations of Black identity. The 56-item inventory

is comprised of three scales that measure the concepts of the multidimensional model and seven subscales.

The GIQ is a questionnaire used to determine which stage of sexual orientation development gay, lesbian, and bisexual individuals are in using the Cass Model of Homosexual Identity Formation (Cass, 1979). The 45-item instrument is designed to measure each of the six stages of identity development according to Cass with six subscales that include seven items each. However, to reduce attrition and respondent burden, the two measures were removed from the final study questionnaire.

Table 1: Variable Descriptions and Reliability Coefficients

Variable	Definition	Descriptive <sup>a</sup> Skewness, Kurtosis, $\alpha$		
<b>Demographic Characteristics</b>				
Age	Chronological age measured continuous	.64	-.48	
Sexual orientation	Measure of sexual orientation			Categorical
Relationship Status	Measure of current relationship status			Categorical
Education	Measure of educational level			Categorical
Employment	Measure of employment status			Categorical
Income	Measure of income level			Categorical
<b>Social Desirability <sup>b</sup></b>				
BIDR	Measure of respondent bias	.92	3.66	.63
<b>Internalized Homophobia <sup>b</sup></b>				
Internalized Homophobia Scale	Measure of internalized homophobia among lesbian and gay people	.23	.37	.22
Reaction to Homosexuality Scale	Measure of internalized homophobia among gay men	-.93	.90	.59
<b>Internalized Racism <sup>b</sup></b>				
Nadanolitization Scale	Measure of internalized racism among African Americans	.36	-.05	.89
Internalized Racial Oppression Scale	Measure of internalized racism among Black people	.72	.42	.81
<b>Partner Characteristics</b>				
Partner's Racial Identity	Racial identity of most recent sexual partner			Categorical
Partner Gender Expression	Perceived level of partner's masculinity	.70	.11	
<b>Outcome Variable</b>				
Condomless Anal Sex	Condom use during most recent engagement of anal intercourse			Categorical
Condomless Anal Sex with partner of unknown Status	Condom use during anal intercourse with partner whom HIV status is unknown			Categorical

<sup>a</sup> Means and standard deviations is provided in Chapter 5

<sup>b</sup> The composite mean score is used in the analysis

## **Risk**

There was potential risk of emotional discomfort from answering questions about stigma and sexual behavior. The emotional discomfort experienced in the study is not out of the ordinary for Black gay men as they face experiences of racism and homophobia in their everyday life. The potential discomfort was temporary as the questions were designed to be minimally invasive. In an effort to address any prolonged discomfort, the researcher provided resources for follow-up should participants request information regarding feeling discomfort. In addition, at the bottom of the survey, the National AIDSInfo Hotline (is a federal resource that provides information about HIV national and resources to local services) telephone number and website was embedded. The principal investigator in the study was an MSW and can assess symptoms of psychological distress and refer to additional services to address the distress from the answering survey questions. Should a respondent have contacted the principal investigator with emotional distress, the principal investigator assisted with resolving the distress. This did not occur. The data were kept on a password-protected computer and storage device using special software that encrypts the information so that no one can read it. The study was approved by the University of Denver's Institutional Review Board prior to the start of the study.

## **Data Analysis**

After the data were collected, they were coded and entered into SPSS for Windows version 23 and STATA version 13. Descriptive statistical analysis was conducted on the demographic variables. For each of the validated measures (i.e., *Nadanolitization Scale*, *Internalized Homophobia Scale*, *Masculine Role Inventory*) a



confirmatory factor analysis (CFA) was conducted to ensure the structure of these measures when being used with Black GBQSGM men. Following the CFA, binomial logistic regression models were conducted to test the research questions. The analytic plan for the study is outlined in Table 2.

### **Confirmatory Factor Analysis**

Prior to conducting a CFA on each scale, the assumptions for running a CFA were checked to ensure the results of the CFA were likely to be correct. The assumptions of CFA are normality, linearity, independence, homoscedasticity, and lack of multicollinearity (Garson, 2013). Mahalanobis distance for each case was computed to determine if there were multivariate outliers. Mahalanobis distance revealed five multivariate outliers in the sample. These cases were excluded from analysis. A scatterplot was used to determine if there was a relationship between any of the independent variables to test linearity. The scatterplot revealed that the relationship between the independent variables were not linear, therefore the assumption of linearity was violated. In case of violations of linearity, it is recommended that a transformation of the data occurs, however the analysis may be performed (Tabachnick & Fidell, 2013). Since factors are linear functions of measured variables, homoscedasticity of the relationship was assumed. Finally, multicollinearity was assessed using a tolerance test, the variance inflation factor test in SPSS. The assumption of lack of multicollinearity was met.

Following testing the assumptions of CFA, confirmatory analysis was conducted with each of the scales using STATA version 13. Chi-square fit, root mean square error

of approximation (RMSEA), and goodness of fit index (GFI) fit indices was evaluated to determine the fit of each model for the scales in the study.

### **Binomial Logistic Regression**

Before conducting the six regression models and identifying the best fitting model, the assumptions of binomial logistic regression were tested to ensure each assumption was met. The assumptions of binomial logistic regression are that the dependent variable is dichotomous; that there are one or more independent variables, independence of observations, and the relationship between any continuous independent variables and the logit transformation of the dependent variable is linear (Menard, 2002). Evaluating the data to ensure the dependent variable is dichotomous, included more than one independent variable and that the observations were collected from independent individuals were conducted to check the first three assumptions. For the fourth assumption of binomial logistic regression, the assumption of the linear relationship between the independent variable and the logit transformation of the dependent variable was tested at met using a linear regression between the independent variable and logit transformation of the dependent variable.

After assessment of the assumptions of binomial logistic regressions, eight binominal logistic regression models were tested to answer the research questions. The first two models examined the relationship between the control variables (i.e., demographic characteristics) and anal sex with a partner of unknown HIV status. The next two models examined the relationship between the control variables (i.e., demographic characteristics) and CAS with a partner of unknown HIV status. The next

two models were used to test the relationship of the independent variables (i.e., internalized racism and internalized homophobia), the direct effects of partner characteristics (i.e., partner’s racial identity, partner’s sexual orientation, and perceived level of masculinity for partner), and CAS with a partner of unknown HIV status while controlling for demographic characteristics. The final set of models tested the relationship between the independent variables (i.e., internalized racism and internalized homophobia), the interaction effects of partner characteristics, and CAS with a partner of unknown HIV status, controlling for demographic characteristics.

<b>Variable</b>	<b>Research Question</b>	<b>Analytic Method</b>
Demographic characteristics	Q1, Q2, Q3	Descriptive analysis Binominal logistic regression
Social desirability	Q1, Q2, Q3	Confirmatory factor analysis Binominal logistic regression
Internalized homophobia	Q1, Q2, Q3	Confirmatory factor analysis Binominal logistic regression
Internalized racism	Q1, Q2, Q3	Confirmatory factor analysis Binominal logistic regression
Partner characteristics	Q3	Binomial logistic regression

*Table 2: Variables and Analytic Method*

*Outcome variable: Q1 is CAS, Q2 and Q3 is CAS with partner of unknown HIV status.*

## **Summary**

Chapter 4 provides a description of the methodology that was used to conduct the study, including specific information on Internet-based survey design, the research question, the sampling procedure, data collection, and analytic approach. The Internet-based survey questionnaire was used to 1) examine the relationship between internalized racism among Black GBQSGM men and CAS with partners of unknown HIV status; 2) examine the relationship between internalized homophobia among Black GBQSGM men

and CAS with partners of unknown HIV status; and 3) examining the moderating effect of the social characteristics of the sexual partners of Black GBQSGM men (i.e., racial identity, level of perceived masculinity and the sexual orientation of one's sexual partner) on the relationship between internalized stigma and CAS with partners of unknown HIV status among Black GBQSGM men. This chapter detailed the survey questionnaire that was used, how the researcher recruited study participants, and how the data were collected and analyzed.

## **Chapter Five: Results**

### **Introduction**

This chapter presents the results of the descriptive analyses (which includes data screening); confirmatory factor analyses of the scales used to assess internalized homophobia and internalized racism; and binominal logistic regression analyses used to assess the extent of the relationship between a) internalized homophobia, internalized racism, and CAS among Black GBQSGM men, b) internalized homophobia, internalized racism, and CAS among Black GBQSGM men with a partner of unknown HIV status, and c) the potential moderating effect of participants' sexual partners' racial identity and the perceived level of masculine gender expression on the relationship between internalized homophobia, internalized racism, and CAS among Black GBQSGM men with partners of unknown HIV status.

### **Data Cleaning**

Initially, all of the items were retained after examining values (mean, standard deviation, skewness, and kurtosis) generated through descriptive statistics. The statistics indicated that, within the sample, there was adequate variability in the responses to each item. Missingness was assessed. Nine cases had missingness on all of the control variables and several of the composite scale scores. These cases were dropped from the analysis. Further, as discussed in Chapter 4, Mahalanbois distance revealed five

multivariate outliers in the sample on the independent variables of interest and these cases were excluded from analysis. A total of 14 (3.14%) cases were dropped from analysis, leaving a total sample of 432 participants for analyses.

Across the independent variables, 12% of the data were missing. In this case, mean composite scores were calculated with a 75% cut-point for each of the independent variables due to the level of missingness across each scale. That is, participants had to have completed at least 75% of the items on a composite scale to receive a scale score. Computing a mean composite score for scale level data is the preferred method of addressing missing data when the interest is calculating a score to determine the level of a psychological indicator (Bono, Ried, Kimberlin, & Vogel, 2007; Downey & King, 1998; Gottschall, West, & Ender, 2012).

### **Dummy Coding**

For the binomial logistic regression analyses, some categories of variables were combined when there were small number of cases in the category to insure adequate statistical power (Tabachnick & Fidell, 2013). For sexual orientation, individuals who indicated their sexual orientation as *bisexual* or *queer* were grouped together into one group. These individuals were grouped together to increase power and there was no statistical difference between the two groups on the dependent variable. Similarly, for relationship status, participants who reported their relationship status as *single*, *casually dating*, or *divorced* were collapsed into one group. Individuals who reported their relationship status as *married* or *in a monogamous relationship* were paired together. In the case of relationship status, individuals were grouped together based on literature that

suggest that individuals who are not in a monogamous relationship or who are married have a similar HIV risk profile (Calsyn, Campbell, Tross, Hatch-Mailette, 2011; Mitchell, Harvey, Champeau, & Seal, 2012; Senn, Carey, Venable, Coury-Doniger, & Urban, 2009). Lastly for the demographic control variables, under employment status, individuals who indicated their employment as a *student, a homemaker, unable to work due to a disability, or unemployed* were combined into a single unemployed category. While the number of individuals who indicated their employment status as retired were also small, they were statistically different from the other groups on the multivariate level, therefore combining them with the other groups under unemployed was not acceptable.

In assessing drug use, a potential risk behavior for HIV, participants were asked the dichotomous categorical question “*In the past 30 days, did you use any of the following drugs during, immediately before, or after having oral or anal sex?*” The responses options were *yes/no*. The dichotomous categorical covariate drug use was computed by coding participants who responded yes to any of the list of drugs (i.e., *marijuana, crack, cocaine, heroin, methamphetamine, GHB, ecstasy, poppers, ketamine, and prescription drugs*) into the *yes* category and for participants who indicated no on the entire list of drugs coding them into the *no* category.

For the categorical dependent variable of engaging in CAS, two categorical variables were combined into one dichotomous categorical variable. Participants were asked, “*During the last time you had sex with your most recent sexual partner, when you were the insertive partner “top” did you use a condom?*” The response choices were: *did*

*not use a condom, used a condom part of the time, used a condom the whole time, and used a condom but it broke.* The variable was dichotomized into *yes/no* responses by grouping *did not use a condom, used a condom part of the time, and used a condom but it broke* into a “*no*” response and *used a condom the whole time* into a “*yes*” response. Similarly, participants were asked, “*During the last time you had sex with your most recent sexual partner, when you were the receptive partner “bottom” did you use a condom?*” Participants were given the same response options as the previous question and it was dichotomized into the same categories as the previous category. The rationale for this dichotomous variable is the outcome variable of interest is condom use as a representation of risk for HIV infection, thus not using a condom or part time condom use including using a condom that broke, is associated with greater risk of HIV infection.

After dichotomizing each variable, individuals who only engaged in either receptive or insertive anal sex were coded according to their response on either variable. Individuals who responded *yes* to both questions about were coded into the *yes* category of using a condom for anal sex. Individuals who responded *no* to both questions were coded into the *no* category for using a condom for anal sex. Individuals who had both anal sex as a receptive and insertive partner, and responded *yes* to one question and *no* to the other question were coded as *no* to using a condom for anal sex.

### **Descriptive Analyses**

The majority (74.8%) of participants in the study identified as gay, indicated their relationship status as single (61.6%), were employed full-time (67.4%), and reported having at least some college education (>90%). The median household income for the



participants was between \$30,000 to \$39,999 annually. The mean age for the sample was 35.68 years old with a standard deviation of 11.3. A majority of participants (61.1%) reported their HIV status as negative and knew the HIV status of their most recent sexual partner (64.4%). A majority (78.5%) of participants had oral or anal sex with a man in the last 30 days and of that number, 27.3% used a condom while having anal sex. In addition, of those who reported oral or anal sex in the last 30 days, 42.6% reported abstaining from drug use before, during, or immediately after having oral or anal sex. The demographic and risk factor characteristics of the sample are reported in Table 3.

*Table 3: Sample Demographics and Risk Characteristics*

<b>Characteristics (N = 432)</b>	<b>N of M</b>	<b>%</b>	<b>(SD)</b>
<b>Sexual Orientation</b>			
Gay	323	74.8	
Same-gender-loving	48	11.1	
Bisexual	57	13.2	
Queer	4	.9	
<b>Relationship Status</b>			
Single	266	61.6	
Dating	45	10.4	
Monogamous relationship	67	15.5	
Open relationship	27	6.3	
Married	21	4.9	
Divorced	2	.5	
Unknown relationship status	4	.9	
<b>Employment Status</b>			
Full-time job	291	67.4	
Part-time job	33	7.6	
Student	25	5.8	
Homemaker	4	.9	
Retired	18	4.2	
Unable to work due to a disability	22	5.1	
Unemployed	37	8.6	
Unknown employment status	2	.5	
<b>Education</b>			

Less than 12 years	3	.7	
High school or GED	30	6.9	
Some college	161	37.3	
College grad	136	31.5	
Post grad degree	97	22.5	
Unknown education level	5	1.2	
<b>Household Income</b>			
\$0 - \$4,999	23	5.3	
\$5,000 - \$9,999	18	4.2	
\$10,000 - \$19,999	45	10.4	
\$20,000 - \$29,999	43	10.0	
\$30,000 - \$39,999	69	16.0	
\$40,000 - \$49,999	56	13.0	
\$50,000 - \$74,999	81	18.8	
\$75,000 or more	86	19.9	
Unknown household income	10	2.3	
Did not report household income	1	.2	
<b>Age</b>	35.7		11.3
<b>HIV Status</b>			
Negative	264	61.1	
Positive	124	28.7	
Unknown HIV status	14	3.2	
Did not report HIV status	30	6.9	
<b>Partner HIV Status Known</b>			
Yes	278	64.4	
No	153	35.4	
Did not report	1	.2	
<b>Sexual Activity in the Last 30 Days (oral or anal)</b>			
Yes	339	78.5	
No	93	21.5	
<b>Condom Use with Most Recent Sexual Partner (anal or oral and anal)*</b>			
Yes	118	36.2	
No	208	63.8	
<b>Drug Use Before, During, or Immediately After Most Recent Sexual Activity *</b>			

Yes	154	35.6
No	184	42.6
Did not report	94	21.8

*\* Only individuals who reported having oral or anal sex with a male in the last 30 days responded*

### **Confirmatory Factor Analyses**

Researchers recommend the use of multiple fit indices to determine the adequacy of model fit for CFA (Brown, 2006; Hu & Bentler, 1999; Schumacker & Lomax, 1996). Furthermore, Brown (2006) suggests the use of fit indices from each of the three categories of fit estimates: index of absolute fit; index for adjusted fit; and index for comparative or incremental fit. The conventional criteria for evaluation model fit for the different fit indices are  $\chi^2 < .05$ ; SRMR  $< .08$ ; RMSEA  $< .08$ ; and CFI  $> .95$  (Brown, 2006; Leach et al., 2008; Jackson, Gillaspay, & Purc-Stephenson, 2009). The fit indices selected for the study were the chi square likelihood ratio ( $\chi^2$ ), standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA) and the comparative fit index (CFI).

The  $\chi^2$  value was significant at  $p < .001$  for all measures, which was not unanticipated as  $\chi^2$  is sensitive to sample size suggesting sample size influenced the statistical significance of the test. The results suggest the two factor IHS scale has good model fit to the data (SRMR = .05; RMSEA = .05; CFI = .97). The unidimensional RHS scale had good model fit to the data (SRMR = .04; CFI = .94.). The results suggest poor model fit to the data for the four factor IROS scale (SRMR = .08; RMSEA = .08; CFI = .78). The two factor NAD scale had poor model fit to the data (SRMR = .09; CFI = .67). Finally, the results for the two factor BIDR scale suggest poor model fit to the data (SRMR = .08; CFI = .57). The fit indices for each of the models are listed in Table 4.

Table 4: CFA Results for Internalized Stigma and Social Desirability Scales

Subscale	Cronbach's $\alpha$	$\chi^2$	<i>df</i>	SRMR	RMSEA	RMSEA CI <sub>90</sub>	CFI
IHS	.22	146.82**	71	.05	.05	.04 - .06	.97
RHS	.59	65.50***	14	.04	.09	.07 - .12	.94
NAD	.89	3878.93***	1126	.09	.08	.08 - .08	.67
IROS	.81	1131.69***	293	.08	.08	.10 - .09	.78
BIDR	.63	1038.47***	349	.08	.07	.07 - .08	.57

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Note. SRMR = standardized root mean square residual, RMSEA = root mean square error of approximation, CFI = comparative fit index

## Binomial Logistic Regression Analyses

### Internalized Homophobia

The relationship between internalized homophobia and engaging in CAS was explored using two measures of internalized homophobia: IHS and RHS. Likewise, the relationship between internalized homophobia and engaging in CAS with a partner of unknown HIV status was explored with both measures of internalized homophobia.

The logistic regression analyses conducted to examine the hypothesis that internalized homophobia using the IHS scale predicts CAS category are shown in Table 5. In the sample, internalized homophobia was not statistically significantly associated with CAS ( $Z_{\text{wald}} = .10, p = .75$ ). The Hosmer-Lemeshow chi-square fit was [4.13(8),  $p = .85$ ], indicating adequate model fit to the data, with the model accounting for 13.8% of the variance according to the Nagelkerke  $R^2$ . The partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{\text{wald}} = 5.09, p = .02$ ), had a post graduate degree ( $Z_{\text{wald}} = 4.73, p = .03$ ), and individuals who are retired ( $Z_{\text{wald}} = 5.15, p = .02$ ) were statistically significant predictors of CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 5: Logistic Regression Analyses Summary Examining Internalized Homophobia on CAS

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.73	.51	2.10	2.08	.77 – 5.66
Bisexual& queer <sup>a</sup>	.70	.38	3.37	2.02	.95 – 4.26
Single, dating, or divorced <sup>b</sup>	.91	.40	5.09*	2.48	1.13 – 5.47
Open Relationship <sup>b</sup>	.96	.66	2.15	2.62	.72 – 9.52
High school diploma <sup>c</sup>	.17	.67	.06	1.18	.32 – 4.37
College degree <sup>c</sup>	.65	.36	3.37	1.92	.96 – 3.86
College degree <sup>c</sup>	.84	.39	4.73*	2.32	1.09 – 4.96
Post graduate degree <sup>c</sup>	.68	.40	2.87	1.97	.90 – 4.33
Full-time employment <sup>d</sup>	-.20	.75	.07	.82	.19 – 3.60
Part-time employment <sup>d</sup>	2.22	.98	5.15*	9.21	1.35 – 62.74
Retired <sup>d</sup>	-.18	.30	.38	.83	.46 – 1.50
Drug use	-.50	.32	2.41	.61	.32 – 1.14
HIV positive <sup>e</sup>	.62	1.02	.37	1.86	.25 – 13.56
Unknown HIV status <sup>e</sup>	.16	.52	.10	1.18	.42 – 3.29
IHS composite score					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

The logistic regression analyses conducted to examine the hypothesis that internalized homophobia using the RHS scale is related to a greater likelihood of engaging in CAS are shown in Table 6. In the sample, internalized homophobia was not statistically significantly associated with CAS ( $Z_{Wald} = .36, p = .55$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $.90(8), p = .99$ ], indicating adequate model fit to the data with the model accounting for 13.2% of the variance according to the Nagelkerke  $R^2$ . The partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{Wald} = 4.94, p = .03$ ), had a postgraduate degree ( $Z_{Wald} = 4.16, p = .04$ ), and individuals who are retired ( $Z_{Wald} = 5.45, p = .02$ ) were statistically significant predictors of CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 6: Logistic Regression Analyses Summary Examining Internalized Homophobia on CAS

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.54	.50	1.20	1.72	.65 – 4.54
Bisexual& queer <sup>a</sup>	.56	.40	1.95	1.75	.80 – 3.84
Single, dating, or divorce <sup>b</sup>	.88	.40	4.94*	2.41	1.11 – 5.23
Open Relationship <sup>b</sup>	.95	.66	2.09	2.59	.71 – 9.39
High school diploma <sup>c</sup>	.15	.66	.05	1.16	.32 – 4.25
College degree <sup>c</sup>	.56	.35	2.54	1.75	.88 – 3.47
College degree <sup>c</sup>	.78	.38	4.16*	2.19	1.03 – 4.65
Post graduate degree <sup>c</sup>	.71	.40	3.21	2.04	.94 – 4.44
Full-time employment <sup>d</sup>	-.20	.75	.07	.82	.19 – 3.58
Part-time employment <sup>d</sup>	2.29	.98	5.45*	9.89	1.44 – 67.78
Retired <sup>d</sup>	-.17	.30	.32	.85	.47 – 1.51
Drug use	-.50	.32	2.44	.60	.32 – 1.14
HIV positive <sup>e</sup>	.50	1.02	.35	1.83	.25 – 13.35
Unknown HIV status <sup>e</sup>	.10	.17	.36	1.11	.79 – 1.55
RHS composite score					

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

### **CAS Among Black GBQSGM Men with Partners of Unknown HIV Status**

The logistic regression analyses conducted to examine the hypothesis that internalized homophobia using the IHS scale is related to a greater likelihood of engaging in CAS with partners of unknown HIV status among Black GBQSGM men are shown on Table 7. In the sample, internalized homophobia was not statistically associated with CAS with a partner of unknown HIV status ( $Z_{Wald} = 1.95, p = .16$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $2.72(8), p = .95$ ], indicating adequate model fit to the data with the model accounting for 34.4% of the variance according to the Nagelkerke  $R^2$ . The partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{Wald} = 7.19, p = .007$ ), individuals who had a college degree ( $Z_{Wald} = 7.09, p = .008$ ), and individuals who had a post graduate degree ( $Z_{Wald} = 6.68, p =$

.01) were statistically significant predictors of CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 7: Logistic Regression Analyses Summary Examining Internalized Homophobia on CAS with Partners of Unknown HIV Status

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.51	.94	.30	1.66	.27 – 10.42
Bisexual& queer <sup>a</sup>	-.17	.88	.04	.85	.15 – 4.77
Single, dating, or divorce	2.46	.92	7.19**	11.71	1.94 – 70.71
<sup>b</sup>	.60	1.51	.16	1.83	.10 – 35.18
Open Relationship <sup>b</sup>	.38	1.37	.08	1.46	.10 – 21.17
High school diploma <sup>c</sup>	2.03	.76	7.09**	7.61	1.71 – 33.89
College degree <sup>c</sup>	2.19	.85	6.68**	8.92	1.70 – 46.91
Post graduate degree <sup>c</sup>	-.65	.75	.74	.52	.12 – 2.29
Full-time employment <sup>d</sup>	-.65	1.59	.17	.52	.02 – 11.81
Part-time employment <sup>d</sup>	-.67	.59	1.31	.51	.16 – 1.61
Drug use	-.70	.57	1.48	.50	.16 – 1.53
HIV positive <sup>e</sup>	.25	1.39	.03	1.29	.09 – 19.50
Unknown HIV status <sup>e</sup>	1.51	1.08	1.95	4.52	.54 – 37.51
IHS composite score					

Note: Retired variable dropped due to no cases when restricted to unknown partners. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

The logistic regression analyses conducted to examine the hypothesis that internalized homophobia using the RHS scale is related to a greater likelihood of engaging in CAS among Black GBQSL men with partners of unknown HIV status are shown on Table 8. In the sample, internalized homophobia was not a statistically associated with CAS with partners of unknown HIV status ( $Z_{Wald} = .01, p = .93$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $3.48(8), p = .90$ ], indicating adequate model fit to the data with the model accounting for 32.1% of the variance according to the Nagelkerke  $R^2$ . The partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{Wald} = 7.07, p = .01$ ), individuals who had a college

degree ( $Z_{\text{Wald}} = 6.02, p = .01$ ), and individuals who had a post graduate degree ( $Z_{\text{Wald}} = 6.18, p = .01$ ) were statistically significant predictors of CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 8: Logistic Regression Analyses Summary Examining Internalized Homophobia on CAS With Partners of Unknown HIV Status

Variable	Partial regression coefficients				
	$\beta$	SE	$Z_{\text{Wald}}$	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.39	.97	.16	1.48	.22 – 9.84
Bisexual& queer <sup>a</sup>	-.42	.89	.22	.66	.12 – 3.74
Single, dating, or divorce <sup>b</sup>	2.44	.92	7.07**	11.52	1.90 – 69.75
Open Relationship <sup>b</sup>	.79	1.50	.28	2.21	.18 – 41.79
High school diploma <sup>c</sup>	.33	1.40	.05	1.39	.90 – 21.58
College degree <sup>c</sup>	1.78	.72	6.02*	5.92	1.43 – 24.47
Post graduate degree <sup>c</sup>	2.11	.85	6.18*	8.27	1.56 – 43.47
Full-time employment <sup>d</sup>	-.55	.74	.55	.58	.14 – 2.48
Part-time employment <sup>d</sup>	-.71	1.64	.19	.50	.02 – 12.30
Drug use	-.65	.57	1.27	.52	.17 – 1.61
HIV positive <sup>e</sup>	-.65	.58	1.27	.52	.17 – 1.62
Unknown HIV status <sup>e</sup>	.40	1.38	.08	1.49	.10 – 22.09
RHS composite score	.30	.34	.01	1.03	.53 – 2.03

Note: Retired variable dropped due to no cases when restricted to unknown partners. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

### Internalized Racism

Similar to the decision above to examine the hypotheses regarding internalized homophobia with two different measures of internalized homophobia, testing of the hypotheses whereby internalized racism predicts either CAS or CAS with a partner of unknown status was done using two different measures of internalized racism: IROS and NAD.



### *CAS Among Black GBQSG L Men*

The logistic regression analyses conducted to examine the hypothesis that internalized racism using the NAD scale is related to a greater likelihood of engaging in CAS are shown on Table 9. In the sample, internalized racism was not statistically associated with CAS ( $Z_{\text{wald}} = 1.66, p = .20$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $9.02(8), p = .34$ ], indicating adequate model fit to the data with the model accounting for 15.9% of the variance according to the Nagelkerke  $R^2$ . However, the partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{\text{wald}} = 6.33, p = .01$ ), had a postgraduate degree ( $Z_{\text{wald}} = 4.21, p = .04$ ), individuals employed full time ( $Z_{\text{wald}} = 4.77, p = .03$ ), and individuals who are retired ( $Z_{\text{wald}} = 7.23, p = .01$ ) were statistically significant predictors of CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 9: Logistic Regression Analyses Summary Examining Internalized Racism on CAS

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.26	.52	.25	1.30	.47 – 3.62
Bisexual& queer <sup>a</sup>	.52	.38	1.85	1.68	.80 – 3.54
Single, dating, or divorce <sup>b</sup>	1.05	.42	6.33**	2.84	1.26 – 6.42
Open Relationship <sup>b</sup>	.99	.67	2.21	2.70	.73 – 10.03
High school diploma <sup>c</sup>	.25	.68	.14	1.28	.34 – 4.85
College degree <sup>c</sup>	.55	.36	2.36	1.73	.86 – 3.49
Post graduate degree <sup>c</sup>	.82	.40	4.21*	2.27	1.04 – 4.98
Full-time employment <sup>d</sup>	.90	.41	4.76*	2.47	1.10 – 5.57
Part-time employment <sup>d</sup>	-.21	.77	.08	.81	.18 – 3.64
Retired <sup>d</sup>	3.36	1.25	7.23**	28.85	2.49 – 334.24
Drug use	-.001	.31	.001	.99	.55 – 1.82
HIV positive <sup>e</sup>	-.65	.33	3.73	.52	.27 – 1.01
Unknown HIV status <sup>e</sup>	.44	1.01	.19	1.56	.22 – 11.26
NAD composite score	-.25	.20	1.66	.78	.53 – 1.14

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

The logistic regression analyses conducted to examine the hypothesis that internalized racism using the IROS scale is related to a greater likelihood of engaging in CAS are shown on Table 10. In the sample, internalized racism was not a statistically associated with CAS ( $Z_{Wald} = .96, p = .33$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $7.99(8), p = .44$ ] with the model accounting for 13.7% of the variance according to the Nagelkerke  $R^2$ . However, the partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{Wald} = 5.19, p = .02$ ), had a postgraduate degree ( $Z_{Wald} = 4.17, p = .04$ ), and individuals who are retired ( $Z_{Wald} = 5.68, p = .02$ ) were statistically significant predictors of CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 10: Logistic Regression Analyses Summary Examining Internalized Racism on CAS

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.38	.51	.56	1.47	.54 – 4.01
Bisexual& queer <sup>a</sup>	.66	.38	3.09	1.93	.93 – 4.03
Single, dating, or divorce <sup>b</sup>	.91	.40	5.19*	2.48	1.14 – 5.43
Open Relationship <sup>b</sup>	.96	.66	2.09	2.60	.71 – 9.51
High school diploma <sup>c</sup>	.28	.67	.18	1.33	.35 – 4.97
College degree <sup>c</sup>	.59	.35	2.76	1.80	.90 – 3.59
Post graduate degree <sup>c</sup>	.79	.39	4.17*	2.21	1.03 – 4.72
Full-time employment <sup>d</sup>	.80	.41	3.73	2.22	.99 – 4.98
Part-time employment <sup>d</sup>	-.13	.76	.03	.88	.20 – 3.90
Retired <sup>d</sup>	2.34	.98	5.68*	10.34	1.52 – 70.55
Drug use	-.13	.30	.17	.88	.49 – 1.60
HIV positive <sup>e</sup>	-.51	.33	2.45	.60	.32 – 1.14
Unknown HIV status <sup>e</sup>	.70	1.04	.46	2.02	.27 – 15.34
IROS composite score	.36	.37	.96	1.43	.70 – 2.95

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

### **CAS Among Black GBQSG L Men with Partners of Unknown HIV Status**

The logistic regression analyses conducted to examine the hypothesis that internalized racism using the NAD scale is related to a greater likelihood of engaging in CAS among Black GBQSG L men with partners of unknown HIV status shown on Table 11. In the sample, internalized racism was not a statistically associated with CAS with partners of unknown HIV status ( $Z_{Wald} = 1.14, p = .29$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $5.86(8), p = .66$ ] with the model accounting for 37.2% of the variance according to the Nagelkerke  $R^2$ . However, the partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{Wald} = 8.70, p = .003$ ), individuals who had a college degree ( $Z_{Wald} = 7.40, p = .007$ ), and individuals who had a post graduate degree ( $Z_{Wald} = 7.720, p = .005$ ) were statistically significant predictors of

CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 11: Logistic Regression Analyses Summary Examining Internalized Racism on CAS With Partners of Unknown HIV Status

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.04	1.05	.002	1.05	.13 – 8.24
Bisexual& queer <sup>a</sup>	-.58	.85	.46	.56	.11 – 2.98
Single, dating, or divorce <sup>b</sup>	2.77	.94	8.70**	16.00	2.53 – 101.02
Open Relationship <sup>b</sup>	.54	1.53	.13	1.72	.09 – 34.54
High school diploma <sup>c</sup>	.53	1.50	.12	1.69	.09 – 31.77
College degree <sup>c</sup>	2.07	.76	7.40**	7.90	1.78 – 35.03
Post graduate degree <sup>c</sup>	2.54	.91	7.72**	12.65	2.11 – 75.75
Full-time employment <sup>d</sup>	-.56	.75	.56	.57	.13 – 2.47
Part-time employment <sup>d</sup>	-1.29	1.75	.55	.28	.01 – 8.45
Drug use	-.30	.60	.25	.74	.23 – 2.40
HIV positive <sup>e</sup>	-1.23	.67	3.34	.29	.08 – 1.09
Unknown HIV status <sup>e</sup>	-.14	1.46	.01	.87	.05 – 15.19
NAD composite score	-.38	.35	1.14	.69	.34 – 1.37

Note: Retired variable dropped due to no cases when restricted to unknown partners. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

The logistic regression analyses conducted to examine the hypothesis that internalized racism using the IROS scale is related to a greater likelihood of engaging in CAS among Black GBQSGM men with partners of unknown HIV status shown on Table 12. In the sample, internalized racism was not statistically associated with CAS with partners of unknown HIV status ( $Z_{Wald} = .59, p = .44$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $3.87(8), p = .87$ ] with the model accounting for 34.2% of the variance according to the Nagelkerke  $R^2$ . However, the partial regression coefficient for individuals who are single, dating, or divorced ( $Z_{Wald} = 7.46, p = .006$ ), individuals who had a college degree ( $Z_{Wald} = 5.10, p = .02$ ), and individuals who had a post graduate degree ( $Z_{Wald} = 6.46, p = .011$ ) were statistically significant predictors of

CAS in the model. All remaining variables had a non-significant relationship with the likelihood of engaging in CAS.

Table 12: Logistic Regression Analyses Summary Examining Internalized Racism on CAS With Partners of Unknown HIV Status

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
Step 3.					
Same-gender-loving <sup>a</sup>	.31	.94	.10	1.36	.22 – 8.50
Bisexual& queer <sup>a</sup>	-.43	.87	.24	.65	.12 – 3.62
Single, dating, or divorce <sup>b</sup>	2.57	.94	7.50**	13.09	2.07 – 82.94
Open Relationship <sup>b</sup>	.75	1.51	.25	2.12	.11 – 40.96
High school diploma <sup>c</sup>	.59	1.41	.18	1.81	.12 – 28.48
College degree <sup>c</sup>	1.65	.73	5.10*	5.19	1.24 – 21.64
Post graduate degree <sup>c</sup>	2.19	.86	6.46*	8.92	1.65 – 48.20
Full-time employment <sup>d</sup>	-.70	.76	.86	.50	.11 – 2.20
Part-time employment <sup>d</sup>	-.88	1.59	.30	.42	.02 – 9.42
Drug use	-.74	.60	1.54	.48	.15 – 1.54
HIV positive <sup>e</sup>	-.65	.59	1.22	.52	.17 – 1.65
Unknown HIV status <sup>e</sup>	.44	1.39	.10	1.56	.10 – 23.84
IROS composite score	.59	.77	.59	1.80	.40 – 8.14

Note: Retired variable dropped due to no cases when restricted to unknown partners. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = gay, <sup>b</sup> Reference group = marriage or monogamous relationship, <sup>c</sup> Reference group = some college, <sup>d</sup> Reference group = unemployed, <sup>e</sup> Reference group = HIV negative

## Moderation Analyses

### Perceived Partner Masculinity

Logistic regression analyses were used to test the hypothesis that the level of perceived masculinity of one's sexual partner moderates the relationship between internalized stigma and condom use for anal sex among Black GBQSGM men. The control variables, predictors and the interaction were entered into simultaneous regression models. The results from the models are shown in Table 13.

### *Internalized Homophobia and Perceived Partner Masculinity*

In the model testing IHS scores and level of perceived masculinity, the results indicated that neither IHS scores ( $Z_{Wald} = .27, p = .61$ ) nor level of perceived masculinity

( $Z_{\text{Wald}} = .68, p = .41$ ) were statistically significantly associated with CAS. The interaction between IHS scores and level of perceived masculinity was not statistically significant ( $Z_{\text{Wald}} = .42, p = .52$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $8.36(8), p = .40$ ] with the model accounting for 17.2% of the variance according to the Nagelkerke  $R^2$ .

In the model testing RHS scores and level of perceived masculinity, the results indicated that neither RHS scores ( $Z_{\text{Wald}} = 3.47, p = .06$ ) nor level of perceived masculinity ( $Z_{\text{Wald}} = 1.99, p = .16$ ) were statistically significantly associated with CAS. The interaction between RHS scores and level of perceived masculinity was not statistically significant ( $Z_{\text{Wald}} = 1.09, p = .30$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $5.92(8), p = .66$ ] with the model accounting for 18.8% of the variance according to the Nagelkerke  $R^2$ .

#### ***Internalized Racism and Perceived Partner Masculinity***

In the model testing NAD scores and level of perceived masculinity, the results indicated that neither NAD scores ( $Z_{\text{Wald}} = .49, p = .49$ ) nor level of perceived masculinity ( $Z_{\text{Wald}} = .004, p = .95$ ) were statistically significantly associated with CAS. The interaction between NAD scores and level of perceived masculinity was not statistically significant ( $Z_{\text{Wald}} = .30, p = .61$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $11.63(8), p = .17$ ] with the model accounting for 16.5% of the variance according to the Nagelkerke  $R^2$ .

In the model testing IROS scores and level of perceived masculinity, the results indicated that neither IROS scores ( $Z_{\text{Wald}} = .58, p = .45$ ) nor level of perceived

masculinity ( $Z_{\text{Wald}} = .72, p = .40$ ) were statistically significantly associated with CAS. The interaction between IROS scores and level of perceived masculinity was not statistically significant ( $Z_{\text{Wald}} = .30, p = .59$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $6.02(8), p = .65$ ] with the model accounting for 16.9% of the variance according to the Nagelkerke  $R^2$ .

*Table 13: Logistic Regression Analyses Summary Examining Moderation Effects of Perceived Partner Masculinity on CAS*

Variable	Partial regression coefficients				
	$\beta$	SE	$Z_{\text{Wald}}$	Exp(B)	95% CI
Internalized Homophobia Models					
IHS mean score	.64	1.24	.27	1.90	.17 – 21.64
Level of masculinity	.09	.10	.68	1.09	.89 – 1.34
IHS mean score * level of masculinity	-.02	.03	.42	.98	.92 – 1.05
RHS mean score	.70	.37	3.46	2.01	.96 – 4.17
Level of masculinity	.07	.05	1.99	1.07	.98 – 1.17
RHS mean score * level of masculinity	-.01	.01	1.09	.99	.97 – 1.01
Internalized Racism Models					
NAD mean score	-.29	.41	.49	.75	.33 – 1.70
Level of masculinity	-.002	.04	.004	1.00	.93 – 1.07
NAD mean score * level of masculinity	.01	.01	.26	1.01	.98 – 1.03
IROS mean score	.62	.82	.58	1.86	.38 – 9.18
Level of Masculinity	.04	.05	.72	1.05	.94 – 1.16
IROS mean score * level of masculinity	-.01	.02	.30	.99	.95 – 1.03

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

### Partner's Racial Identity

Logistic regression analyses were used to test the hypothesis that the racial identity of one's sexual partner moderates the relationship between internalized stigma and condom use for anal sex among Black GBQSGM men. The control variables,

predictors and the interaction were entered into simultaneous regression models. The results from the models are shown in Table 14.

#### ***Internalized Homophobia and Partner's Racial Identity***

In the model testing IHS scores and partner's racial identity, the results indicated that neither IHS scores ( $Z_{\text{wald}} = .46, p = .50$ ) nor partner's racial identity ( $Z_{\text{wald}} = .11, p = .74$ ) were statistically significantly associated with CAS. The interaction between IHS scores and partner's racial identity was not statistically significant ( $Z_{\text{wald}} = .07, p = .79$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $10.69(8), p = .22$ ] with the model accounting for 12.4% of the variance according to the Nagelkerke  $R^2$ .

In the model testing RHS scores and partner's racial identity, the results indicated that neither RHS scores ( $Z_{\text{wald}} = .47, p = .49$ ) nor partner's racial identity ( $Z_{\text{wald}} = .001, p = .97$ ) were statistically significantly associated with CAS. The interaction between RHS scores and partner's racial identity was not statistically significant ( $Z_{\text{wald}} = .02, p = .87$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $4.38(8), p = .82$ ] with the model accounting for 11.8% of the variance according to the Nagelkerke  $R^2$ .

#### ***Internalized Racism and Partner's Racial Identity***

In the model testing NAD scores and partner's racial identity, the results indicated that neither NAD scores ( $Z_{\text{wald}} = .02, p = .90$ ) nor partner's racial identity ( $Z_{\text{wald}} = .20, p = .65$ ) were statistically significantly associated with CAS. The interaction between NAD scores and partner's racial identity was not statistically significant ( $Z_{\text{wald}} = .13, p = .72$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $7.38(8), p = .50$ ] with the model accounting for 12.9% of the variance according to the Nagelkerke  $R^2$ .



In the model testing IROS scores and partner's racial identity, the results indicated that neither IROS scores ( $Z_{\text{Wald}} = .07, p = .80$ ) nor partner's racial identity ( $Z_{\text{Wald}} = .37, p = .54$ ) were statistically significantly associated with CAS. The interaction between IROS scores and partner's racial identity was not statistically significant ( $Z_{\text{Wald}} = .50, p = .48$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $5.19(8), p = .74$ ] with the model accounting for 12.1% of the variance according to the Nagelkerke  $R^2$ .

Table 14: Logistic Regression Analyses Summary Examining Moderation Effects of Partner Racial Identity on CAS

Variable	Partial regression coefficients				
	$\beta$	SE	$Z_{\text{Wald}}$	Exp(B)	95% CI
Internalized Homophobia Models					
IHS mean score	.48	.71	.46	1.62	.40 – 6.52
Non-Black partner <sup>a</sup>	1.01	3.01	.11	2.73	.01 – 988.28
IHS mean score * non-Black partner	-.26	.99	.07	.77	.11 – 5.33
RHS mean score	.14	.20	.47	1.15	.78 – 1.69
Non-Black Partner <sup>a</sup>	-.05	1.62	.97	.95	.04 – 22.49
RHS mean score * non-Black partner	.05	.32	.87	1.05	.57 – 1.95
Internalized Racism Models					
NAD mean score	-.03	.24	.02	.97	.60 – 1.56
Non-Black partner <sup>a</sup>	.51	1.12	.20	1.66	.18 – 15.02
NAD mean score * non-Black partner	-.13	.36	.13	.88	.44 – 1.77
IROS mean score	.12	.47	.07	1.13	.45 – 2.86
Non-Black Partner <sup>a</sup>	-.99	1.62	.37	.37	.02 – 8.82
IROS mean score * non-Black partner	.49	.70	.50	1.64	.42 – 6.40

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = Black

### **Perceived Partner Masculinity for Partners of Unknown HIV Status**

Logistic regression analyses were used to test the hypothesis that the level of perceived masculinity of one's sexual partner moderates the relationship between internalized stigma and condom use for anal sex among Black GBQSG men with partners of unknown HIV status. The control variables, predictors and the interaction were entered into simultaneous regression models. The results from the models are shown in Table 15.

#### ***Internalized Homophobia and Perceived Partner Masculinity***

In the model testing IHS scores and level of perceived masculinity, the results indicated that neither IHS scores ( $Z_{\text{wald}} = 2.71, p = .10$ ) nor level of perceived masculinity ( $Z_{\text{wald}} = 2.23, p = .14$ ) was statistically significantly associated with CAS with partners of unknown HIV status. The interaction between IHS scores and level of perceived masculinity was not statistically significant ( $Z_{\text{wald}} = 1.94, p = .16$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $3.14(7), p = .87$ ] with the model accounting for 38.4% of the variance according to the Nagelkerke  $R^2$ .

In the model testing RHS scores and level of perceived masculinity, the results indicated that neither RHS scores ( $Z_{\text{wald}} = 2.81, p = .09$ ) nor level of perceived masculinity ( $Z_{\text{wald}} = 2.80, p = .10$ ) were statistically significantly associated with CAS with partners of unknown HIV status. The interaction between RHS scores and level of perceived masculinity was not statistically significant ( $Z_{\text{wald}} = 2.22, p = .14$ ). The

Hosmer-Lemeshow chi-square fit was statistically non-significant [4.56(7),  $p = .71$ ] with the model accounting for 39.2% of the variance according to the Nagelkerke  $R^2$

***Internalized Racism and Perceived Partner Masculinity***

In the model testing NAD scores and level of perceived masculinity, the results indicated that neither NAD scores ( $Z_{\text{wald}} = .28, p = .60$ ) nor level of perceived masculinity ( $Z_{\text{wald}} = .94, p = .33$ ) were statistically significantly associated with CAS. The interaction between NAD scores and level of perceived masculinity was not statistically significant ( $Z_{\text{wald}} = .35, p = .56$ ). The Hosmer-Lemeshow chi-square fit was statistically significant [18.62(8),  $p = .02$ ] with the model accounting for 36.9% of the variance according to the Nagelkerke  $R^2$ .

In the model testing IROS scores and level of perceived masculinity, the results indicated that neither IROS scores ( $Z_{\text{wald}} = 2.10, p = .15$ ) nor level of perceived masculinity ( $Z_{\text{wald}} = 2.68, p = .10$ ) were statistically significantly associated with condomless anal sex. The interaction between IROS scores and level of perceived masculinity was not statistically significant ( $Z_{\text{wald}} = 2.04, p = .15$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [6.90(8),  $p = .55$ ] with the model accounting for 40.0% of the variance according to the Nagelkerke  $R^2$ .

Table 15: Logistic Regression Analyses Summary Examining Moderation Effects of Perceived Partner Masculinity on CAS With Partners Of Unknown HIV Status

Variable	Partial regression coefficients				
	$\beta$	SE	Z <sub>Wald</sub>	Exp(B)	95% CI
<b>Internalized Homophobia Models</b>					
IHS mean score	4.07	2.47	2.71	58.51	.46 – 7448.45
Level of masculinity	.33	.22	2.23	1.39	.90 – 2.14
IHS mean score * level of masculinity	-.10	.07	1.94	.91	.79 – 1.04
RHS mean score	1.37	.82	2.81	3.93	.79 – 19.50
Level of masculinity	.19	.11	2.80	1.21	.97 – 1.50
RHS mean score * level of masculinity	-.03	.02	2.22	.97	.93 – 1.01
<b>Internalized Racism Models</b>					
NAD mean score	.43	.81	.28	1.54	.31 – 7.57
Level of masculinity	.07	.07	.94	1.07	.93 – 1.22
NAD mean score * level of masculinity	-.01	.02	.35	.99	.95 – 1.03
IROS mean score	2.77	1.91	2.10	15.96	.38 – 678.11
Level of Masculinity	.17	.10	2.68	1.18	.94 – 1.44
IROS mean score * level of masculinity	-.06	.04	2.04	.94	.95 – 1.02

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

### Partner's Racial Identity for Partners of Unknown HIV Status

Logistic regression analyses were used to test the hypothesis that the racial identity of one's sexual partner moderates the relationship between internalized stigma and condom use for anal sex among Black GBQSGM men. The control variables, predictors and the interaction were entered into simultaneous regression models. The results from the models are shown in Table 16.

#### *Internalized Homophobia and Partner's Racial Identity*

In the model testing IHS scores and partner's racial identity, the results indicated that neither IHS scores ( $Z_{Wald} = .253, p = .11$ ) nor partner's racial identity ( $Z_{Wald} = .21, p$

= .65) were statistically significantly associated with CAS. The interaction between IHS scores and partner's racial identity was not statistically significant ( $Z_{\text{wald}} = .32, p = .57$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $7.87(8), p = .45$ ] with the model accounting for 32.9% of the variance according to the Nagelkerke  $R^2$ .

In the model testing RHS scores and partner's racial identity, the results indicated that neither RHS scores ( $Z_{\text{wald}} = 1.67, p = .20$ ) nor partner's racial identity ( $Z_{\text{wald}} = 1.22, p = .27$ ) were statistically significantly associated with CAS. The interaction between RHS scores and partner's racial identity was not statistically significant ( $Z_{\text{wald}} = 1.55, p = .21$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $8.09(8), p = .43$ ] with the model accounting for 31.2% of the variance according to the Nagelkerke  $R^2$ .

#### ***Internalized Racism and Partner's Racial Identity***

In the model testing NAD scores and partner's racial identity, the results indicated that neither NAD scores ( $Z_{\text{wald}} = 1.11, p = .29$ ) nor partner's racial identity ( $Z_{\text{wald}} = 2.70, p = .10$ ) were statistically significantly associated with CAS. The interaction between NAD scores and partner's racial identity was not statistically significant ( $Z_{\text{wald}} = 2.27, p = .13$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $72.39(8), p = .97$ ] with the model accounting for 34.5% of the variance according to the Nagelkerke  $R^2$ .

In the model testing IROS scores and partner's racial identity, the results indicated that neither IROS scores ( $Z_{\text{wald}} = 2.05, p = .15$ ) nor partner's racial identity ( $Z_{\text{wald}} = 2.40, p = .12$ ) were statistically significantly associated with CAS. The interaction between IROS scores and partner's racial identity was not statistically

significant ( $Z_{\text{Wald}} = 2.70, p = .10$ ). The Hosmer-Lemeshow chi-square fit was statistically non-significant [ $4.94(8), p = .77$ ] with the model accounting for 33.8% of the variance according to the Nagelkerke  $R^2$ .

Table 16: Logistic Regression Analyses Summary Examining Moderation Effects of Partner Racial Identity on CAS With Partners of Unknown HIV Status

Variable	Partial regression coefficients				
	$\beta$	SE	$Z_{\text{Wald}}$	Exp(B)	95% CI
Internalized Homophobia Models					
IHS mean score	2.32	1.46	2.53	10.21	.58 – 178.78
Non-Black partner <sup>a</sup>	2.78	6.05	.21	16.04	.001 –
IHS mean score * non-Black partner	-1.14	2.00	.32	.32	2243048.41 .01 – 16.13
RHS mean score	.72	.56	1.67	2.06	.69 – 6.17
Non-Black Partner <sup>a</sup>	4.00	3.62	1.22	54.51	.05 – 65779.54
RHS mean score * non-Black partner	-.86	.69	1.55	.42	.11 – 1.64
Internalized Racism Models					
NAD mean score	-.49	.46	1.11	.62	.25 – 1.52
Non-Black partner <sup>a</sup>	-3.31	2.01	2.70	.04	.001 – 1.89
NAD mean score * non-Black partner	.95	.63	2.27	2.58	.75 – 8.89
IROS mean score	1.82	1.27	2.05	6.14	.51 – 73.43
Non-Black Partner <sup>a</sup>	5.55	3.59	2.40	257.85	.23 – 291760.61
IROS mean score * non-Black partner	-2.55	1.55	2.70	.08	.004 – 1.63

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; <sup>a</sup> Reference group = Black

## **Chapter Six: Discussion**

### **Introduction**

The results from the fifth chapter have numerous implications for social work practice, HIV prevention, and public health. This final chapter will review the findings of the study in relationship to the hypotheses of the study. Following the review, there will be a discussion of the implications for social work and public health practice with recommendations for future research. Finally, the chapter will conclude with a discussion of the methodological limitations of the study and a summary of the chapter.

### **Review of Research Question Analysis**

The three research questions for the study were 1) does internalized racism and internalized homophobia increase the likelihood of having CAS anal sex, 2) does internalized racism and internalized homophobia increase the likelihood having CAS with a partner of unknown HIV status, and 3) does the likelihood of having CAS with a partner of unknown HIV status vary depending on the perceived racial identity and the level of perceived masculinity of one's sexual partner? I hypothesized that there would be a significant relationship between internalized homophobia, internalized racism and CAS for Black GBQSGM men. In addition, I postulated that there is a significant relationship between internalized homophobia, internalized racism and CAS for Black GBQSGM men who have sexual partners of unknown HIV status and I suggested that the relationship

between internalized homophobia, internalized racism, and CAS for Black GBQSGM men who have sexual partners of unknown HIV status to vary depending on the racial identity of their sexual partners and the perceived level of masculinity of their sexual partners.

The results did not support these assertions. The logistic regression models revealed no relationship between neither internalized homophobia and CAS nor internalized racism and CAS. Furthermore, the second hypothesis that there is a significant relationship between internalized stigma (i.e., internalized homophobia and internalized racism) and CAS for Black GBQSGM men with partners of unknown HIV status was not supported by the results. There was no relationship between internalized stigma and CAS for Black GBQSGM men. These findings align with some existing literature which suggests that there is no direct relationship between internalized homophobia and CAS (Kashubeck-West & Szymanski, 2008; Preston et al., 2004; Shidlo, 1994), or internalized racism and CAS (Smith, 2013) among Black MSM. However, they are contradictory to other existing literature that suggests there is a relationship between internalized homophobia (Huebner et al., 2002; Meyer & Dean, 1998; Rosario et al., 2001) and internalized racism (Ayala et al., 2012, Díaz, Ayala, & Bein, 2004, Wilson & Yoshikawa, 2004) and CAS for Black MSM.

Several underlying factors may influence the inconsistent results of previous literature and the current study. In terms of the nonsignificant findings of a relationship between internalized homophobia and CAS, review of previous research suggests methodological differences may have impacted the findings regarding the relationship



between internalized homophobia and CAS. In the studies identified, researchers operationalized internalized homophobia in different ways potentially causing discrepancies which led to different outcomes. Many studies of internalized homophobia used the Nungesser Homosexuality Attitudes Inventory (NHAI) (Nungesser, 1983); however, several studies used the Revised Homosexuality Attitude Inventory (RHAI) (Shidlo, 1994), the Internalized Homonegativity Inventory (IHNI) (Mayfield, 2004) or the IHS (Wagner, et al., 1996). The NHAI, RHAI, and the IHS operationalize internalized homophobia similarly with subscales that measures attitudes about one's own sexual orientation, attitudes about homosexuality in general, and comfort in disclosing one's sexual orientation to others. The IHNI measures the same theoretical concepts of internalized homophobia, however it also includes a subscale that measures attitudes about same-sex sexual behavior (Mayfield, 2004). Consequently, some scholars have argued one of the major deficiencies in research examining the relationship between internalized homophobia and CAS is the lack of consensus in measuring the concept (Newcomb & Mustanski, 2011, Williamson, 2000). Part of the criticism of these scales is that as the acceptance of the LGB community becomes more widespread, measuring attitudes about homosexuality in general may not be the best way to capture internalized homophobia (Newcomb & Mustanski, 2011), particularly if internalization is related more to a comparison of one's self-worth in relation to heterosexuality.

A possible rationale for the results of the current study and previous research is the use of different scales to measure internalized homophobia. The findings of the current study are similar to several scholars that measured internalized homophobia using

the NHAI, the RHAI, and the IHNI (Kashubeck-West et al., 2008; Preston et al., 2007; Shidlo, 1994). These findings would suggest that using scales that measures the three prominent constructs of internalized homophobia (i.e., negative attitudes about one's own sexual orientation, negative attitudes about homosexuality in general, and comfort of disclosing one's sexual orientation) result in null relationships between internalized homophobia and CAS. However, Rosario et al. (2001) used the NHAI which resulted in an indirect association between internalized and CAS, where internalized homophobia was associated with higher levels of anxiety and higher levels of anxiety were associated with CAS among MSM. Using the RHAI, Huebner et al (2002) also found an indirect relationship between internalized homophobia and CAS. The study found that MSM with higher levels of internalized homophobia were associated with low levels of self-efficacy to use condoms. Other studies that found significant relationships between internalized homophobia and sexual-risk taking used the IHS (Meyer & Dean, 1995). These studies reveal another methodological issue associated with determining the relationship between internalized homophobia and CAS, how CAS is operationalized. Some studies directly measured CAS (i.e., self-reported CAS) while other studies examined self-efficacy to use condoms or a global measure of sexual risk taking. These discrepancies further complicate the literature and the ability for researchers to clearly articulate the relationship between internalized homophobia and CAS.

Another possible explanation for inconsistent findings of the current study and studies that found a relationship between internalized homophobia and CAS is the racial identity of the sample. The previous studies that found a direct or indirect relationship

between internalized homophobia and CAS were predominantly comprised of White MSM. Huebner et al., (2002) study was geographically representative for the southwest region of the United States and 81% White MSM. Other studies had similar racial compositions where the sample was a majority or exclusively encompassed of White MSM; however, the current study focused solely on Black GBQSGM men. The racial background of participants is an important distinction that possibly influences the results of the study. Research suggest that gay and bisexual men of color experience higher rates of discrimination compared to White gay and bisexual men based on their sexual orientation (Whitfield et al., 2014) and a combination of their sexual orientation and racial identity (Diaz et al., 2001; Meyer et al., 2001). Since internalized stigma is a result of social oppression (Herek, 2007) it is possible that gay and bisexual men of color experience a unique form of internalized stigma compared to White gay and bisexual men. This possible difference may also alter the way in which gay and bisexual men of color experience internalization of stigma from their multiple marginalized identities. Table 17 provides a summary of previous research on the relationship between internalized homophobia and CAS.

Table 17: Summary of Studies of the Relationship Between Internalized Homophobia and Condomless Anal Sex

Study	Year of data collection	N	% Black MSM	Measure of internalized homophobia	Measure of CAS	Statistic reported
Kashubeck-West & Szymanski (2008)	2008	209	40	IHNI	Self-report CAS and vaginal sex	$r = -.02$
Preston et al. (2007)	2004	414	1	RHAI	Self-report CAS	$r = -.177^{***}$
Dew and Chaney (2005)	2005	510	6	NHAI	CSBI	$F_{(2,510)} = 40.02$
Preston et al. (2004)	2004	99	N/A	RHAI	Self-report CAS	$r = .21$
Huebner et al. (2002)	2002	89	7	RHAI	Condom use self-efficacy scale	$r = -.17^{***}$
Rosario et al. (2000)	1994	80	35	NHAI	SERBAS-Y	$r^2 = .34^*$
Ratti et al. (2000)	1996	98	N/A	NHAI	Self-report CAS	$r = .28$
Meyer & Dean (1995)	1990	174	12	IHS	Self-report CAS	$t = 2.58$
Shidlo (1994)	1990	54	N/A	NHAI	Self-report CAS, vaginal, and oral sex	$t = -.12$

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , *IHNI* Internalized homonegativity inventory, *RHAI* Revised homosexual attitudes inventory, *NHAI* Nungesser homosexual attitudes inventory, *IHS* Internalized homophobia scale, *CSBI* Compulsory sexual behavior inventory, *SERBAS-Y* Sexual risk assessment sexual youth

Methodological distinctions in studies on internalized racism may also influence the results of the current study and its alignment with other research. Díaz et al. (2004) found that Latino MSM who had higher levels of internalized homophobia and internalized racism were more likely to engage in CAS; however, Diaz and colleagues used experiences of social oppression (i.e., experiencing discrimination based on racial identity or sexual orientation) as proxies for the psychological construct of internalized homophobia and internalized racism. The study also examined the relationship between social oppression and CAS among Latino MSM while the present study examined the impact of internalized stigma among Black GBQSG men. Similarly, other studies have found a relationship between internalized homophobia, internalized racism, and CAS among Black MSM. In these studies, the researchers used experiences of racism and homophobia rather than psychological measures of internalized social oppression (i.e., internalized homophobia and internalized racism) (Ayala et al., 2012; Crawford et al., 2002; Mays et al., 2004). Table 18 provides a summary of previous research on the relationship between internalized racism and CAS.

Table 18: Summary of Studies of the Relationship Between Internalized Racism and Condomless Anal Sex

<b>Study</b>	<b>Year of data collection</b>	<b>N</b>	<b>% Black MSM</b>	<b>Measure of internalized racism</b>	<b>Measure of CAS</b>	<b>Statistic reported</b>
Ayala et al. (2012)	2006	2235	51.6	Self-report of social oppression	Self-report self-efficacy of condom use	$\beta = .11^{***}$
Díaz et al. (2004)	1999	912	0	Self-report of social oppression	Self-report self-efficacy of condom use	$\beta = .14^*$
Crawford et al. (2002)	1997	174	100	MEIM	HPSES & SRS	$F_{(15,489)} = 4.58^{**}$

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ , MEIM Minority multi-group ethnic identity measures; HPSES HIV prevention self-efficacy scale, SRS Sexual risk-taking scale

The postulation that the level of perceived masculinity and the racial identity of the sexual partners of Black GBQSGM men moderate the relationship between internalized homophobia, internalized racism and CAS was also not supported. There were no significant main effects or significant interaction effects of level of neither partner's perceived masculinity nor the partner's racial identity on the relationship between internalized homophobia, internalized racism, and CAS for Black GBQSGM men regardless of whether or not the individual knew their partner's HIV serostatus. This finding is supported by previous research that did not find a moderated relationship between internalized homophobia and CAS based on masculine ideology among bisexual or non-gay identified men for male sexual partners (Malebranche et al., 2012).

There is evidence that the perceived racial identity of the sexual partners of Black GBQSGM men may not influence CAS, thus concurring with the present study's finding that perceived partner racial identity does not moderate the relationship between internalized stigma and CAS among Black GBQSGM men. In previous studies of the effects of partner racial identity on HIV risk behavior among Black MSM, researchers found that although Black MSM were more likely to have sexual partners who were also Black, their partner's racial identity did not predict likelihood of CAS (Bingham et al., 2003; Tieu et al., 2009). While the findings of these studies examined the direct effect of racial identity on CAS for Black MSM, they have implications for indirect effects of partner racial identity on risky sexual behavior of Black GBQSGM men.

While the results of the study did not find a relationship between internalized homophobia, internalized racism, and CAS among Black GBQSGM men in this sample,

several demographic factors are associated with CAS. Individuals in the study who were single, dating, or divorced were two times more likely to engage in CAS in general and between 11 and 16 times more likely to engage in CAS with partners of unknown HIV status than those who were married or in a monogamous relationship. Previous research on relationship status has discovered contradictory results, with some studies suggesting that MSM with a primary monogamous partner are more likely to engage in risky sexual behavior with their primary partner (Calsyn et al., 2011) than MSM who are non-monogamous. However, other studies finding MSM in non-monogamous relationships are more likely to engage CAS (Mitchell et al., 2012; Senn et al., 2009). Unfortunately, in the current study, participants were asked their current relationship status separately from describing their most recent sexual partner and CAS, therefore the data do not allow us to determine if their most current sexual partner is their primary partner or someone else making a comparison between existing research and the current study impossible to make. It is possible that individuals who were in married or in monogamous relationships described a most recent sexual partner who was not their primary sexual partner. Exploration of most recent sexual behavior with information about the sexual partner would be needed to determine if the findings of the current study are aligned with previous research.

Education status was an indicator of CAS among the sample. Individuals who had a post-graduate degree were two times more likely to engage in CAS in general and between 8 to 12 times more likely to engage in CAS with a partner of unknown HIV status compared to those with some college education but not a college degree.



Furthermore, individuals with a college degree were 7 times more likely to engage in CAS with a partner of unknown HIV status compared to with some college education but not a college degree. Employment status was also a predictor of CAS among Black GBQSGM men in the study. Individuals who were retired were 9 to 10 times more likely to engage in CAS in general compared to those who were unemployed. Likewise, in the model examining the relationship between internalized racism and CAS, individuals who were employed full-time were two times more likely to engage in CAS in general compared to people who were unemployed.

These findings conflict with previous research that suggests that individuals with lower education attainment have greater HIV infection rates and are thus at higher risks for engaging in risky sexual behavior (CDC, 2013; Gant et al., 2014) and unemployment is associated with risky sexual behavior (CDC, 2013). Analyzing national data on the social determinants for HIV, the CDC found the highest rates of HIV diagnoses were among those living in census tracts where 7% or more of residents were unemployed (CDC, 2013). However, the current study findings are similar to a study of Black MSM which found that those who were unemployed were less likely to be infected with HIV (Gant et al., 2012; Gant et al., 2014). These findings suggest that the association between HIV infection, HIV risk behavior, and employment are unclear and require further analysis.

There are important distinctions in the current study and previous studies that affect the ability to compare the results that found education and employment status predict CAS. Existing studies that examine education attainment and employment status

used census data and neighborhood indicators, while the current study looked at education attainment and employment status at an individual level. Using community level indicators are helpful in identifying social determinants on a mezzo level; however, researchers are unable to necessarily make implications on the individual level based on neighborhood or community level analysis. It is also important to note that the current study sample was largely comprised of individuals with some college education. The restricted variability in educational levels may impact the ability to detect any significance educational status has on the CAS in the sample.

In the current study, 64% of participants reported knowing the HIV serostatus of their most recent sexual partner. This rate of known partner HIV status is higher than national studies suggest that estimates more that 60% of Black GBQSGM men have sexual partners of unknown HIV status (Eaton et al., 2010; Oster et al., 2011). The rates of having sexual partners of unknown HIV status is calculated differently in the current study and previous research. In the present study, participants were asked to self-report the HIV status of their most recent sexual partner. In previous explorations, the rate was calculated based on a combination of self-report and serological testing (i.e., HIV test results) (Millet et al., 2006; Millett et al., 2012; Oster et al., 2011). The method of using both self-report and serological information was used as empirical evidence suggests that Black GBQSGM men are less likely to engage in frequent and recent HIV testing, thus may have outdated information about their own HIV status. In turn, if individuals have outdated information about their own HIV status, the information they present to sexual partners if discussed may be inaccurate, thus individuals may believe they have accurate

information about their partner's status, when they do not actually know the HIV status of their sexual partners. However, 61% of participants in the current study reported being tested in the last 12 months, suggesting potentially adequate HIV status information depending on HIV risk behaviors. The pattern of self-report serological information about most recent sexual partners raises an important question as to if the increased focus on frequent HIV testing among Black GBQSGM men is effective and if there is a trend emerging whereby there is an increase in Black GBQSGM men knowing their HIV status and practicing frequent HIV testing.

### **Implications for Social Work and Public Health Practice**

The findings from the present study have implications for both social work practice and public health practice. Intersectional researchers have argued that our social identities are bounded by multiple social characteristics and our experiences in society are influenced by these social markers. For Black GBQSGM men this means their sexual orientation and racial identity among other social identifiers. In social work practice, intersectionality calls for not only using a biopsychosocial perspective in assessment and diagnostics but also to understand the role of social oppression using a multidimensional lens. Studies on the salience of social identities for Black GBQSGM men have found that men negotiate or “code switch” the importance of their sexual orientation and racial identity depending on the social situation, but that regardless of the context of the environment, the effects of marginalization continue to impact the individual (Hunter, 2010). In practice, social workers should explore different social factors and how they influence clients, impact the therapeutic experience, shape health outcomes, and have

larger implications related to structural and institutional barriers. In public health, intersectionality suggests a shift in the perspective of practice that includes understanding contextual factors related to stigma, oppression, and marginalization in the health of communities.

The findings related to education and employment status suggest that the assumption that greater resources are necessarily associated with less risky sexual behavior may not be accurate. The presumptions that individuals from lower socioeconomic backgrounds are at greater risk for HIV infection via engaging in CAS is not supported by findings in this study. These findings suggest social workers and public health professional use universal screening to determine the potential for HIV infections among Black GBQSGM men, regardless of socioeconomic status or educational level. In addition, higher resourced individuals might be left out of HIV prevention provided by public social service agencies in favor of using private providers. In ensuring equal access to services that reduce HIV infections, social workers and public health professional should leverage private/public relationships that make these services available to individuals regardless of socioeconomic status.

Recent literature suggests that serosorting actually reduces the risk of HIV acquisition if used appropriately (Eaton et al., 2010; Grov et al., 2007; Philip et al., 2010; Wilton et al., 2015). In the present study, 41% Black GBQSGM men used serosorting as a risk reduction strategy. A greater focus on multiple methods of risk reduction should be incorporated into HIV prevention messaging, particularly, how to engage in serosorting appropriately and successfully to reduce risk of HIV infection among Black GBQSGM

men. As biomedical interventions become effective, it is important to engage Black GBQSGM men in different methods to prevention HIV.

Overall the recommendations for social work and public health from the findings of the present study are based on a universal screening model of HIV risk factors regardless of assumptions of risk based on demographic factors. In addition, it is important to understand the impact of social identities and their effect on the social reality of Black GBQSGM men. The research highlights the importance of combination HIV risk reduction strategies using a harm reduction approach which includes condom use, serosorting, the use of biomedical interventions, and frequent HIV testing. Finally, these findings suggest a greater need to engage in practice that addresses the syndemic effect of biopsychosocial drivers on HIV infection and transmission on Black GBQSGM men.

### **Limitations and Future Research**

A major limitation of the study is the use of the selected scales to assess internalized homophobia and internalized racism. The results of the CFA for the internalized racism scales and the reliability test for the internalized homophobia scales suggest that these validated measures that were normed using other populations may be inadequate in assessing internalized stigma among Black GBQSGM men. This limitation calls for future research that examines the efficacy of current measures designed to assess internalized stigma among Black GBQSGM men. From an intersectional perspective, measuring the effects of one social identity without measuring other social identities simultaneously negates the experience of social oppression and how it is internalized by individuals. Some researchers have suggested that much of the research on internalized

homophobia has ignored the unique sociocultural experiences of LGBTQ People of Color and are assessing high levels of internalized homophobia when it may actually be internalized racism or other forms of social oppression from experiences that differ from the perspective of White gay men (Russell & Bohan, 2006). Future research on internalization of stigma should focus on development of multidimensional scales that assess stigmatization across social markers (e.g., gender, sexual orientation, racial identity, etc.).

Furthermore, the focus of the study was examining the role of internalized stigma on condom use among Black GBQSGM men, however studies suggest that several factors may actually influence condom use. Only identifying one potential factor associated with condom use limits the ability to determine other potential drivers of condom use. Future studies should investigate multiple factors associated with the syndemic of psychosocial factors related to condom use and HIV risk in a larger context.

The study results are predicated by participants' ability to recall specific experiences; therefore, the study may be weakened by recall bias. This potential limitation is mitigated by shrinking the timeframe for recall and associating the events with the name of their most recent sexual partner; however, depending on the length of time since their last sexual experiences, participants may have forgotten specific details, impacting the findings of the study. Studies of self-report assessment in research on sexual risk behavior found retrospective self-reports within a 1-year timeframe had high recall consistency (Carey et al., 2001; Jaccard et al., 2002) with recall at one and three months being the most accurate (MacFarlane et al., 1999; Schroder et al., 2003).

One of the strengths of the study is the use of multiple forms of recruitment to draw a more robust sample of Black GBQSGM men, however this method had its limitations. Individuals were recruited using multiple formats including face-to-face recruitment and web-based methods, however the study is not representative because it uses a convenient sampling methodology. In addition, the study required the use of a web interfacing device (e.g., computer, mobile device) therefore, individuals who did not have access to the Internet via a web-interfacing device were excluded from participating in the study. This sampling method reduces the generalizability of the study findings.

### **Conclusion**

This purposive quantitative study examined the effects of internalized homophobia, internalized racism, and sexual partner characteristics on CAS among a sample of Black GBQSGM men in the United States. In addition, the study investigated potential differences of condom use based on if individuals knew the HIV status of their sexual partners. A total of 443 self-identified Black GBQSGM men who had anal sex with another male in the last 12 months were recruited using multiple recruitment methods. Collaborating with community partners in 5 U. S. metropolitan cities and virtual recruitment using the Internet and mobile applications, participants were asked to describe their sexual histories, assess their level of internalized stigma, discuss HIV risk factors, and share information about their most recent sexual encounter with another male using a web-based survey.

The data were analyzed using SPSS and STATA testing the research hypothesis using binominal logistic regression, CFA, and moderation testing. The results indicated

that neither internalized homophobia nor internalized racism were predictive of CAS among Black GBQSGM men. Furthermore, these results were not impacted by whether individuals knew the HIV status of their sexual partners, the perceived level of masculinity of their sexual partner, or racial identity of their sexual partners. Demographic characteristics were associated with CAS including relationship status, educational level, and employment status. Individuals who were single, dating, or divorced were more likely to engage in CAS compared to those who were married or in a monogamous relationship. Individuals with a college degree or post-graduate degree were more likely to engage in CAS compared to individuals with some college education. In addition, individuals who were employed full-time were more likely to engage in CAS compared to those who were unemployed.

These findings suggest that social work and public health professionals use a universal screening model of HIV risk factors regardless of assumptions of risk based on demographic factors. Furthermore, these findings underscore the importance of understanding the impact of social identities and their effect on the social reality of Black GBQSGM men. Moreover, multilevel HIV prevention interventions should be used to reduce risk of HIV transmission. Finally, there is a need to engage in practice that addresses the syndemic effect of biopsychosocial drivers on HIV infection among Black GBQSGM men.



## References

- Amola, O. (2012). The Effects of Internalized Homophobia on HIV Risk Behaviors among Black Men Who Have Sex with Men. (unpublished dissertation). North Carolina State University, Raleigh, NC.
- Asanti, T. (1996). Suffering internalized racism. *Lesbian News*, 21(7), 51.
- Ayala, G., Bingham, T., Kim, J. Wheeler, D. P., & Millett, G. A. (2012). Modeling the impact of the social discrimination and financial hardship on the sexual risk of HIV among Latino and Black men who have sex with men. *American Journal of Public Health*, 102(Suppl. 2), S242-S249. Doi: 10.2105/AJPH.2011.300641
- Baca Zinn, M., & Dill, T. (1996). Theorizing difference from multiracial feminism. *Feminist Studies*, 22, 321-331.
- Bailey, T. M., Chung, Y. B., Williams, W. S., Singh, A. A., & Terrell, H. K. (2011). Development and validation of the Internalized Racial Oppression Scale for Black individuals. *Journal of Counseling Psychology*, 58, 481-493, DOI: 10.1037/a0023585.
- Barre-Sinoussi, F., Chermann, J. C., Rey, F., Nugeyre, M. T., Chamaret, S., Grueset, J., . . . & Montagnier, L. (1983). Isolation of a T-lymphotropic retrovirus from a patient at risk for acquired immune deficiency syndrome (AIDS). *Science*, 220, 868-871
- Beam, J. (Ed.). (1986). *In the life: A Black gay anthology*. Boston, MA: Alyson.
- Berger, J., Fisek, M. H., Norman, R. Z., & Zelditch, M. Jr. (1977). Status characteristics and social interaction: An expectation states approach. New York: Elsevier.
- Bingham, T. A., Harawa, N. T., Johnson, D. F., Secura, G. M., MacKellar, D. A., & Valleroy, L. A. (2003). The effect of partner characteristics on HIV infection among African American men who have sex with men in the Young Men's Survey, Los Angeles, 1999-2000. *AIDS Education and Prevention*, 15(1 Supplement), 39.
- Binkley, S. (2009). Governmentality, temporality, and practice: From the individualization of risk to the contradictory movements of the soul. *Time & Society*, 18, 86-105.
- Bird, J., & Voisin, D. (2013). You're an open target to be abused: A qualitative study of stigma and HIV self-disclosure among Black men who have sex with men. *American Journal of Public Health*, 103, 2193-2199.

- Blauner, B. (2001). *Still the big news: Racial oppression in America*. Philadelphia, PA: Temple University Press.
- Bloom, L. (1972). *The social psychology of race relations*. Cambridge, MA: Schenkman Publishing Company.
- Bond, L., Wheeler, D. P., Millett, G. A., LaPollo, A. B., Carson, L. F., & Liao, A. (2009). Black men who have sex with men and the association of down-low identity with HIV risk behavior. *American Journal of Public Health, 99*(S1), S92-S95.
- Bonilla-Silva, E. (2004). From bi-racial to tri-racial: Towards a new system of racial stratification in the USA. *Ethnic and Racial Studies, 27*, 931-950.
- Bono, C., Ried, L. D., Kimberlin, C., & Vogel, B. (2007). Missing data on the Center for Epidemiologic Studies Depression Scale: a comparison of 4 imputation techniques. *Research in Social and Administrative Pharmacy, 3*(1), 1-27. doi: 10.1016/j.sapharm.2006.04.001
- Borrell, L. N., Jacobs, D. R., Williams, D. R., Pletcher, M. J., Houston, T. K., & Kiefe, C. I. (2007). Self-reported racial discrimination and substance use in the Coronary Artery Risk Development in Adults Study. *American Journal of Epidemiology, 166*(9), 1068-1079.
- Bowleg, L. (2013). Once you've blended the cake, you can't take the parts back to the main ingredients: Black gay and bisexual men's descriptions and experiences of intersectionality. *Sex Roles, 68*, 745-767.
- Brady, S. (1983). The relationship between differences in stages of homosexuality identity formation and background characteristics, psychological well-being and homosexual adjustment. *Dissertation Abstracts International, 45*, 3328(10B).
- Brady, S., & Busse, W. (1994). The gay identity questionnaire: A brief measure of homosexual identity formation. *Journal of Homosexuality, 26*, 1-22.
- Brewer, R. (1993). Theorizing race, class, and gender: The new scholarship of black feminist intellectuals and black women's labor. In S. James & A. Busia (eds). *Theorizing black feminisms: The visionary pragmatism of black women* (pp 13-30). London: Routledge.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York, NY: Guilford.
- Bryant, W. W. (2011). Internalized racism's association with African American male youth's propensity for violence. *Journal of Black Studies, 42*(4), 690-707.

- Butler, C., Tull, E. S., Chambers, E. C., & Taylor, J. (2002). Internalized racism, body fat distribution, and abnormal fasting glucose among African-Caribbean women in Dominica, West Indies. *Journal of the National Medical Association, 94*(3), 143.
- Calsyn, D. A., Campbell, A. N., Tross, S., & Hatch-Maillette, M. A. (2011). Is monogamy or committed relationship status a marker for low sexual risk among men in substance abuse treatment? Clinical and methodological considerations. *The American Journal of Drug and Alcohol Abuse, 37*(5), 294-300. doi: 10.3109/00952990.2011.596874.
- Carey, M. P., Carey, K. B., Maisto, S. A., Gordon, C. M., & Weinhardt, L. S. (2001). Assessing sexual risk behaviour with the Timeline Followback (TLFB) approach: continued development and psychometric evaluation with psychiatric outpatients. *International journal of STD & AIDS, 12*(6), 365-375.
- Carter, R. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist, 35*, 13-105
- Cass, V. (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality, 4*, 219-235.
- CDC. (1981). Kaposi's sarcoma and Pneumocystis pneumonia among homosexual men – New York City and California. *MMWR Morb Mortal Wkly Rep, 30*, 305-308
- CDC. (2003). Characteristics of persons living with HIV and AIDS, 2001. *HIV/AIDS Surveill Suppl Rep., 9*(2)
- CDC. (2005). HIV prevalence, unrecognized infection and HIV testing among men who have sex with men – five U.S. cities, June 2004-April 2005. *MMRW Morb Mortal Wkly Rep, 54*(24), 597-601.
- CDC. (2012a). Estimated HIV incidence in the United States, 2007-2010. *HIV Surveillance Supplemental Report, 17*, 4
- CDC. (2012b). *New HIV infections in the United States*. Atlanta, GA: US Department of Health and Human Services.
- CDC. (2013). Social determinants of health among adults with diagnosed HIV infection in 18 areas, 2005-2009. *HIV Surveill Suppll Rep., 18*.
- CDC. (2015). *HIV Transmission*. Retrieved from <http://www.cdc.gov/hiv/basics/transmission.html>
- CDC. (2016). *Half of Black gay men and a quarter of Latino gay men projected to be diagnosed within their lifetime* [Press release]. Retrieved from <http://www.cdc.gov/nchhstp/newsroom/2016/croi-press-release-risk.html>

- Celentano, D. D., Sifakis, F., Hylton, J., Torian, L. V., Guillin, V., & Koblin, B. A. (2005). Race/ethnic differences in HIV prevalence and risks among adolescent and young adult men who have sex with men. *Journal of Urban Health, 82*(4), 610-621. Doi: 10.1093/jurban/jti124.
- Chambers, E. C., Tull, E. S., Fraser, H. S., Mutunhu, N. R., Sobers, N., & Niles, E. (2004). The relationship of internalized racism to body fat distribution and insulin resistance among African adolescent youth. *Journal of the National Medical Association, 96*(12), 1594.
- Choi, K., Han, C., Paul, J., & Ayala, G. (2011). Strategies of managing racism and homophobia among US ethnic and racial minority men who have sex with men. *AIDS Education & Prevention, 23*, 145-158.
- Choi, K. H., Kumekawa, E., Dang, Q., Kegeles, S. M., Hays, R. B., & Stall, R. (1999). Risk and protective factors affecting sexual behavior among young Asian and Pacific Islander men who have sex with men: Implications for HIV prevention. *Journal of Sex Education and Therapy, 24*(1-2), 47-55.
- Choi, K., Paul, J., Ayala, G., Boylan, R., & Gregorich, S. (2013). Experiences of discrimination and their impact on the mental health among African American, Asian and Pacific Islander, and Latino men who have sex with men. *American Journal of Public Health, 103*, 868-874.
- Choi, Y., Harachi, T. W., Gillmore, M. R., & Catalano, R. F. (2006). Are multiracial adolescents at greater risk? Comparisons of rates, patterns, and correlates of substance use and violence between monoracial and multiracial adolescents. *American Journal of Orthopsychiatry, 76*(1), 86.
- Clark, K., & Clark, M. (1939). The development of consciousness of self and the emergence of racial identification in Negro preschool children. *Journal of Social Psychology, 10*, 591-599.
- Clerkin, E., Newcomb, M., & Mustanski, B. (2011). Unpacking the racial disparity in HIV rates: The effect of race on risky sexual behavior among Black young men who have sex with men (YMSM). *Journal of Behavioral Medicine, 34*, 237-243.
- Cohen, C. J. (2005). Punks, dulldaggers, and welfare queens: The radical potential of queer politics? In E. P. Johnson & M. G. Henderson (Eds). *Black queer studies: A critical anthology* (pp. 21-51). Durham, NC: Duke University Press.
- Cokley, K. (2002). Testing Cross's revised racial identity model: An examination of the relationship between racial identity and internalized racialism. *Journal of Counseling Psychology, 49*(4), 476.

- Cokley, K. (2005). Racial(ized) identity, ethnic identity and Afrocentric values: Conceptual and methodological challenges in understanding African American Identity. *Journal of Counseling Psychology, 52*, 317-326.
- Collins, P. (1993). Towards a new vision: Race, class, and gender as categories of analysis and connection. *Race, Sex, & Class, 1*, 25-45.
- Collins, P. (2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment (2nd ed)*. New York: Routledge.
- Corrigan, P., Markowitz, F., Watson, A., Rowan, D., & Kubiak, M. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health & Social Behavior, 44*, 162-179.
- Crawford, I., Allison, K., Zamboni, B., & Soto, T. (2002). The influence of dual-identity development on the psychosocial functioning of African-American gay and bisexual men. *Journal of Sex Research, 39*, 179-189.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A feminist critique of anti-discrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum, 139*, 139-167.
- Crichlow, W. (2004). *Buller men and batty boys: Hidden men in Toronto and Halifax communities*. Toronto, Canada: University of Toronto Press.
- Dake, K. (1992). Myths of nature: Culture and the social construction of risk. *Journal of Social Issues, 48*, 21-37.
- Daley, E. M., McDermott, R. J., McCormack Brown, K. R., & Kittleson, M. J. (2003). Conducting web-based survey research: A lesson in Internet designs. *American Journal of Health Behavior, 27*(2), 116-124.
- Darrow, W., Jaffe, H., & Curran, J. (1983). Passive anal intercourse as a risk factor for AIDS in homosexual men. *The Lancet, 322*(8342), 160.
- Davis, K. (2008). Intersectionality as buzzword: A sociology of science perspective on what makes a feminist theory successful. *Feminist Theory, 9*, 67-85.
- Detels, R., Schwartz, K., Visscher, B., Fahey, J., Greene, R., & Gottlieb, M. (1983). Relation between sexual practices and T-cell subsets in homosexually active men. *The Lancet, 321*(8325), 609-611.
- Díaz, R. M., Ayala, G., & Bein, E. (2004). Sexual risk as an outcome of social oppression: data from a probability sample of Latino gay men in three US cities. *Cultural Diversity and Ethnic Minority Psychology, 10*(3), 255.

- Díaz, R., Ayala, G., Bein, E., Henne, J., & Marin, B. (2001). The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 US cities. *American Journal of Public Health, 91*, 927-932.
- Douglas, M. (1978). *Cultural bias: Royal anthropological institute occasional paper no. 35*, (London, Royal Anthropological Institute).
- Douglas, M. (1982). *Essays in the sociology of perception*. London, England: Routledge
- Douglas, M. (1985). *Risk acceptability according to the social sciences*. New York, NY: Russell Sage Foundation.
- Douglas, M. (1986). *How institutions think*. London, England: Routledge
- Douglas, M., & Wildavsky, A. (1982). *Risk and Culture: An essay on selection of technological and environmental dangers*. Berkley, CA: University of California Press.
- Downey, R. G., & King, C. V. (1998). Missing data in Likert ratings: A comparison of replacement methods. *The Journal of general psychology, 125*(2), 175-191. Doi: 10.1080/00221309809595542
- Earl, W. L. (1990). Married men and same sex activity: A field study on HIV risk among men who do not identify as gay or bisexual. *Journal of Sex and Martial Therapy, 16*, 251-257.
- Easterbrook, P. J., Chmiel, J. S., Hoover, D. R., Saah, A. J., Kaslow, R. A., Kingsley, L. A., & Detels, R. (1993). Racial and ethnic differences in human immunodeficiency virus type 1 (HIV-1) seroprevalence among homosexual and bisexual men. *American Journal of Epidemiology, 138*(6), 415-429.
- Eaton, L., Kalichman, S., & Cherry, C. (2010). Sexual partner selection and HIV risk reduction among Black and White men who have sex with men. *American Journal of Public Health, 100* (3), 503-509.
- Edgerton, R. (1967). *The cloak of competence*. Berkley, CA: University of California Press.
- Elliott, K. M. (2002). Key determinants of student satisfaction. *Journal of College Student Retention, 4*, 271-279.
- Fields, E. L., Fullilove, R., & Fullilove, M. (2001). *HIV sexual risk-taking behavior among young Black MSM: Contextual factors*. Paper presented at the annual meeting of the American Public Health Association, Atlanta, GA, October 2001.

- Fischhoff, B., Slovic, P., Lichtenstein, S., Read, S., & Combs, B. (1978). How safe is safe enough? A psychometric study of attitudes towards technological risks and benefits. *Policy Studies*, 9, 127-152.
- Fleming, D. T., & Wasserheit, J. N. (1999). From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sexually transmitted infections*, 75(1), 3-17.
- Fortenberry, D., McFarlane, M., Bleakley, A., Bull, S., Fishbein, M., Grimley, D., . . . & Stoner, B. (2002). Relationship of stigma and shame to gonorrhea and HIV screening. *American Journal of Public Health*, 92, 378-381.
- Fortes De Leff, J. (2002). Racism in Mexico: Cultural Roots and Clinical Interventions 1. *Family Process*, 41(4), 619-623.
- Fowler, J. (ed.) (2009). *Survey research methods (4th ed)*. Thousand Oaks, CA: Sage Publications. Series: Applied social research methods, No. 1.
- Freire, P. (1999). *Pedagogy of the oppressed*. New York, NY: Continuum
- Fricke, R. D., & Schonlau, M. (2002). Advantages and disadvantages of Internet research surveys: Evidence from the literature. *Field Methods*, 14(4), 347-367.
- Gallo, R. C., Salahuddin, S. Z., Popovic, M., Shearer, G. M., Kaplab, M., Haynes, B. F., . . . & Markham, P. D. (1984). Frequent detection and isolation of cytopathic retroviruses (HTLV-III) from patients with AIDS and at risk for AIDS. *Science*, 224, 500-503.
- Gant, Z., Lomotey, M., Hall, H., Hu, X., Guo, Z., & Song, R. (2012). A County-Level Examination of the Relationship Between HIV and Social Determinants of Health: 40 States, 2006-2008. *The Open Journal AIDS*, 6, 1-17.
- Gant, Z., Gant, L., Song, R., Willis, L., & Johnson, A. S. (2014). A Census Tract-Level Examination of Social Determinants of Health among Black/African American Men with Diagnosed HIV Infection, 2005–2009—17 US Areas. *PloS one*, 9(9), e107701.
- Garcia, J., & Crocker, J. (2008). Reasons for disclosing depression matter: The consequences of having ecosystem and ecosystem goals. *Social Science & Medicine*, 67, 453-462.
- Garson, D. (2013). *Testing of Assumptions: Statnotes from North Carolina State University. Public administration Program*. Retrieved from: <http://faculty.chass.ncsu.edu/garson/PA765/assumpt.htm>

- Gilman, S. (1986). *Jewish self-hatred: Anti-Semitism and the hidden languages of the Jews*. Baltimore, MD: John Hopkins University Press.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. New York: Simon & Schuster.
- Gorbach, P. M., Sopheab, H., Phalla, T., Leng, H. B., Mills, S., Bennett, A., & Holmes, K. K. (2000). Sexual bridging by Cambodian men: potential importance for general population spread of STD and HIV epidemics. *Sexually transmitted diseases*, 27(6), 320-326.
- Gottschall, A. C., West, S. G., & Enders, C. K. (2012). A comparison of item-level and scale-level multiple imputation for questionnaire batteries. *Multivariate Behavioral Research*, 47(1), 1-25. Doi: 10.1080/00273171.2012.640589.
- Granello, D. H., & Wheaton, J. E. (2004). Online data collection: Strategies for research. *Journal of Counseling and Development*, 82(4), 387-393.
- Grant, R. M., Lama, J. R., Anderson, P. L., McMahan, V., Liu, A. Y., Vargas, L., . . . iPrex Study Team. (2010). Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. *New England Journal of Medicine*, 363(27), 2587-2599. Doi: 10.1056/NEJMoa1011205
- Griffith, D. M., Gunter, K., & Watkins, D. C. (2012). Measuring masculinity in research on men of color: Findings and future directions. *American Journal of Public Health*, 102(S2), S187-S194.
- Grov, C., DeBusk, J. A., Bimbi, D. S., Golub, S. A., Nanin, J. E., & Parsons, J. T. (2007). Barebacking, the Internet, and harm reduction: an intercept survey with gay and bisexual men in Los Angeles and New York City. *AIDS and Behavior*, 11(4), 527-536.
- Haile, R., Rowell-Cunsolo, T., Parker, E., Padilla, M., & Hansen, N. (2014). An empirical test of racial/ethnic differences in perceived racism and affiliation with the gay community: Implications for HIV risk. *Journal of Social Issues*, 70, 342-359.
- Halkitis, P. N. (2010). Reframing HIV prevention for gay men in the United States. *American Psychologist*, 65(8), 752-763. Doi: 10.1037/0003-066X.65.8.752
- Halkitis, P. N. (2011, November 30). Reflecting on the AIDS generation. *Chelsea Now*, 4(33), pp. 18, 2-19. Retrieved from <http://chelseanow-.com/2011/12/reflecting-on-the-aids-generation/>
- Halkitis, P. N. (2012). Obama, marriage equality and the healthy of gay men. *American Journal of Public Health*, 102(9), 1628-1629. Doi: 10.2105/AJPH.2012.300940



- Halkitis, P. N., Green, K. A., & Wilton, L. (2004). Masculinity, body image, and sexual behavior in HIV-seropositive gay men: A two-phase formative behavioral investigation using the Internet. *International Journal of Men's Health*, 3(1), 27.
- Halkitis, P. N., Wolitski, R. J., & Millett, G. A. (2013). A holistic approach to addressing HIV infection disparities in gay, bisexual, and other men who have sex with men. *American Psychologist*, 68(4), 261-273. Doi: 10.1037/a0032746
- Hall, H. I., An, Q., Tang, T., Song, R., Chen, M., Green, T., & Kang, J. (2015). Prevalence of diagnosed and undiagnosed HIV infections – United States, 2008-2012. *MMRW Morb Mortal Wkly Rep*, 64(24), 657-662.
- Hammelmann, T. L. (1993). Gay and lesbian youth: Contributing factors to serious attempts or considerations of suicide. *Journal of Gay & Lesbian Psychotherapy*, 2(1), 77-89.
- Hammond, W. P., & Mattis, J. S. (2005). Being a man about it: Manhood meaning among African American men. *Psychology of Men and Masculinity*, 6, 114-126.
- Han, C. (2007). They don't want to cruise your type: Gay men of color and racial politics of exclusion. *Social Identities*, 13, 51-67.
- Han, C. S. (2008). A qualitative exploration of the relationship between racism and unsafe sex among Asian Pacific Islander gay men. *Archives of Sexual Behavior*, 37(5), 827-837.
- Hardiman, R., & Jackson, B. (1997). Conceptual foundation for social justice courses. In M. Adams, L. Bell, & P Griffin (Eds.), *Teaching for diversity and social justice: A sourcebook* (pp. 16-29). New York, NY: Routledge
- Harper, G. W., Jernewall, N., & Zea, M. C. (2004). Giving voice to emerging science and theory for lesbian, gay, and bisexual people of color. *Cultural Diversity and Ethnic Minority Psychology*, 10(3), 187.
- Hatzenbuehler, M. L., McLaughlin, K. A., Keyes, L. M., & Hasin, D. S. (2010). The impact of institutional discrimination on psychiatric disorders in lesbian, gay, and bisexual populations: A prospective study. *American Journal of Public Health*, 100, 452-459.
- Heckman, T. G., Kelly, J. A., Bogart, L. M., Kalichman, S. C., & Rompa, D. J. (1999). HIV risk differences between African-American and white men who have sex with men. *Journal of the National Medical Association*, 91(2), 92.
- Hemphill, E. (Ed). (1991). *Brother to brother: New writings by Black gay men*. Boston, MA: Alyson

- Herek, G. (1996). Why tell if you're not asked? Self disclosure, intergroup contact, and heterosexuals' attitudes toward lesbians and gay men. In G. Herek, J. Jobe, & R. Carney (eds). *Out in force: Sexual orientation and the military* (pp. 197-225). Thousand Oaks, CA: Sage.
- Herek, G. M. (2004). Beyond "homophobia": Thinking about sexual prejudice and stigma in the twenty-first century. *Sexuality Research & Social Policy, 1*(2), 6-24.
- Herek, G. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues, 63*, 905-925.
- Hipolito-Delgado, Carlos P. "Exploring the etiology of ethnic self-hatred: Internalized racism in Chicana/o and Latina/o college students." *Journal of college student development 51.3* (2010): 319-331.
- HIV Prevention Justice Alliance. (2014). *Victory: CDC responds to open letter, commits to condom clarity*. Retrieved from <http://www.preventionjustice.org/victory-cdc-responds-to-open-letter-commits-to-condom-clarity/>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal, 6*(1), 1-55.
- Huebner, D., Davis, M., Nemeroff, C., & Aiken, L. (2002). The impact of internalized homophobia on HIV prevention interventions. *American Journal of Community Psychology, 30*, 327-348.
- Hunter, M. A. (2010). All the gays are White and all the Blacks are straight: Black gay men, identity, and community. *Sex Res Soc Policy, 7*, 81-92. Doi: 10.1007/s13178-010-001-4
- Jaccard, J., McDonald, R., Wan, C. K., Dittus, P. J., & Quinlan, S. (2002). The accuracy of Self-Reports of condom use and sexual behavior. *Journal of Applied Social Psychology, 32*(9), 1863-1905.
- Jackson, D. L. (2007). The effect of the number of observations per parameter in misspecified confirmatory factor analytic models. *Structural Equation Modeling, 14*(1), 48-76.
- Jackson, D. L., Gillaspay Jr, J. A., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: an overview and some recommendations. *Psychological methods, 14*(1), 6. Doi: 10.1037/a0014694
- Jeffries, W., Marks, G., Lauby, J., Murrill, C., & Millett, G. (2013). Homophobia is associated with sexual behavior that increase risk of acquiring and transmitting

- HIV infection among Black men who have sex with men. *AIDS Behavior*, 17, 1442-1453.
- Jerome, R., & Halkitis, P. (2009). Stigmatization, stress, and the search for belonging in Black men who have sex with men who use methamphetamine. *Journal of Black Psychology*, 35, 343-365.
- Jie, W., Ciyong, L., Xueqing, D., Hui, W., & Lingyao, H. (2012). A syndemic of psychosocial problems places the MSM (men who have sex with men) population at greater risk for HIV infection. *PLoS One*, 7(3), e32312. Doi: 10.1371/journal.pone.0032312
- Jin, F., Prestage, G. P., Mao, L., Poynten, M., Templeton, D. J., Grulich, A. E., & Zablotska, I. (2015). "Any condomless anal intercourse" is no longer an accurate measure of HIV sexual risk behavior in gay and other men who have sex with men. *Frontiers in Immunology*, 6, 1-1. Doi: 10.3389/fimmu.2015.00086
- Jones, C. P. (2000). Levels of racism: a theoretic framework and a gardener's tale. *American Journal of Public Health*, 90(8), 1212.
- Jourian, T. J. (2015). Evolving nature of sexual orientation and gender identity. *New Directions for Student Services*, 152, 11-2. Doi: 10.1002/ss.20142
- Kashubeck-West, S., & Szymanski, D. (2008). Risky sexual behavior in gay and bisexual men: Internalized heterosexism, sensation seeking, and substance use. *The Counseling Psychologist*, 36, 595-614.
- Kilmarx, P. (2008). Acquired immunodeficiency syndrome. In D. Heymann, *Control of communicable diseases manual* (19 edition ed.). Washington, DC: American Public Health Association Press.
- Lash, S. (2000). Risk culture. In B. Adam, U. Beck, & J. Van Loon (Eds) *The risk society and beyond: Critical issues for social theory*. pp 47 - 62. London: Sage
- Lassiter, J. M. (2014). Extracting dirt from water: A strengths-based approach to religion for African American same-gender-loving men. *Journal of Relig Health*, 53, 178-189. Doi: 10.1007/s10943-012-9668-8
- Lichter, D., & Qian, Z. (2004). Marriage and family in a multiracial society. In R. Farley & J. Haaga (Eds), *The American people: census 2000*. New York, NY: Russell Sage Foundation.
- Lin, K., & Lundquist, J. (2013). Mate selection in cyberspace: The intersection of race, gender, and education. *American Journal of Sociology*, 119, 183-215.

- Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 35(Extra Issue), 80-94
- Link, B., & Phelan, J. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27, 363-385.
- Link, B., Struening, E., Rahav, M., Phelan, J., & Nuttbrock, L. (1997). On stigma and its consequences: Evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. *Journal of Health & Social Behavior*, 38, 177-190.
- Lupton, D. (2013). Risk and emotions: Towards an alternative theoretical perspective. *Health, Risk, & Society*, 15, 634-647
- MacKellar, D. A., Valleroy, L. A., Secura, G. M., Bartholow, B. N., McFarland, W., Shehan, D., ... & Torian, L. V. (2002). Repeat HIV testing, risk behaviors, and HIV seroconversion among young men who have sex with men: a call to monitor and improve the practice of prevention. *JAIDS*, 29(1), 76-85.
- MacKellar, D. A., Valleroy, L. A., Secura, G. M., Behel, S., Bingham, T., Celentano, D. D., ... & Thiede, H. (2005). Unrecognized HIV infection, risk behaviors, and perceptions of risk among young men who have sex with men: opportunities for advancing HIV prevention in the third decade of HIV/AIDS. *JAIDS*, 38(5), 603-614.
- Majors, R., & Billson, J. (1992). *Cool pose: The dilemmas of Black manhood in America*. New York, NY: Simon & Schuster.
- Major, B., & O'Brien, T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393-421.
- Malebranche, D., Fields, E., Bryant, L., & Harper, S. (2009). Masculine socialization and sexual risk behaviors among Black men who have sex with men: A qualitative exploration. *Men & Masculinities*, 12, 90-112.
- Malebranche, D., Gvetadze, R., Millett, G., & Sutton, M. (2012). The relationship between gender role conflict and condom use among Black MSM. *AIDS Behavior*, 16, 2051-2061.
- Mao, L., Crawford, J. M., Hosper, H. J., Prestage, G. P., Grulich, A. E., Kaldor, J. M., & Kippax, S. C. (2006). "Serosorting" in casual anal sex of HIV-negative gay men is noteworthy and is increasing in Sydney, Australia. *AIDS*, 20(8), 1204-1206 doi: 10.1097/01.aids.0000226964.17966.75
- Marks, G., Millett, G. A., Bingham, T., Lauby, J., Murrill, C. S., & Stueve, A. (2010). Prevalence and protective value of serosorting and strategic positioning among

- Black and Latino men who have sex with men. *Sexually transmitted diseases*, 37(5), 325-327.
- Marx, J. L. (1984). Strong new candidate for AIDS agent. A newly discovered member of the human T-cell leukemia virus family is very closely linked to the immunodeficiency disease. *Science*, 224, 475-477
- Mays, V. M., Cochran, S. D., & Zamudio, A. (2004). HIV prevention research: Are we meeting the needs of African American men who have sex with men?. *Journal of Black Psychology*, 30(1), 78-105.
- McFarlane, M., & Lawrence, J. S. S. (1999). Adolescents' recall of sexual behavior: consistency of self-report and effect of variations in recall duration. *Journal of Adolescent Health*, 25(3), 199-206.
- Menard, S. 2002. *Applied Logistic Regression Analysis (2nd ed)*. Thousand Oaks, CA: Sage Publications. Series: Quantitative Applications in the Social Sciences, No. 106 (1st edn), 1995.
- Meyer, I. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38-56.
- Meyer, I. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697.
- Meyer, I. H., & Dean, L. (1998). Internalized homophobia, intimacy, and sexual behavior among gay and bisexual men. In G. Herek (Ed.) *Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals* (pp. 160-186). Thousand Oaks, CA: Sage Publications.
- Meyer, I. H., Schwartz, S., & Frost, D. M. (2008). Social patterning of stress and coping: Does disadvantaged social statuses confer more stress and fewer coping resources?. *Social science & medicine*, 67(3), 368-379.
- Millett, G., Peterson, J., Flores, S., Hart, T., Jeffries, Wilson, P. , . . . & Remis, R. (2012). Comparison of disparities and risk of HIV infection in Black and other men who have sex with men in Canada and USA: A meta-analysis. *The Lancet*, 380, 341-348.
- Millett, G., Peterson, J., Wolitski, R., & Stall, R. (2006). Greater risk for HIV infection of Black men who have sex with men: A critical literature review. *American Journal of Public Health*, 96 (6), 1007-1019.

- Mills, T., Paul, J., Stall, R., Pollack, L., Canchola, J., Chang, Y., . . . & Catania, J. (2004). Distress and depression in men who have sex with men: The urban men's health study. *American Journal of Psychiatry*, *16*, 278-285.
- Mitchell, J. W., Harvey, S. M., Champeau, D., & Seal, D. W. (2012). Relationship factors associated with HIV risk among a sample of gay male couples. *AIDS and Behavior*, *16*(2), 404-411. DOI 10.1007/s10461-011-9976-0.
- Mizuno, Y., Borkowf, C., Millett, G., Bingham, Ayala, G., & Stueve, A. (2012). Homophobia and racism experienced by Latino men who have sex with men in the United States: Correlates of exposure and associations with HIV risk behaviors. *AIDS Behavior*, *16*, 724-735.
- Morris, M., Zavisca, J., & Dean, L. (1995). Social and sexual networks: their role in the spread of HIV/AIDS among young gay men. *AIDS Education and Prevention*.
- Murrill, C. S., Liu, K. L., Guilin, V., Colón, E. R., Dean, L., Buckley, L. A., ... & Torian, L. V. (2008). HIV prevalence and associated risk behaviors in New York City's house ball community. *American Journal of Public Health*, *98*(6), 1074-1080.
- Mustanski, B., Garofola, R., Herrick, A., & Donenberg, G. (2007). Psychosocial health problems increase risk for HIV among urban young men who have sex with men: Preliminary evidence of a syndemic in need of attention. *Annals of Behavioral Medicine*, *34*(1), 37-45. Doi: 10.1007/BF02879919
- Neuman, L.W. (2011). *Social research methods: Qualitative and quantitative approaches* (7th ed). Boston, MA: Pearson.
- Neuman, L. W. (2004). *Basics of social research: Qualitative and quantitative approaches*. Boston, MA: Pearson Education
- Newcomb, M. E., & Mustanski, B. (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. *Clinical psychology review*, *30*(8), 1019-1029.
- Newcomb, M. & Mustanski, B. (2011). Moderators of the relationship between internalized homophobia and risky sexual behavior in men who have sex with men: A meta-analysis. *Archives of Sexual Behavior*, *40*, 189-199.
- Newcomb, M. & Mustanski, B. (2013). Racial differences in same-race partnering and the effects of sexual partnership characteristics on HIV risk in MSM: A prospective sexual diary study. *Journal of Acquired Immune Deficiency Syndrome*, *62*, 329-333.
- Nungesser, L. G. (1983). *Homosexual acts, actors, and identities*. Praeger Publishers.

- O'Brien, J. (2011). Spoiled group identities and backstage work: A theory of stigma management rehearsals. *Social Psychology Quarterly*, 74, 291-309.
- O'Neil, J. (1990). Assessing men's gender role conflict. In D. Moore, & F. Leafgren (eds) *Men in conflict* (pp. 23-38). Alexandria, VA: American Counseling Association.
- O'Neil, J. & Nadeau, R. (2004). Men's gender-role conflict, defense mechanisms, and self-protective defensive strategies. In M. Harway, & J. O'Neil (eds). *What causes men's violence against women?* (pp. 89-119). Thousand Oaks, CA: Sage.
- Olteidal, S., Moen, B., Klempe, H., & Rundmo, T. (2004). Explaining risk perception, An evaluation of cultural theory. *Rotunde*, 85
- Olteidal, S., & Rundmo, T. (2006). Using cluster analysis to test the cultural theory of risk perception. *Transportation Research, F*, 254-262.
- Operario, D., Smith, C. D., & Kegeles, S. (2008). Social and psychological context for HIV risk in non-gay-identified African American men who have sex with men. *AIDS Education and Prevention*, 20(4), 347.
- Oster, A., Wiegand, R., Sionean, C., Miles, I., Thomas, P., Melendez-Morales, L., . . . & Millett, G. (2011). Understanding disparities in HIV infection between Black and White MSM in the United States. *AIDS*, 25, 1103-1112.
- Parks, C. (2001). African American same-gender-loving youths and families in urban schools. *Journal of Gay and Lesbian Social Services*, 13, 41-56. Doi: 10.1300/J041v13n03\_03
- Parks, C. (2004). Black men who have sex with men. *The Psychology of Prejudice and Discrimination: Bias Based on Gender and Sexual Orientation*, 3, 227-248.
- Paulhus, D. L. (1988). *Manual for Balanced Inventory of Desirable Responding*. Unpublished manual. University of British Columbia.
- Pescosolido, B., Martin, J., Lang, A., & Olafsdottir, S. (2008). Rethinking theoretical approaches to stigma: A framework integrating normative influences on stigma. *Social Science & Medicine*, 67, 431-440.
- Peterson, J., & Bakeman, R. (2001). Racial/ethnic patterns of HIV sexual risk behaviors among young men who have sex with men. *Journal of the Gay and Lesbian Medical Association*, 5, 155-162.
- Peterson, J., Bakeman, R., Blackshear, J., & Stokes, J. (2003). Perceptions of condom use among African American men who have sex with men. *Culture, Health, & Sexuality*, 5, 409-424.

- Philip, S. S., Yu, X., Donnell, D., Vittinghoff, E., & Buchbinder, S. (2010). Serosorting is associated with a decreased risk of HIV seroconversion in the EXPLORE Study Cohort. *PLoS One*, *5*(9), e12662.
- Popovic, M. Sarngadharan, M. G., Read, E., Gallo, R. C. (1984). Detection, isolation, and continuous production of cytopathic retroviruses (HTLV-III) from patients with AIDS and pre-AIDS. *Science*, *224*, 497-500.
- Preston, D. B., D'Augelli, A. R., Kassab, C. D., & Cain, R. E. (2004). The influence of stigma on the sexual risk behavior of rural men who have sex with men. *AIDS Education and Prevention*, *16*(4), 291.
- Preston, D., D'Augelli, A., Kassab, C., & Starks, M. (2007). The relationship of stigma to the sexual behavior of rural men who have sex with men. *AIDS Education & Prevention*, *19*, 218-230.
- Pyke, K. D. (2010). What is internalized racial oppression and why don't we study it? Acknowledging racism's hidden injuries. *Sociological Perspectives*, *53*(4), 551-572.
- Pyke, K., & Dang, T. (2003). "FOB" and "whitewashed": Identity and internalized racism among second generation Asian Americans. *Qualitative Sociology*, *26*(2), 147-172.
- Rea, L. M., & Parker, R. A. (2005). *Designing and constructing survey research*. San Francisco, CA: Jossey-Bass
- Remafedi, G., Farrow, J. A., & Deisher, R. W. (1991). Risk factors for attempted suicide in gay and bisexual youth. *Pediatrics*, *87*(6), 869-875.
- Rosario, M., Hunter, J., Maguen, S., Gwadz, M., & Smith, R. (2001). The coming-out process and its adaptational and health-related associations among gay, lesbian, and bisexual youths: Stipulation and exploration of a model. *American Journal of Community Psychology*, *29*(1), 133-160.
- Ross, M. & Rosser, B.R. (1996). Measurement and correlations of internalized homophobia: A factor analytic study. *Journal of Clinical Psychology*, *52*, 15-21.
- Ross, M. W., Rosser, B. S., Neumaier, E. R., & Positive Connections Team. (2008). The relationship of internalized homonegativity to unsafe sexual behavior in HIV seropositive men who have sex with men. *AIDS education and prevention: official publication of the International Society for AIDS Education*, *20*(6), 547.
- Russell, G. M., & Bohan, J. S. (2006). The Case of Internalized Homophobia Theory and/as Practice. *Theory & Psychology*, *16*(3), 343-366.



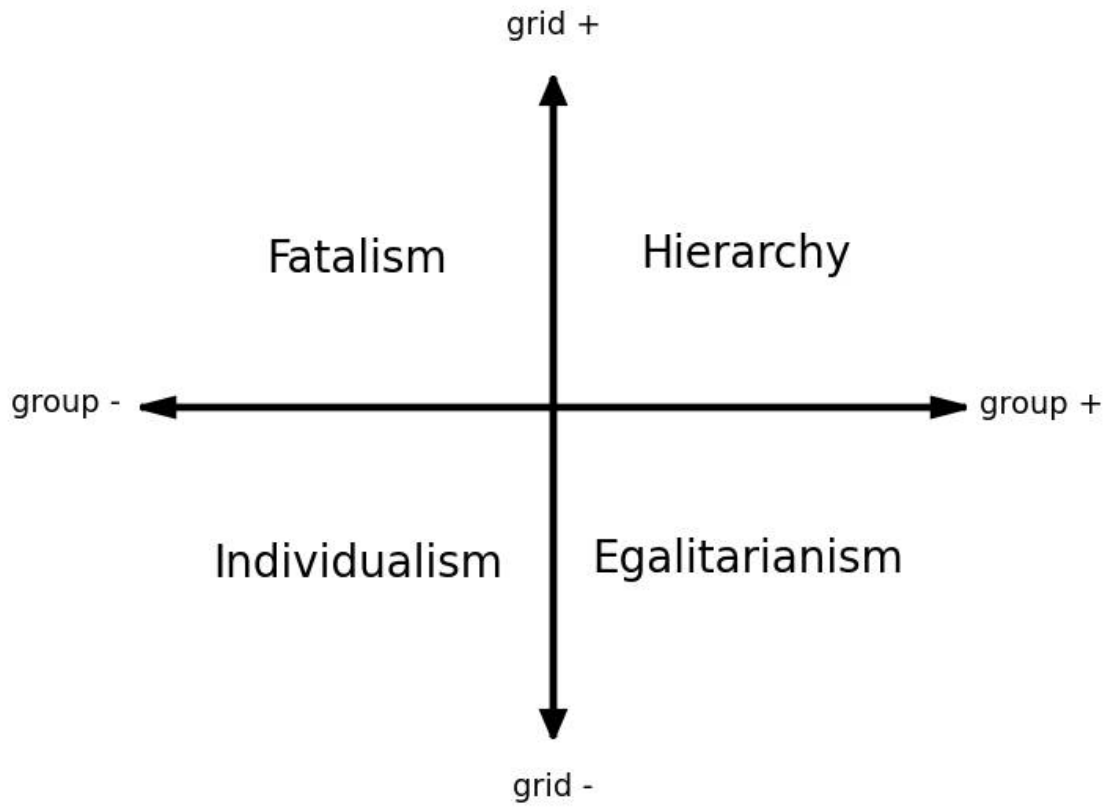
- Rust, P.C.R. (Ed.). (2000). *Bisexuality in the United States: A social science reader*. New York, NY: Columbia University Press.
- Sandfort, T. G. (1995). HIV/AIDS prevention and the impact of attitudes toward homosexuality and bisexuality. In Herek, G., & Greene, B. (eds.), *AIDS, psychology, and the lesbian and gay community* (pp. 32-54). Thousand Oaks, CA: Sage.
- Schroder, K. E., Carey, M. P., & Vanable, P. A. (2003). Methodological challenges in research on sexual risk behavior: II. Accuracy of self-reports. *Annals of behavioral medicine*, 26(2), 104-123.
- Schumacker, R. E., & Lomax, R. G. (1996). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Seibt, A. C., McAlister, A. L., Freeman, A. C., Krepcho, M. A., Hedrick, A. R., & Wilson, R. (1991). Condom use and sexual identity among men who have sex with men – Dallas. *MMRW Morb Mortal Wkly Rep*, 42, 7-14.
- Sellers, R. M., Rowley, S. A., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology*, 73, 805-815
- Senn, T. E., Carey, M. P., Vanable, P. A., Coury-Doniger, P., & Urban, M. (2009). Sexual partner concurrency among STI clinic patients with a steady partner: correlates and associations with condom use. *Sexually Transmitted Infections*, 85(5), 343-347. doi: 10.1136/sti.2009.035758.
- Shidlo, A. (1994). Internalized homophobia: Conceptual and empirical issues in measurement. In B. Greene & G. M. Herek (Eds.), *Lesbian and gay psychology: Vol. 1. Theory, research and clinical applications* (pp.176–205). Thousand Oaks, CA: Sage.
- Singer, M. (1996). A dose of drugs, a touch of violence, a case of AIDS: Conceptualizing the SAVA syndemic. *Free Inquiry in Creative Sociology*, 24(2), 99-110.
- Smith, W. (2012). Exploring dimensions of racism, homophobia, and social network as concomitant predictors of condom use in a sample of Black MSM. *Journal of Gay & Lesbian Social Services*, 24, 417-445.
- Smith, W. (2013). Exploring the validity and statistical utility of a racism scale among Black men who have sex with men: A pilot study. *American Journal of Mens Health*, 7, 362-373.

- Smolenski, D., Diamond, P., Ross, M., & Rosser, B.R. (2010). Revisions, criterion validity, and multigroup assessment of the reactions to homosexuality scale. *Journal of Personality Assessment*, *92*, 568-576.
- Snell, W. (1986). The masculine role inventory: Components and correlates. *Sex Roles*, *15*, 443-445.
- Solomon, D. J. (2001). Conducting web-based surveys. *Practical Assessment, Research, and Evaluation*, *7*(19). Retrieved from <http://pareonline.net/getvn.asp?v=7&n=19>
- Stall, R., Friedman, M., & Cantania, J. A. (2008). Interacting epidemics and gay men's health: A theory of syndemic production among urban gay men. In R. J. Wolitski, R. Stall, and R. O. Vadiserrri (Eds), *Unequal opportunity: Health disparities affecting gay and bisexual men in the United States* (pp.251-274). Oxford, England: Oxford University Press.
- Stall, R., Mills, T. C., Williamson, J., Hart, T., Greenwood, G., Paul, J., Pollack, L., . . . Cantania, J. A. (2003). Associations of co-occurring psychosocial health problems and increased vulnerability to HIV/AIDS among urban men who have sex with men. *American Journal of Public Health*, *93*(6), 939-942. Doi: 10.2105/AJPH.93.6.939
- Steinberg, D., & Colla, P. (1991). LOGIT: *A supplementary module for SYSTAT*. Evanston, IL: SYSTAT.
- Stokes, J., Venable, P., & McKirnan, D. (1997). Comparing gay and bisexual men on sexual behavior, condom use and psychosocial variables related to HIV/AIDS. *Archives of Sexual Behavior*, *26*, 383-397.
- Stokes, J., & Peterson, J. (1998). Homophobia, self-esteem, and risk for HIV among African American men who have sex with men. *AIDS Education and Prevention*, *10*, 278-292.
- Szymanski, D., & Gupta, A. (2009). Examining the relationship between multiple internalized oppressions and African American lesbian, gay, bisexual, and questioning person's self-esteem and psychological distress. *Journal of Counseling Psychology*, *56*, 110-118.
- Szymanski, D., Kashubeck –West, S., & Meyer, I. (2008). Internalized heterosexism: Measurement, psychological correlates, and research directions. *The Counseling Psychologist*, *36*, 525-574.
- Tabachnick, B. G., & Fidell, L. S. (Eds). (2013). *Using multivariate statistics (6<sup>th</sup> ed)*. Boston, MA: Pearson.

- Taylor, J. (1990). Relationship between internalized racism and marital satisfaction. *Journal of Black Psychology, 16*(2), 45-53.
- Taylor, J., & Grundy, C. (1996). Measuring Black internalization of White stereotypes about African Americans: The nadanolization scale. In R.L. Jones, (Ed), *Handbook of test and measures of Black populations, Vol 2*. Hampton, VA: Cobb & Henry.
- Taylor, J., Henderson, D., & Jackson, B. B. (1991). A holistic model for understanding and predicting depressive symptoms in african-american women. *Journal of Community Psychology, 19*(4), 306-320.
- Tieu, H., Murrill, C., Xu, G., & Koblin, B. A. (2009). Sexual partnering and HIV risk among Black men who have sex with men: New York. *Journal of Urban Health, 87*(1), 113-121. Doi: 10.1007/s11524-009-9416-x.
- Torian, L. V., Makki, H. A., Menzies, I. B., Murrill, C. S., & Weisfuse, I. B. (2002). HIV infection in men who have sex with men, New York City Department of Health sexually transmitted disease clinics, 1990–1999: a decade of serosurveillance finds that racial disparities and associations between HIV and gonorrhea persist. *Sexually Transmitted Diseases, 29*(2), 73-78.
- Tull, E. S., Sheu, Y. T., Butler, C., & Cornelious, K. (2005). Relationships between perceived stress, coping behavior and cortisol secretion in women with high and low levels of internalized racism. *Journal of the National Medical Association, 97*(2), 206.
- Valleroy, L. A., MacKellar, D. A., Karon, J. M., Rosen, D. H., McFarland, W., Shehan, D. A., ... & Thiede, H. (2000). HIV prevalence and associated risks in young men who have sex with men. *JAMA, 284*(2), 198-204.
- Van de Ven, P., Mao, L., Fogarty, A., Rawstorne, P., Crawford, J., Prestage, G., . . . & Kippax, S. (2005). Undetectable viral load is associated with sexual risk taking in HIV serodiscordant gay couples in Sydney. *AIDS, 19*(2), 179-184
- Vandiver, B., Worrell, F., & Delgado-Romero, E. (2009). A psychometric examination of multidimensional inventory of Black identity (MIBI) scores. *Assessment, 16*, 337-351.
- Wagner, G., Brondolo, E., & Rabkin, J. G. (1996). Internalized homophobia in a sample of HIV+ gay men, and its relationship to psychological distress, coping, and illness progression. *Journal of Homosexuality, 32*, 91-106
- Wagner, G., Serafini, J., Rabkin, J., Remien, R., & Williams, J. (1994). Integration of one's religion and homosexuality: A weapon against internalized homophobia? *Journal of Homosexuality, 26*, 91-104.

- Wang, H., Kao, G., & Joyner, K. (2004). Stability of interracial and intraracial romantic relationships among adolescents. *Social Science Research, 35*, 435-453.
- Watts-Jones, D. (2002). Healing Internalized Racism: The Role of a Within-Group Sanctuary Among People of African Descent. *Family Process, 41*(4), 591-601.
- Wester, S. R., Vogel, D. L., Wei, M., & McLain, R. (2006). African American men, gender role conflict, and psychological distress: The role of racial identity. *Journal of Counseling & Development, 84*(4), 419-429.
- Williamson, I. (2000). Internalized homophobia and health issues affecting lesbians and gay men. *Health Education Research, 15*, 97-107.
- Wilson, P. A., & Yoshikawa, H. (2004). Experiences of and responses to social discrimination among Asian and Pacific Islander gay men: Their relationship to HIV risk. *AIDS Education and Prevention, 16*(1: Special issue), 68.
- Wilton, L., Koblin, B., Nandi, V., Xu, G., Latkin, C., Seal, D., ... & Spikes, P. (2015). Correlates of seroadaptation strategies among Black men who have sex with men (MSM) in 4 US cities. *AIDS and Behavior, 19*(12), 2333-2346.
- Whitfield, D. L., Walls, N. E., Langenderfer-Magruder, L., & Clark, B. (2014). Queer is the new black? Not so much: Racial disparities in anti-LGBTQ discrimination. *Journal of Gay & Lesbian Social Services, 26*(4), 426-440.
- WHO. (2015). HIV/AIDS [fact sheet]. Retrieved from <http://www.who.int/mediacentre/factsheets/fs360/en/>
- Wolitski, R., J., & Fenton, K. A. (2011). Sexual health, HIV, and sexually transmitted infections among gay, bisexual, and other men who have sex with men in the United States. *AIDS and Behavior, 15*(Suppl 1), S9-S17. Doi: 10.1007/s10461-011-9901-6
- Wolitski, R., J., Stall, R., & Vadaserri, R. O. (Eds). (2008). *Unequal opportunity: Health disparities affecting gay and bisexual men in the United States*. Oxford, England: Oxford University Press.

**Appendix A: Cultural Theory of Risk Perception Grid – Group Typology**



## **Appendix B: Dissertation Survey Instrument**

### **Informed Consent**

Thank you for your interest in our study. This page contains more information.

Please read the consent form below and indicate whether or not you agree to participate.

#### *Informed Consent*

*You are being asked to be in an online survey for research. This form provides you with information about the study. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part.*

*Darren Whitfield, MSW, and doctoral student at the Graduate School of Social Work at the University of Denver is conducting the study.*

*You are being asked to participate because you have indicated that you are Black, a gay, bisexual, queer, or same-gender-loving man over the age of 18 years old. We ask that you read this form and contact us with any questions you may have before completing the survey.*

*If you agree to participate you will complete a survey related to experiences of racism, homophobia, and your sexual behavior practices. The goal of the study is to understand how psychosocial and cultural factors influence sexual behavior. Results will be used to understand the association between how experiences of*

*homophobia and racism influence behavioral decisions. The principle investigator conducting this study is Darren Whitfield can be reached at 314-610-2903 or [Darren.whitfield@du.edu](mailto:Darren.whitfield@du.edu).*

*Participating in this study is completely voluntary. Participation in this study should take approximately 30 minutes of your time. Participation will involve completing a questionnaire about your experience as a Black gay male. The researchers have taken steps to minimize the risks of this study. Even so, you may still experience some risks related to your participation, even when researchers are careful to avoid them. These risks may include some discomfort from answering questions about your experiences with racism, homophobia, and your sexual practices as well as potential breaches of confidentiality. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled*

*If you agree to take part in this study, there will be no direct benefit to you. However, information gathered in this study may provide insight into how experiences of racism and homophobia influence the sexual practices of Black gay men and assist in developing interventions to mitigate these effects in the future. You will not be compensated for your participation in the study. You will not be expected to pay any costs related to the study.*

*This survey is being hosted by SurveyGizmo and involves a secure connection.*

*Terms of Service, addressing confidentiality, may be viewed at*

*<http://www.surveygizmo.com/survey-software-features/security-reliability/>*

*To safeguard your information, your name will not be attached to any data, but a study number will be used instead. Your IP address will not be collected from the study platform. The data will be kept on a password-protected computer and storage device using special software that scrambles the information so that no one can read it. The researchers will retain the data only until the completion of research activities.*

*The data will be made available to other researchers for other studies following the completion of this research study and will not contain information that could identify you such as your name. The results from the research may be shared at a meeting. The results from the research may be in published articles. Your individual identity will be kept private when information is presented or published. Although we will do everything we can to keep your records a secret, confidentiality cannot be guaranteed. Others may look at both the records that identify you and the consent form signed by you.*

- *Federal agencies that monitor human subject research*
- *Human Subject Research Committee*



*All of these people are required to keep your identity confidential. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.*

*The researcher carrying out this study is Darren Whitfield, MSW. You may ask any questions you have prior to taking the survey by emailing [Darren.Whitfield@du.edu](mailto:Darren.Whitfield@du.edu) or 314-610-2903. If you have questions later, you may call Darren Whitfield at 314-610-2903.*

*If the researchers cannot be reached, or if you would like to talk to someone other than the researcher(s) about; (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) research-related injuries, or (4) other human subjects issues, you may contact the Chair of the Institutional Review Board for the Protection of Human Subjects, at 303-871-4015 or by emailing [IRBChair@du.edu](mailto:IRBChair@du.edu), or you may contact the Office for Research Compliance by emailing [IRBAdmin@du.edu](mailto:IRBAdmin@du.edu), calling 303-871-4050 or in writing (University of Denver, Office of Research and Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121).*

*If you want a copy of this consent for your records, you can print it from the screen. If you would you like documentation linking you to this research study, please email your request to the Principal Investigator at*

*Darren.whitfield@du.edu.*

*If you wish to participate, please select the Accept button below to begin the survey.*

*If you do not wish to participate in this study, please select the Decline button, and your session will end. \**

Accept

Decline

## Pre-Survey Questions

Tell us a little about yourself.

1) What is your age?

2) What is your racial/ethnic background? (Select all that apply)\*

Asian/Pacific Islander

American Indian/Alaskan Native

Black/ African American

Hispanic/Latino

White/Caucasian

Other (required):

3) Do you consider yourself?\*

Male

Female

Transgender

4) Do you consider yourself as:\*

Heterosexual "Straight"

Homosexual "Gay"

Same-gender-loving

Bisexual

Queer

Other (required):

5) In the past 12 months have you had oral or anal sex with a man?\*

Yes

No

## **Background Information**

The next set of questions is designed to help us get to know you better. Remember all of your information is confidential.

6) What state do you reside in?\*

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota

- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

7) What is your zipcode?

8) What is your current relationship status?

- Single
- Casually dating
- In a monogamous relationship
- In an open relationship
- Married
- Divorced
- Prefer not to answer

9) What is the highest level of education you have completed?

- Never attended school
- Less than high school
- High school diploma or GED
- Some college, associates degree, vocational/technical college
- College graduate
- Post graduate degree
- Prefer not to answer

10) How would you describe your current work situation?

- Part-time job
- Full-time job
- Full-time student
- Homemaker
- Retired
- Unable to work because of a disability
- Unemployed

Prefer not to answer

11) What was your annual (yearly) household income last year from all sources before taxes?

\$0 - \$4,999

\$5,000 - \$9,999

\$10,000 - \$19,999

\$20,000 - \$29,999

\$30,000 - \$39,999

\$40,000 - \$49,999

\$50,000 - \$74,999

\$75,000 or more

Prefer not to answer

### Perceived Masculinity

14) The items below inquire about some of your attitudes and opinions. For each item indicate how much you agree or disagree with each statement. (As used in the following statements, the phrase close relationship refers to the interactions that take place between two people who choose to see each other on a relatively exclusive basis.) Use the following scale for your responses.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
Close relationships can detract from career developments.	( )	( )	( )	( )	( )
I don't devote too much time to personal relationships.	( )	( )	( )	( )	( )
A close relationship may cause others to think I lack success potential.	( )	( )	( )	( )	( )
I avoid discussing my feelings because others might think I am weak.	( )	( )	( )	( )	( )
Even if I have	( )	( )	( )	( )	( )



known someone for a long time, I still prefer not to talk about the more private aspects of myself.					
I sometimes assume an indifferent attitude toward loving someone; otherwise, people might consider me immature.	( )	( )	( )	( )	( )
I am somewhat hesitant to commit myself to another people.	( )	( )	( )	( )	( )
A successful career means more to me than a successful close relationship.	( )	( )	( )	( )	( )
It is impractical for people to make long-range commitments in a close relationship, until they have started a career.	( )	( )	( )	( )	( )
I would be tempted to end a relationship if my partner asked me	( )	( )	( )	( )	( )

to devote any more time to her/him.					
There are career drawbacks associated with investing oneself in a relationship.	( )	( )	( )	( )	( )
It is easy for me to express feelings openly to someone close to me.	( )	( )	( )	( )	( )
I don't search for too much personal fulfillment from a relationship with another person, because of the potential cost to my ambitions.	( )	( )	( )	( )	( )
If I committed myself to another person, I would not have enough time to wholeheartedly pursue a career.	( )	( )	( )	( )	( )
I prefer not to be emotionally involved with another person.	( )	( )	( )	( )	( )
There are	( )	( )	( )	( )	( )

professional costs associated with sustaining a close relationship.					
Strong involvement in a love relationship will ultimately interfere with career activities.	( )	( )	( )	( )	( )
It's costly to admit that one is emotionally upset.	( )	( )	( )	( )	( )
If people thought of me as a sensitive person, they might exploit me.	( )	( )	( )	( )	( )
A person would be wise not to display any affection for his/her friends.	( )	( )	( )	( )	( )
If people knew how strongly I respond to other's feelings, they would consider me a "soft" person.	( )	( )	( )	( )	( )
I would prefer that others not think of me as a kind person.	( )	( )	( )	( )	( )

People who are sensitive cannot be effective leaders.	( )	( )	( )	( )	( )
In order to become a successful person, it is important not to show emotional weakness.	( )	( )	( )	( )	( )
People cannot succeed in business unless they suppress their sensitivity to other people's feelings.	( )	( )	( )	( )	( )
If I were involved in an affectionate relationship, I would not have enough time left over to develop my career.	( )	( )	( )	( )	( )
If others know how you really feel, your career can be hurt.	( )	( )	( )	( )	( )
People who cry will not get anywhere in the working world.	( )	( )	( )	( )	( )
I am comfortable	( )	( )	( )	( )	( )

with the idea of committing myself to another person.					
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## **HIV Testing History**

15) Have you been tested for HIV

Yes

No

16) When was your most recent HIV test?

Month:

January

February

March

April

May

June

July

August

September

October

November

December

Year::

17) What was the result of your most recent HIV test?

Negative

Positive

Indeterminate/Inconclusive

Did not get the results of my last HIV test

## **HIV Risk Behavior**

The following questions are about having oral or anal sex with other men in the past 12 months. For this study oral sex is defined as putting the mouth on the penis and anal sex is putting the penis in the anus (butt). Remember all your information will be kept private.

18) During the past 12 months, with how many men did you have oral or anal sex with?

19) Were any of these male sex partners an exchange partner? That is a partner you had sex with in exchange for money, drugs, food, or something else of value.

Yes

No

Now we are going to ask you about your experiences with having sex with male partners in the past 30 days.

20) In the past 30 days have you had oral or anal sex with a man?

Yes

No

21) With how many men have you had oral or anal sex with in the past 30 days?

22) In the past 30 days, what type of sexual activity have you engaged in?

Oral sex only

Anal sex only

Both oral and anal sex

I did not have sex in the past 30 days

23) In the past 30 days, when having oral sex, how frequently did you use condoms?

Never

Rarely

Sometimes

Often

All the time

24) In the past 30 days, did you have receptive anal sex, where you were the "bottom"?

Yes

No

25) In the past 30 days, when having receptive anal sex "bottoming", how frequent did you use a condom?

Never

Rarely

Sometimes

Often

All of the time

26) In the past 30 days, did you have insertive anal sex, where you were the "top"?

Yes

No

27) In the past 30 days, when having insertive anal sex "topping", how frequent did you use a condom?

Never

Rarely



- Sometimes
- Often
- All of the time

## Drug Use

The next question is about your experiences with using drugs or alcohol in the past 30 days. Please remember your answers will be kept private.

28) In the past 30 days, did you use any of the following drugs drug, immediately before, or after having oral or anal sex?

	<b>Yes</b>	<b>No</b>
Alcohol	( )	( )
Marijuana (pot, weed, Mary Jane)	( )	( )
Crack (dope, rocks)	( )	( )
Cocaine (blow, snow, coke)	( )	( )
Heroin	( )	( )
Methamphetamine (crystal, meth, Tina)	( )	( )
GHB	( )	( )
Ecstasy (E, X)	( )	( )
Poppers	( )	( )
Ketamine (Special K)	( )	( )
Prescription drugs	( )	( )

## HIV Self-Efficacy

The next questions are about practices you may have engaged in. please remember your responses will be kept private.

29) Below is a list of sexual practices. Please read each statement and respond by indicating your degree or engaging in each of these practices.

	Never	Rarely	Sometimes	Most of the time	Always
I talk about safe sex with my partner(s).	( )	( )	( )	( )	( )
I ask my sex partner(s) about their sexual histories.	( )	( )	( )	( )	( )
I refuse to have sex with a partner when I don't know their sexual history.	( )	( )	( )	( )	( )
If I know meeting someone might lead to sex, I bring condoms and other safer sex supplies with me.	( )	( )	( )	( )	( )
If my partner declines to use a condom for anal sex, I refuse to have anal sex with him.	( )	( )	( )	( )	( )
I ask my sexual partner(s) about their HIV status before having anal sex.	( )	( )	( )	( )	( )
If I have questions about HIV/AIDS or	( )	( )	( )	( )	( )

other STI's, I feel confident finding out the information I need.					
I know where and how to access HIV testing and other services if needed.	( )	( )	( )	( )	( )

### **Risk Reduction Strategies**

30) Are you currently taking pre-exposure prophylaxis, also known as PreP or Truvada?

- Yes, currently taking it.
- No, but have taken it in the past.
- No, never taken pre-exposure prophylaxis.

31) When having either oral or anal sex with someone who is HIV+ , do you ask your sexual partner about their viral load?

- Yes
- Maybe
- No

32) Do you only have sex with individuals who have the same HIV status as yourself?

- Yes
- No
- Don't know

### **Most Recent Sexual Partner**

The next set of questions are about the last person you had anal sex with. Please take a moment to recall the last person you had anal sex with regardless of the sexual position at the time. Remember your responses will be kept private.

33) To help you recall the last person you had sex with; please indicate a nickname for the individual. Choose any name that will help you remember the person.

Now we would like to get some information from you about the last person you had anal sex with. Remember your responses will be kept private.

### **Partner Demographics**

34) Which best describes [question("value"), id="190"]'s race/ethnicity?

- Asian/Pacific Islander
- American Indian/Alaskan Native
- African American/Black
- Hispanic/Latino
- White/Caucasian
- Mixed Race
- Don't know

35) Which best describes [question("value"), id="190"]'s age?

- Younger than you
- The same age as you
- Older than you

36) How much younger was [question("value"), id="190"] than you?

- 2- 5 years younger
- 5 - 10 years younger
- 10+ years younger

37) How much older was [question("value"), id="190"] than you?

- 2 - 5 years older
- 5 - 10 years older
- 10+ years older

38) To what degree was [question("value"), id="190"] masculine or feminine?

0 \_\_\_\_\_ [ ] \_\_\_\_\_ 100

## Partner Description

Now we would like to ask you some questions about your relationship with \_\_\_\_.

Please remember your responses will be kept private.

39) Would you describe [question("value"), id="190"] as a main partner or a causal partner? A main partner is someone who you feel committed to, someone you know well. You might call this person a boyfriend, significant other, life partner, or husband. A causal partner is a partner who you don't know well or feel committed to.

Causal partner

Main partner

40) Did you have sex with [question("value"), id="190"] once or more than once in the last 6 months?

Once

More than once

41) If you had to describe the type of sexual partner [question("value"), id="190"] is/was, which of the following best describe the relationship?

Someone who is a primary sex partner.

Someone you have sex with on a regular basis, but not your primary partner.

Someone you have had sex with more than once but not on a regular basis.

Someone you had sex with only one time but could contact again if necessary.

Someone you have never met before you had sex with and never plan to see again.

Someone you gave money or other good in exchange for sex.

42) Where did you first meet [question("value"), id="190"]?

Through friends or family

At school or work

At a party

- At a bar/club
- Online or through a mobile app
- Cruising area
- At an adult bookstore/bathhouse/sex club
- Social organization or community event
- Other (required): \_\_\_\_\_ \*

43) If you met [question("value"), id="190"] online or through a mobile app, what specific website or mobile app was it?

- Adam4Adam
- BGCLive
- Craigslist
- Facebook
- Grindr
- Jack'd
- Manhunt
- OkCupid
- Scuff
- Other (required): \_\_\_\_\_ \*

**Partner HIV Behavior**

44) Did you and [question("value"), id="190"] share both of your HIV statuses before you had sex?

- Yes
- No
- Don't know

45) What was [question("value"), id="190"] HIV status when you first met?

- HIV negative
- HIV positive



Don't know

46) The last time you had sex with [question("value"), id="190"] what type of sex did you have?

Oral sex

Anal sex

Both oral and anal sex

47) During anal sex, which sexual position did you participate in with [question("value"), id="190"]?

Insertive partner "topping"

Receptive partner "bottoming"

Both insertive and receptive partner

48) During the last time you had anal sex with [question("value"), id="190"] when you were the insertive partner "top" did you use a condom?

Did not use a condom

Used a condom part of the time

Used a condom the whole time

Used a condom but it broke

49) During the last time you had anal sex with [question("value"), id="190"] when you were the receptive partner "bottom" did you use a condom?

Did not use a condom

Used a condom part of the time

Used a condom the whole time

Used a condom but it broke

## Internalized Homophobia Scale

50) The following are some statements that individuals can make about being gay.

Please read each one carefully and decide the extent to which you agree with the statements. Select the options that best reflects how much you agree or disagree with the statement.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
Being gay is a natural expression in human males.	( )	( )	( )	( )	( )
I wish I were heterosexual.	( )	( )	( )	( )	( )
When I am sexually attracted to another gay man, I do not mind if someone else knows how I feel.	( )	( )	( )	( )	( )
Most problems that gay men have come from their status as an oppressed minority, not from their sexuality, per se.	( )	( )	( )	( )	( )

Life as a gay man is not as fulfilling as life as a heterosexual man.	( )	( )	( )	( )	( )
I am glad to be gay.	( )	( )	( )	( )	( )
Whenever I think a lot about being gay, I feel critical about myself.	( )	( )	( )	( )	( )
I am confident that my sexuality does not make me inferior.	( )	( )	( )	( )	( )
Whenever I think a lot about being gay, I feel depressed.	( )	( )	( )	( )	( )
If it were possible, I would accept the opportunity to be straight.	( )	( )	( )	( )	( )
I wish I could be more sexually attracted to women.	( )	( )	( )	( )	( )
If there were a pill that could change my sexual orientation, I	( )	( )	( )	( )	( )

would take it.					
I would not give up being gay even if I could.	( )	( )	( )	( )	( )
Being gay is seen as a bad thing in society.	( )	( )	( )	( )	( )
It would bother me if I had children who were gay.	( )	( )	( )	( )	( )
Being gay is a satisfactory and acceptable way of life for me.	( )	( )	( )	( )	( )
Straight people are happier than gay people.	( )	( )	( )	( )	( )
Most gay men end up lonely.	( )	( )	( )	( )	( )
For the most part, I do not care who knows I am gay.	( )	( )	( )	( )	( )
I have no regrets about being gay.	( )	( )	( )	( )	( )

## Reactions to Homosexuality Scale

51) Please indicate how strongly you agree or disagree with each statement. 1 means strongly disagree and 7 means strongly agree.

Even if I could change my sexual orientation, I wouldn't/
I feel comfortable in gay bars.
I feel comfortable discussing homosexuality in a public situation.
Homosexuality is as natural as heterosexuality.
I feel comfortable being seen in public with an obviously gay person.
Social situations with gay men make me uncomfortable.
I feel comfortable being a homosexual man.

## Nadanolitization Scale

52) For each of the following items, please mark the extent in which you agree or disagree with each of the statements using the 8-point point scale. For the scale,0 means not at all agree and 8 means entirely agree.

African Americans are superstitious.
African Americans can be accepted as intimate friends.
Attending a dinner party in honor of a famous Black person would be fun.
African Americans are born with greater sexual desire than White people.
Racial differences explain why African Americans don't live as long as Whites.
It is difficult to tell one Black person from another Black person.
Voting for a Black political seems only right.
Making physical love with a Black person can be exciting.
Differences in inheritance are a main reason why African Americans and Whites should remain separate.
It is more embarrassing to lose a game to a White person than to a Black person.
It is easy to work for someone Black.
African Americans are welcome at my house.
Black men have greater sexual drive than White men.
African Americans are more industrious than Whites.
Voting privileges should be extended more actively to African Americans.
The ideas of African Americans are to be admired.

African Americans are born with greater physical strength and endurance than Whites.
Eating in a Black person's home can be interesting.
African Americans are more sportsmanlike than Whites.
When it comes to figures and figuring, African Americans seldom are able to measure up to Whites.
Whites are superior to African Americans.
African Americans are sloppier than Whites.
African Americans act alike.
Working for a Black person would be acceptable.
African Americans are less reliable than Whites.
Racial differences explain why Europeans are technologically more advanced than Africans.
African Americans are more religious than Whites.
Genetic inferiority explains why more African Americans than Whites drop out of school.
The school dropout problem among African Americans is due to their not having the mental power of Whites.
African Americans are born with more musical talent than Whites.
The Black race is mentally unable to contribute more towards the American's progress.
African Americans are mentally unable to assume positions of high responsibility.
Being in the company of a large number of African Americans can be frightening.
African Americans are just as smart as Whites.
The high percentage of African Americans in jail reflects inborn tendencies towards criminality.
Whites are better at reasoning than African Americans.
Black people are born with greater rhythm than White people.

The inborn physical ability of African Americans makes it hard to beat them at athletics.
Race is an important factor in explaining why Whites have succeeded more than African Americans.
Being partners with a Black in an athletic or card game is okay.
African Americans are more ignorant than Whites.
Working for a Black person would create inner tension.
African Americans are carefree, happy-go-lucky.
The high incidence of crime among African Americans reflects a genetic abnormality.
Black men are better at sex than White men.
The Black man's body is more skillful than his mind.
The large number of African Americans addicted to drugs suggests a form of biological weakness.
Giving a Black person top priority for employment seems only fair.
Black women are more sexually open and willing than White women.



## IROS

53) The following statements reflect some beliefs, opinions, and attitudes. Read each statement carefully and give your honest feelings about the beliefs and attitudes expressed. Indicate the extent to which you agree or disagree using the following scale. There are no right or wrong answers. 1 means strongly disagree and 5 means strongly agree.

I wish I looked more White.
There were universities and other learning centers in Africa more than 2000 years ago.
I would like a partner with lighter skin, to insure that my children will have lighter skin.
Most criminals are Black men.
Straight hair is better than my natural hair texture.
African people have no written history.
Black women are confrontational.
The first mathematicians and scientists were European.
I prefer my hair to be natural.
It is okay to straighten or relax my hair.
The earliest civilizations were in Africa.
Having full lips is not attractive to me.
Earlier Egyptians were either White or Arabic.
It is okay for Black people to change their appearance through surgery.
There were no institutions of higher learning in ancient Africa.
There were Africans in the Americas prior to Europeans.

I wish my nose were narrower.
Black people are lazy.
It is fine to use skin care products to lighten skin color.
Cannibalism was widely practiced in Africa.
I wish my skin were lighter than it is now.
I texturize my hair.
Money management is something that Black people cannot do.
Lighter skin is more attractive.
Most Black people are on welfare.
Black men are irresponsible.
I like it when my partner wears his or her hair natural.

## BIDR

54) Using the scale below as a guide, select how much you agree or disagree with each statement. For the scale, 0 means strongly disagree and 8 strongly agree.

My first impressions of people usually turn out to be right.
It would be hard for me to break any of my bad habits.
I don't care to know what other people really think of me.
I have not always been honest with myself.
I always know why I think things.
When my emotions are aroused, it biases my thinking.
Once I've made up my mind, other people can seldom change my opinion.
I am not a safe driver when I exceed the speed limit.
I am fully in control of my own fate.
It's hard for me to shut off a disturbing thought.
I never regret my decisions.
I sometimes lose out on things because I can't make up my mind soon enough.
The reason I vote is because my vote can make a difference.
My parents were not always fair when they punished me.
I am a completely rational person.
I rarely appreciate criticism.

I am very confident in my judgments.
I have sometimes doubted my ability as a lover.
It's all right with me if some people happen to dislike me.
I don't always know the reason why I do things I do.
I sometimes tell lies if I have to.
I never cover up my mistakes.
There have been occasions when I have take advantage of someone.
I never swear.
I sometimes try to get even rather than forgive and forget.
I always obey laws, even if I'm unlikely to get caught.
I have said something bad about a friend behind his or her back.
When I hear people talking privately, I avoid listening.
I have received too much change from a salesperson without telling him or her.

## **Referral Source**

55) How did you hear about this study?

- Facebook
- Grindr
- Adam4Adam
- Manhunt
- Jack'd
- Community-based organization / service provider
- Other research study
- Other

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## **Resource Page**

If you would like to talk to someone about your experience today or need resources you can reach the principal investigator of this study at [darren.whitfield@du.edu](mailto:darren.whitfield@du.edu). You can also find resources in your area by contacting the your local HIV/AIDS Hotline here.

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## **Thank You!**

Thank you for taking our survey. Your response is very important to us.

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