

AN ABSTRACT OF THE DISSERTATION OF

Daniel P. Dowhower for the degree of Doctor of Philosophy in Public Health presented on May 7, 2018.

Title: Examining Discrimination, HIV/AIDS Conspiracy Beliefs, and Condom Use Among a Diverse Sample of Young Adults

Abstract approved:

S. Marie Harvey

Racial/ethnic discrimination and HIV/AIDS conspiracy beliefs may contribute to disparities in use and satisfaction with healthcare services and engaging in safer sex practices. Previous studies that examined racial/ethnic discrimination and HIV/AIDS conspiracy beliefs focused primarily on African Americans with few studies focusing on Latinos. This study used longitudinal data from in-person structured interviews with 450 Latino, Black, and White young adults from East Los Angeles, California. The sample was equally represented by race/ethnicity (Latino 33%, Black 34%, and White 33%). We collected data on perceptions of discrimination in a daily context (EOD), in interactions with healthcare providers (HDS), HIV/AIDS conspiracy beliefs (HCB), condom use at baseline and four months post-baseline, condom use self-efficacy, sexual decision-making, perceived risk for HIV/STIs, and demographic characteristics. The first aim was to examine if and how race is associated with Experiences of Discrimination (EOD), Perceived Healthcare Discrimination (HDS), and HIV/AIDS-Conspiracy Beliefs (HCB) and if and how gender moderates this relationship while controlling for number of children, age, education and working outside of the home. The second aim was to

investigate if and how EOD, HDS, and HCB were associated with condom use overall and by race, gender, and race by gender.

For Aim 1, logistic and linear regressions were used to examine the association between discrimination and endorsing HCB by race and by gender. Multivariable models, adjusting for all demographic covariates, investigated if race/ethnicity and gender were associated with EOD, HDS, and HCB and if the association between race/ethnicity and EOD, HDS, and HCB varied by gender. For Aim 2, bivariate relationships between condom use at Time 2 and all covariates were examined using simple logistic regression. Multivariable models, adjusting for all covariates investigated if EOD, HDS, and HCB were associated with condom use at Time 2.

We found that Blacks and Latinos reported more experiences of everyday and healthcare discrimination in almost all forms and endorsed more HIV/AIDS conspiracy beliefs compared to Whites. Additionally, Black and Latino men reported stronger feelings of everyday discrimination than their female counterparts. Also, more reports of experiences of healthcare discrimination and endorsement of HIV/AIDS conspiracy beliefs were found for Blacks, Latinos, and participants with children compared to their counterparts. However, everyday discrimination, healthcare discrimination, and endorsement of HIV/AIDS conspiracy beliefs did not predict future condom use among a sample of Blacks, Latinos, and Whites. We did find, however, that among women, exposure to everyday discrimination did predict future condom use and that past condom use predicted future condom use for all racial and both gender groups.

This study contributes to a growing understanding of how different racial/ethnic groups experience discrimination across various settings and everyday activities and their

endorsement of HIV/AIDS conspiracy beliefs. Notably, we included Latinos who have, outside of immigration issues, been underrepresented from the broader discrimination literature. The field of Public Health must address the problems of racism and discrimination like any other toxic pathogen. In so doing, Public Health becomes proactive in its efforts to mitigate the effects of racial discriminations on population health.

©Copyright by Daniel P. Dowhower
May 7, 2018
All Rights Reserved

Examining Discrimination, HIV/AIDS Conspiracy Beliefs, and Condom Use
Among a Diverse Sample of Young Adults

by
Daniel P. Dowhower

A DISSERTATION

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

Presented May 7, 2018
Commencement June 2018

Doctor of Philosophy dissertation of Daniel P. Dowhower presented on May 7, 2018.

APPROVED:

Major Professor, representing Public Health

Director of School of Social and Behavioral Health Sciences

Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Daniel P. Dowhower, Author

ACKNOWLEDGEMENTS

I have decided to stick with love. Hate is too great a burden to bear.

Martin Luther King, Jr.

I am the luckiest man alive.

Marie Harvey, my chair, mentor and friend, thank you for believing in me, pushing me, challenging me, and your honesty and support. I came to you broken and you gave me wings. You lifted me up, helped me right my course, and, most importantly, taught me how to avoid rabbit holes. You have been a light during dark times and reminded me the importance of acknowledging and celebrating every success. You have been a gift to me and the key to my successful completion.

Adam Branscum, Brian Flay, Kathy Gunter, and Michelle Odden, you are my dream committee. You have played and continue to play a significant role in my education and my life. You have opened your hearts to me. Your generosity of time, incredible ability to translate my anxious diatribes into action plans, and allowing me to wonder and wander has not gone unnoticed. You will always hold a very special place in my heart.

I have a number of friends to thank. First, Lisa Oakley you have been my person during this entire journey. Thank you for being my counselor, confidant, and my friend. I am so grateful for you and look forward to many more years of celebrations. I also need to say thank you to Karen Elliott my greatest cheerleader. Karen Hooker and Sheryl Thorburn thank you both for your source of support and encouragement. Rose Locklear

(aka Ike) you know how I feel about you. Rory VanGarde your support has meant so much to me. You are all very, very special people.

Jolene and Dean Dowhower you are the best parents in the world. I know I posed an interesting challenge for you but you took me in stride, encouraged me to do more, and always, always made me feel safe, loved, and wanted. Dad you taught me the meaning of hard work, honesty, and integrity. Mom you taught me courage, strength, confidence and how to traverse challenging times with humor. You are both such inherently good people, the best people. My goal in life has always been to make you proud. I want you to be as proud of me as I am of you. I love you. Thank you, thank you, and thank you.

I dedicate this work to my children and my husband. Rick, Maya, and Mario you are truly the core of my heart and soul. Rick, you are my one true love and soul mate - "I must have been Ghandi or Buddha....I must have done something great to get to have you." I love you to the moon and back and have ever since the day we met. Maya and Mario, I chose this topic because I want a better world for you. You have given me so much, grounded me, and made me a better person. You are my treasures. I will always fight for our happiness and safety.

The Project on Partner Dynamics, which was funded by a Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) grant (R01 HD047151; PI: S. Marie Harvey). This analysis was funded through an additional NICHD grant (R03 HD07789; PI: S. Marie Harvey).

TABLE OF CONTENTS

	<u>Page</u>
Chapter 1. Introduction	1
Reducing High-Risk Sexual Behavior is a Public Health Priority	1
Expanding Beyond Individual-Level Constructs	2
Perceived Discrimination and HIV/AIDS Conspiracy Beliefs	3
Research Gap	6
Study Purpose and Specific Aims	6
Specific Aims	7
Chapter 2. Literature Review	8
STI and HIV Prevalence	8
Factors Associated with Condom Use	10
Moving Beyond the Individual: Experience of Discrimination, Perceived Healthcare Discrimination, and HIV/AIDS Conspiracy Beliefs	14
Theoretical Perspective	18
Gaps and Limitations in the Current Research	20
Specific Aims and Hypotheses	21
Chapter 3. Methods	23
Overview	23
Participants	23
Data Collection	24
Measures	25

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Primary Independent and Dependent Variables.	25
Experiences of Discrimination	25
Perceived Healthcare Discrimination	26
HIV/AIDS Conspiracy Beliefs	26
Condom Use.....	27
Covariates	27
Condom use self-efficacy	27
Sexual decision-making	28
Perceived risk for STI/HIV	28
Sexual risk behaviors.....	29
Age at first sex	29
Number of lifetime sexual partners.....	29
STI/HIV testing.....	29
Sociodemographics	29
Analytic Plan.....	29
Sample Selection.....	29
Analytic Plan for Aim 1	30
Analytic Plan for Aim 2	31
Chapter 4. Results	32
Results for AIM 1	32
Descriptive Statistics	32

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Demographics	32
Everyday and Healthcare Discrimination	32
HIV/AIDS Conspiracy Beliefs	34
Bivariate Associations	34
Perceived everyday discrimination and race/ethnicity	34
Perceived everyday discrimination and gender	38
Perceived healthcare discrimination and race/ethnicity	40
Perceived healthcare discrimination and gender	40
HIV/AIDS conspiracy beliefs and race/ethnicity	40
HIV/AIDS conspiracy beliefs and gender	42
Ordinal Logistic Regression Model: Associations with EOD	42
Multivariable Regression Model: Associations with HDS	45
Multivariable Regression Model: Associations with HCB	47
Results AIM 2	49
Descriptive Statistics	49
Demographics	49
Bivariate Associations	49
Logistic Regression Model: Predicting Condom Use at Time 2	51
Chapter 5. Discussion	58
Summary of Findings	58
Perceived Everyday and Healthcare Discrimination	59

TABLE OF CONTENTS (Continued)

	<u>Page</u>
HIV/AIDS Conspiracy Beliefs	63
Limitations and Strengths	65
Implications	67
Implications for Public Health Research	68
Implications for Public Health	71
Conclusion	72
References.....	73
Appendices.....	100

LIST OF FIGURES

Figure	<u>Page</u>
1. Diagram of Sample Development	30

LIST OF TABLES

Table	<u>Page</u>
1. Demographic Characteristics of Participants	33
2. Descriptive Statistics for Experiences of Discrimination.....	35
3. Descriptive Statistics for HIV/AIDS Conspiracy Beliefs	36
4. Bivariate Associations between Discrimination and Race/Ethnicity	37
5. Bivariate Associations between Discrimination and Gender	39
6. Bivariate Associations between HIV/AIDS Conspiracy Beliefs and Race/Ethnicity.....	43
7. Bivariate Associations between HIV/AIDS Conspiracy Beliefs and Gender	44
8. Results from Ordinal Logistic Regression Models: Factors Associated with levels of Perceived Everyday Discrimination	46
9. Results from Multivariate Linear Regression Models: Factors associated with Perceived Healthcare Discrimination and HIV/AIDS Conspiracy Beliefs	48
10. Descriptive Information: Demographic, Partner-specific Individual Factors, Discrimination and HIV Conspiracy Beliefs by Race and by Gender.....	50
11. Bivariate Associations Between Condom Use at Time 2: Demographics, Partner- Specific Individual Factors, Discrimination and HIV/AIDS Conspiracy Beliefs Overall Sample and by Race.....	52
12. Bivariate Associations Between Condom Use at Time 2: Demographic, Partner Specific Individual Factors, Discrimination and HIV/AIDS Conspiracy Beliefs Overall Sample and by Gender	53
13. Factors Associated with Condom Use at Time 2 in a Multivariable Logistic Regression	54
14. Factors Associated with Condom Use at Time 2 in Multivariable Logistic Regressions, separately by Race	56
15. Factors Associated with Condom Use at Time 2 in Multivariable Logistic Regressions, separately by Gender	57

Examining Discrimination, HIV/AIDS Conspiracy Beliefs, and Condom Use
Among a Diverse Sample of Young Adults

CHAPTER 1: INTRODUCTION

Reducing High-Risk Sexual Behavior is a Public Health Priority

More than 30 years after the beginning of the Human Immunodeficiency Virus (HIV) epidemic, HIV remains a significant public health problem. The Centers for Disease Control and Prevention (CDC) estimates around 40,000 people contract HIV each year (CDC, 2016). When compared to Whites, minority groups, across all races, contract HIV and other sexually transmitted infections (STIs) at a significantly higher rate, and Blacks continue to experience the greatest burden of HIV when compared to other races and ethnicities (CDC, 2016). In 2015, Blacks accounted for 45% of incident cases of HIV while only representing 12% of the population. Similarly, Latinos represented 18% of the U.S. population, but accounted for 24% of incident cases of HIV (CDC, 2015). These high rates of racial disparities are especially concerning because Blacks and Latinos are far more likely to become infected with HIV but remain undiagnosed much longer than their White counterparts (Chen, Rhodes, Hall, Kilmarx, Branson, et al., 2012).

Although a majority of new HIV infections are transmitted by intravenous drug use or male-to-male sexual activity, one out of every four new infections in the U.S. have been attributed to heterosexual transmission (CDC, 2015). Rates of heterosexual HIV transmission have risen sharply over the past two decades, from approximately 12% of all cases in 1995 to 24% in 2015. Women are especially vulnerable to transmission, both biologically and socially, making them more likely than men to acquire HIV through

heterosexual contact (CDC, 2018). Women account for 19% of overall incident cases with a vast majority contracting HIV through heterosexual sex (CDC, 2015).

Additionally, when compared to White women, infection rates were 20 times higher among Black women and four times higher among Latina women (CDC, 2013).

Racial and gender-based health disparities are often explained by those who contend that individuals are exclusively responsible to exercise control over their health and others who argue that health is largely influenced by broader social and interpersonal constructs (Bandura, 2004). Many posit that in order to reduce disparities in HIV transmission, we must consider the impact of broader social and interpersonal constructs (Ayala, Bingham, Kim, Wheeler, & Millett, 2012). According to Bandura (2004), personal agency is a product of both the individual's direct influence and the influence of social conditions and institutional practices.

Expanding Beyond Individual-Level Constructs

Humans are active agents in their environment (Bandura, 1986). Social Cognitive Theory (SCT) posits that human behavior is the product of the interplay of intrapersonal, environmental, and behavioral influences (Bandura, 1986). The cornerstone of SCT is perceived self-efficacy, which is defined as one's belief in their ability to engage in behavior(s) that lead to the successful completion of a task or goal (Bandura, 1986).

One's perceived self-efficacy, however, is not completely self-determined. It is influenced by impediments brought about by social factors beyond the control of the individual (Bandura, 1998). Bandura argues human behavior is "socially situated, richly contextualized and conditionally expressed" (2002, p. 276). Thus, to understand health behavior requires consideration of competing influences.

Relevant to the present investigation, we know that, beyond the practice of abstinence, condom use is the most effective way to prevent the transmission of HIV. If the solution is this simple, why are incident cases continuing to be reported? What, beyond one's belief in condom use self-efficacy, would explain the disparity in cases between Whites and other minority groups? When considering the effect of interpersonal and environmental factors, one possible explanation may be the influence of perceived discrimination. More specifically, perceived discrimination has been associated with risky sex behavior particularly among people of color (Heads, Castillo, Glover, & Schmitz, 2017).

Perceived Discrimination and HIV/AIDS Conspiracy Beliefs

Racial discrimination is experienced at interpersonal, institutional, and cultural levels. Chronic exposure to discrimination often leads to an individual internalizing the discriminatory beliefs and incorporating those beliefs into their self-identity (Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003). Decades of institutional (e.g., slavery, discriminatory segregation laws, medical experimentation) and interpersonal (e.g., micro-aggressions, racist language, physical attacks) discrimination are prominent in the United States.

Discrimination has been described as a constant feature of the contextual landscape, which differs dramatically for people of color versus White populations (Adimora & Schoenbach, 2005; Bogart & Thorburn, 2005). Discrimination experienced by members of disadvantaged groups may be more severe than that experienced by members of advantaged groups (Branscombe, Schmitt, & Harvey, 1999). Moreover, even the threat of discrimination has been described as more systematic, insidious, and

constant compared to other stressors for people of color (Stetler, Chen, & Miller, 2006).

In contrast to blatant acts of discrimination, subtle or ambiguous encounters can often have a greater effect on the individual (Bennett, Wolin, Robinson, Fowle, & Edwards, 2005; Stetler, et al., 2006; Merritt, Bennett, Williams, Edwards, & Sollers, 2006; Williams & Mohammed, 2009). For example, college students of color attending historically White institutions experience racial and ethnic micro-aggressions at higher levels than their White peers (Blume, Lovato, Thyken, & Denny, 2012). Micro-aggressions have been associated with an increased risk for higher anxiety and poor health choices, including risky sexual behaviors (Blume, et al., 2012).

Other forms of discrimination have also been negatively associated with engaging in high-risk sexual behaviors including a lack of intent to use condoms, engaging in unprotected sex, and non-adherence to HIV medication (Bogart, Landrine, Gavin, Wagner, & Klein, 2013; Bogart et al., 2005; Reed, Santana, Bowleg, Welles, Horsburgh, & Raj, 2013). For example, racial discrimination among Blacks with HIV was associated with lower retention and engagement in healthcare compared to Whites with HIV (Gaston & Alleyne-Green, 2013; Mugavero, Lin, Allison, Willig, Chang, et al., 2007; Casagrande, Gary, LaVeist, Gaskin, & Cooper, 2007). Additionally, Latino and Black men who have sex with men (MSM) who reported experiences of social discrimination (homophobia and racism) and financial hardship have been shown to be at a heightened risk for HIV infection (Bogart, Wagner, Green, Mutchler, Klein, et al., 2016; Diaz, Ayala, & Bein, 2004).

For the individual, the salience of daily discrimination creates social uncertainty leading that person to rely, to a greater extent, on personalized knowledge, reputational

information about others, or both (Mullin & Hogg, 1999). Racial discrimination increases distrust among racial groups. This distrust leads to questioning of the motives of other racial groups, the government, and social institutions (Armstrong, Putt, Halbert, Grande, Schwartz, et al., 2013). Because of this prolonged exposure to discrimination and a history of medical experimentation (e.g., Tuskegee Syphilis Study), some Blacks have reported increased levels of distrust in both the U.S. government and the health care system (Gamble, 1997). Distrust of this magnitude is not isolated to particular segments of Blacks but, rather, has an impact on the Black population as a whole (Bogart & Thorburn, 2006). A suspicion of the federal government and the medical establishment is evidenced by an endorsement of HIV/AIDS conspiracy beliefs. Distrust and HIV/AIDS conspiracy beliefs may lead to maladaptive and self-destructive health behaviors such as engaging in risky behaviors or inconsistent treatment of HIV (Ball, Lawson, & Alim, 2013).

HIV/AIDS conspiracy beliefs have been shown to contribute to health disparities by discouraging safer sex practices (Bogart, Galvan, Wagner, & Klein, 2011) and appropriate treatment behavior (Bogart, et al., 2010). Evidence suggests that black men living with HIV, who held greater HIV/AIDS conspiracy beliefs, had a higher likelihood of engaging in unprotected intercourse (Bogart, et al., 2011). Bogart et al. (2005) noted that HIV/AIDS conspiracy beliefs were significantly associated with negative condom attitudes and inconsistent condom use.

The saliency of HIV/AIDS conspiracy beliefs may be a function of the level of discrimination experienced by the individual. Racial discrimination and HIV/AIDS conspiracy beliefs can be socially persuasive influences and structural forces on an

individual (Brah & Phoenix, 2013). Overall, the evidence suggests that both discrimination and HIV/AIDS conspiracy beliefs play an important role in health behaviors, including risky sexual behavior.

Research Gap

To date, the association between racial discrimination and risky sexual behaviors has been studied primarily among Blacks and MSM populations. Limited research has investigated the effects of discrimination and HIV/AIDS conspiracy beliefs among Latinos. Additionally, research that has investigated the effects of discrimination and HIV/AIDS conspiracy beliefs on condom use among heterosexuals is limited. Further, few studies have explored this relationship among Latinos. In addition, the preponderance of research on discrimination has been cross-sectional.

To address these gaps, we used data from the longitudinal study, Project on Partner Dynamics (POPD), which included over 500 young adult men and women with comparable numbers of Black, Latino, and White participants. Data were collected on partner-specific condom use behaviors, perceptions of discrimination in a daily context and in interactions with health care providers, HIV/AIDS conspiracy beliefs, condom use self-efficacy, and a broad range of demographic characteristics.

Study Purpose and Specific Aims

The goal of the proposed study was to determine if and what socio-demographics, including race/ethnicity, were associated with perceived discrimination and endorsement of HIV/AIDS conspiracy beliefs. Additionally, we investigated if perceived discrimination and HIV/AIDS conspiracy beliefs influenced decisions to engage in condom use above and beyond the influence of individual characteristics. Using a unique,

longitudinal dataset in which Black, Latino, and, White participants were equally represented, this project assessed whether discriminatory experiences and HIV/AIDS conspiracy beliefs predicted condom use at a later time point and whether the nature of this relationship varied as a function of race and gender. We hypothesized that discrimination experiences and HIV/AIDS conspiracy beliefs negatively predicted condom use and were relevant constructs to address in the fight against the spread of HIV.

This was the first study, to our knowledge, that investigated the association between sociodemographic (e.g., race, age, gender, education, income) factors and experiences of discrimination, perceived healthcare discrimination, and HIV/AIDS conspiracy beliefs and how the associations differed for Blacks, Latinos, and Whites and by gender. Using a prospective study design, we also investigated whether the relationship between experiences of discrimination, perceived healthcare discrimination, and HIV/AIDS conspiracy beliefs and condom use differed for Blacks, Latinos, and Whites and by gender.

Specific Aims

Specific Aim #1: Examine if and how race is associated with Experiences of Discrimination (EOD), Perceived Healthcare Discrimination (HDS), and HIV/AIDS-Conspiracy Beliefs (HCB) and if and how gender moderates this relationship while controlling for number of children, age, education and working outside of the home.

Specific Aim #2: Investigated if and how EOD, HDS, and HCB predict condom use overall and by race, gender, and race by gender.

CHAPTER 2: LITERATURE REVIEW

STI and HIV Prevalence

Sexually transmitted infections (STIs), including Human Immunodeficiency Virus (HIV), remain a major public health issue causing significant health and financial burdens on individuals and the larger population (Healthy People, 2017). For many people, STIs are asymptomatic resulting in delayed or forgone medical care and increased transmission rates (Healthy People, 2017). In the United States, nearly 20 million new STIs occur annually (CDC, 2015). HIV prevalence in the U.S. is estimated at over 1.2 million people, an estimated 13% of whom are unaware of their status (CDC, 2017). Although STIs occur among people of all ages, adolescents and young adults (aged 15-24) carry a significant burden of disease, making up half of all STI diagnoses although accounting for only a quarter of the sexually active population (CDC, 2017). Of those infected with HIV in 2015, adolescents and young adults accounted for more than 1 in 5 new HIV diagnoses (CDC, 2015). Despite a significant investment in STIs (e.g., \$94 billion of federal funding committed to STIs and \$27.5 billion for HIV in 2015), less than 1% was devoted toward prevention efforts (Kaiser Family Foundation, 2015).

Although much of the HIV research is focused on men who have sex with men (MSM), heterosexuals accounted for about 25% of new HIV infections (CDC, 2016). Women are especially vulnerable because of both biological and social reasons and are more likely than men to acquire an STI, including HIV, through heterosexual contact (Bowleg, Teti, Malebranche, & Tschann, 2013). Additionally, women face greater consequences of STIs. For example, women with untreated STIs may face additional

health complications such as pelvic inflammatory disease, ectopic pregnancy, infertility, and chronic pelvic pain.

STIs and HIV occur at higher rates among racial or ethnic minorities compared to Whites (CDC, 2015). In 2015, Blacks represented only 12% of the U.S. population, but accounted for 45% of new HIV infections; one in 16 Black men and one in 32 Black women will be diagnosed with HIV in their lifetimes (CDC, 2015). Among young adults, the rate of new HIV diagnoses was about eight times higher for Blacks and three times higher for Latinos versus Whites (CDC, 2016). Among 15-24 year olds, chlamydia rates were six times higher among Blacks and twice as high among Latinos compared to Whites and gonorrhea rates were almost ten times higher among Blacks and twice as high among Latinos compared to Whites.

Gender differences in HIV and STI rates also exist among racial and ethnic minorities. Heterosexual women of color are the fastest growing group with HIV in the U.S.; 85% of Black women with HIV acquired it through heterosexual contact (CDC, 2014). Compared to women of other races/ethnicities, Black women accounted for 60%, Latinas accounted for 17%, and White women accounted for 16% of new HIV diagnoses (CDC, 2015). Among adolescents and young adults, syphilis rates were approximately nine times higher among Black women and 12.3 times higher among Latina women compared to White women. In addition, they were five times higher for Black men and twice as high among Latino men than that of White men.

Since 2014, rates of STIs have been increasing in the United States, specifically rates of chlamydia, gonorrhea, and syphilis (CDC, 2015). Although the rates of HIV are

decreasing in general, the burden of risk continues to fall on adolescents and young adults, people of color, and women.

Factors Associated with Condom Use

Consistent and correct use of condoms remains the only existing method to prevent the transmission of HIV and STIs. When condoms fail to protect against HIV/STI transmission, it is more often associated with inconsistent or incorrect use rather than condom failure (CDC, 2013; Paz-Bailey, Koumans, Sternberg, Pierce, Papp, Unger, et al., 2005). Unprotected vaginal sex is common among heterosexually active adults in the United States (Sionean, Le, Hageman, Oster, Wejnert, et al., 2014), and they remain resistant to change with regard to condom use (Essien, Ross, Fernandez-Esquer, & Williams, 2005).

Inconsistent or incorrect condom use and condom non-use are influenced by a number of individual factors. Sociodemographic factors, including low levels of income (Aziz & Smith, 2011; Essien, et al., 2005; Frew, Parker, Vo, Haley, O'Leary, et al., 2016; Pettifor, Measham, Rees, & Padian, 2004) and educational achievement (Fernandez-Esquer, Atkinson, Diamond, Useche, & Mendiola, 2004), have been associated with lower rates of condom use. Other individual characteristics, including negative perceptions of sexual pleasure when using condoms (Higgins, Hoffman, Graham, & Sanders, 2008), early initiation of sexual intercourse (Grollman, 2017; Shafii, Stovel, Davis, & Holmes, 2004), and a larger number of lifetime sexual partners have been associated with a lack of consistent condom use (Grollman, 2017; Grossman, Purcell, Rotheram-Borus, & Veniegas, 2013; Kaestle, Morisky, & Wiley, 2002). Because of this, early initiation of sexual intercourse is often used as a predictor of risky sexual behavior,

including sex without condoms (Finer & Philbin, 2013; O'Donnell, O'Donnell, & Steuve, 2001), and has been linked to increased risk of HIV/STIs and pregnancy during adolescence (CDC, 2016). Additionally, Blacks and Latinos report an earlier sexual debut and more lifetime sexual partners than Whites (CDC, 2012).

Condom use self-efficacy is an individual's perception of their ability to correctly use and discuss condoms with partners (Snead, O'Leary, Mandel, Kourtis, Wiener, Jamieson, et al., 2014). The greater an individual's condom use self-efficacy the more likely they are to engage in condom use behavior. Condom use self-efficacy has, therefore, been significantly related to condom use (Chambers & Rew, 2003; Espada, Morales, Gullen-Riquelme, Ballester, & Orgiles 2016; Harvey, Bird, Galavotti, Duncan, & Greenberg, 2002; Stokes, Harvey, & Warren, 2016; Thompson-Robinson, Richter, Shegog, Weaver, Trahan, Sellers, & Brown, 2005; Wingood & DiClemente, 1998), consistency of condom use (Rhodes & McCoy, 2015), and the avoidance of other high-risk sexual behaviors (Adoh, Sng, & Loprinzi, 2017; Pearson, 2006). Condom use self-efficacy has also been used to discriminate condom users from non-condom users (Brafford & Beck, 1991; Brien, Thombs, Mahoney, & Wallnau, 1994).

Because condom use requires the participation of both members of a couple, a number of interpersonal factors also influence both the choice to use a condom and the consistency with which condoms are used. Although often measured as an individual trait, condom use self-efficacy has been shown to vary between partners (Harvey, Washburn, Oakley, Warren, & Sanchez, 2016). Therefore, it is important to understand condom use self-efficacy as both an individual and an interpersonal trait.

Both men and women report feeling uncomfortable talking with their partners about sexual health issues (Thompson-Robinson, et al., 2005). Compared to White women, Black and Latino women were more likely to feel uncomfortable discussing sexual health, including condom use (Cipres, Rodriquez, Alvarez, Stern, Steinhauer, & Seidman, 2016). However, a greater level of self-efficacy and sexual decision-making among women, compared to men, significantly increased the odds of always using a condom during sex (O’Leary, Jemmott, & Jemmott, 2008; Sharma, Small, Mengo, & Ude, 2017).

Other important interpersonal predictors of condom use include relationship type or nature of the sexual relationship (Gibbs, 2013; Nesoff, Dunkle, & Lang, 2016), frequency of sex (He, Hensel, Harezlak, & Fortenberry, 2016), and the perception of trust and commitment in the partnership (Gibbs, Manning, Longmore, & Giordano, 2014; Hock-Long, Henry-Moss, Carter, Hatfield-Timajchy, Erickson, et al., 2013; VanderDrift, Agnew, Harvey, & Warren, 2013). An individual’s perception of their vulnerability to contracting an STI or HIV infection, although an individual trait, is strongly influenced by their partner and has been associated with condom use (Agnew, Harvey, VanderDrift, & Warren, 2017).

As trust and commitment increase in a relationship, perceptions of risk decline (Gibbs, et al., 2014). Married and committed women perceive low or no risk of acquiring an HIV/STI from their partner and are less likely to use condoms (Carhvalo, Alvarez, Barz, & Schwarzer, 2015). However, women’s perceptions of relationship exclusivity and risk may not always correctly reflect their partners’ behavior, which could lead them to unknowingly make risky sexual health choices (Frew, et al., 2016). Additionally, many

adolescents and young adults do not think they or their partner have an infection, are more concerned with pregnancy prevention than disease transmission and, therefore, may choose a hormonal method of contraception and forgo condom use (Abel & Brunton, 2005; Mullinax, Sanders, Dennis, Higgins, Fortenberry, & Reece, 2016; Ott, Adler, Millstein, Tschann, & Ellen, 2002).

Beyond the individual and interpersonal level, little work has been done to explore societal- and institutional-level factors associated with condom use. Much of the work done at these levels focuses on male incarceration rates and resulting imbalanced sex ratios that negatively impact condom use, increase likelihood of engaging in risky sexual behavior (Adimora & Schoenbach, 2002; Bowleg, 2012; Cipres, et al., 2016; Dumpont, Allen, Brockmann, Alexander, & Rich, 2013; Frew, et al., 2016;), and shrink sexual networks (El-Sader, Mayer, & Hodder, 2010; Frew, et al., 2016; Friedman, Flom, Kottiri, Neaigus, Sandoval, Curtis, et al., 2001). These factors are associated with an increased risk of STI and HIV transmission (Kerr, Valois, Siddiqi, Vanable, & Carey, 2015; Senn, Walsh, & Carey, 2016).

In addition to the influence of incarceration, structural influences such as lack of employment and educational opportunities, perceived political disempowerment, and racial or gender discrimination have increased vulnerability for HIV/STI (Frew, et al. 2016). Perceptions of structural influence (e.g., socioeconomic inequality and socioeconomic-political position; Gilley & Kleese, 2007) become the lens through which individuals process social interactions (Hammond, 2010; Karlson & Nazroo, 2002) and have been identified as the foundation for both perceived discrimination and belief in HIV/AIDS conspiracy theories (Russell, Katz, Wang, Lee, Green, Kressin, & Claudio,

2011). Although these structural influences have been investigated, to date, research exploring the relationship between perceived discrimination, HIV/AIDS conspiracy beliefs, and future condom use behavior is limited and warrants more in-depth investigations.

Moving Beyond the Individual: Experience of Discrimination, Perceived Healthcare Discrimination, and HIV/AIDS Conspiracy Beliefs

Differences between groups in the United States are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources (CDC, 2017). In addition to individual traits, primary causes of group differences in health status are structural in nature (e.g., poverty, education, employment, access to information, and political and economic influences; Quesada, Hart, & Bourgois, 2011). Patterns of social inequity between groups have been traced to both interpersonal- and institutional-level discrimination in the U.S. (Quesada, et al., 2011) and the more levels of social inequity one experiences, the greater the likelihood of reporting experiences of discrimination.

Discrimination, defined as a form of social inequality, includes experiences resulting from both legal and non-legal systems (Sanders-Phillips, Settles-Reaves, Walker, & Brownlow, 2009; Gamble, 1997). Racial “discrimination promotes the identification of ethnic minority groups, their reification as biologically and culturally different, and their consequent social and economic exclusion (Karlson & Nazroo, 2002, p. 630).” Blacks and Latinos in the United States have a long history of exposure to discrimination (Krieger, 2014). Additionally, perceived experiences of daily discrimination have been shown to cause physical health consequences (e.g., raised blood

pressure and increased psychological distress; Pascoe & Smart Richman, 2009; Williams & Mohammed, 2009).

Perceived discrimination affects health through a number of mechanisms such as increased levels of stress cortisol (Huynh, Guan, Almeida, McCreath, & Fuligni, 2016), reduced physical activity (Borrell, Kiefe, Diez-Roux, Williams, & Gordon-Larsen, 2013), poor quality of sleep quality (Sims, Diez-Roux, Gebreab, Brenner, Dubbert, et al., 2016) and systemic inflammation (Stepanikova, Bateman, & Oates, 2017). Additionally, individuals who experience discrimination report lower levels of self-control (Chen & Yang, 2014; Richeson & Trawalter, 2005; Smart Richman & Leary, 2009) which, in turn, leads to more risky decision-making and engagement in risky behaviors such as an increased prevalence of cigarette smoking, substance abuse (Shi & Stevens, 2005; Borrell, et al., 2013; Molina & Simon, 2014; Sanchez, Whittaker, & Hamilton, 2016) and high-risk sexual behaviors (Quinn & Fromme, 2010; Stock, Gibbons, Peterson, & Gerrard, 2013; Sanchez, et al., 2016). Cross-sectional evidence associates discrimination with increased sexual risk-taking, a greater number of lifetime sex partners, and a lifetime history of STIs (Bowleg, et al., 2013; Choi, Bowleg, & Neilands, 2011; Kaplan, Hormes, Wallace, Rountree, & Theall, 2016; Reed, et al., 2013). Research specifically addressing race and ethnic differences in the link between discrimination and condom use has produced inconsistent evidence; discrimination has been shown to have positive, negative, as well as, no impact (Bowleg, Neilands, & Choi, 2008; Ford, Daniel, Earp, Kaufman, Golin, & Miller, 2009; Grollman, 2017; Jiguet, Sanders-Phillips, & Cotton, 2004; Kogan, Cho, Barnum, Barton, Hicks, & Brown, 2017).

Past and present discrimination and racial persecution serve to perpetuate mistrust of members of the dominant culture at large and members of the medical institution in particular (Ball, et al., 2013). When interacting with health care organizations and providers, Black and Latino patients are more likely than Whites to report being discriminated against (Benkert, Peters, Clark, & Keves-Foster, 2006; Hammond, 2010; Haviland, Morales, Dial, & Pincus, 2005), even after controlling for socioeconomic status, health status, and healthcare access (Armstrong, Ravenell, McMurphy, & Putt, 2007). Additionally, although both men and women experience discrimination, men of color are less likely to trust their health care provider compared to women of color (Armstrong, et al., 2013). Armstrong and colleagues (2013) suggest that medical mistrust might be greater for men because they are less invested in health care decision-making. Discrimination has also been associated with lower levels of health care involvement among Black men (Casagrande, et al., 2007; Mays, Jones, Delany-Brumsey, Coles, & Cochran, 2017). For example, Blacks living with HIV have lower health care retention, engagement in care, and medication adherence compared to Whites with HIV (Bogart, Wagner, Galvan, & Banks, 2010; Mugavaro, et al., 2007; Pascoe, et al., 2009).

Beyond immediate experiences, it is important to recognize the impact and cumulative effect of lifetime experiences of discrimination on both risk and health outcomes associated with HIV (Gaston & Alleyne-Green, 2013). Individuals draw on their experiences of oppression to explain the presence of HIV/AIDS. This “suspicion of the intent” suggests that people of color assume negative intent from members of the dominant culture unless otherwise given a reason to trust the individual with whom they are interacting (Wyatt, Gómez, Hamilton, Valencia-Garcia, Gant, & Graham, 2013). The

compound nature of multiple negative interactions becomes the basis for HIV/AIDS conspiracy beliefs (Graham, Giordano, Grimes, Slomka, Ross, & Hwang, 2010). Black men continue to report more incidents of experiencing discrimination related stress compared to general stress (Pieterse & Carter, 2007), which increases the likelihood they will endorse HIV/AIDS conspiracy beliefs (Simmons & Parsons, 2005). In addition to race, those with lower educational attainment have a lack of knowledge and more inaccuracies and confusion regarding HIV, which also increases the likelihood of endorsing HIV/AIDS conspiracy beliefs (Bohnert & Latkin, 2009; Hutchinson, Begley, Sullivan, Clark, Boyett, & Kellerman, 2007).

For example, in a national survey of Blacks, 48% agreed HIV was manmade, 53% thought the cure for AIDS was being withheld from the poor, and 44% believed people who take antiretroviral therapy (ART) are human guinea pigs for the government (Bogart et al., 2005). Ross, Essien, and Torres (2006) reported that 27% of Black men and 31% of Black women believed that AIDS is an agent of genocide created by the U.S. government to exterminate minorities. Blacks are not the only group to hold conspiracy beliefs. Gilley and Keesee (2007) reported that among an American Indian population in Alaska, 30% of those surveyed believed that HIV/AIDS was deliberately manufactured by “Whites, white Christians or the federal government” (p. 44) as a means to exterminate minority populations. In contrast, rates of conspiracy beliefs are lower among Latinos and Whites. Ross and colleagues (2006) found that 21% of the Latino men and 24% of the Latino women endorsed the belief that AIDS was created by the U.S. government, and among White respondents, 20% of men and 22% of women agreed with the statement.

The endorsement of HIV/AIDS conspiracy beliefs has been related to risky sexual

practices, more sex partners, and inconsistent condom use (Bird & Bogart, 2003; Bogart & Thorburn, 2005; Ross et al., 2006). Blacks living with HIV are also more likely to discuss HIV/AIDS conspiracy beliefs with similar others in their social networks (Bogart, et al., 2016). Individuals who hold HIV/AIDS conspiracy beliefs are more likely to have been tested for HIV (Boehnert & Latkin, 2009). Endorsement of HIV/AIDS conspiracy beliefs appears, therefore, to be both a risk factor and a protective factor for contracting HIV.

As discussed above, people do not live in a vacuum; their interpersonal relationships and environment influence their beliefs, choices, and behavior, and vice versa. “Because people’s conceptions, their behavior, and their environment are reciprocal determinants of each other, individuals are neither powerless objects controlled by environmental factors nor entirely free agents who can do whatever they choose (Bandura, 1978, p. 357).” Because of this reciprocal relationship between individuals and their environment, understanding the correlates of condom use is more difficult when investigating predictors separately at each level. A broader approach is needed to understand how social systems affect health beyond individual traits and interpersonal characteristics (Bandura, 1998).

Theoretical Perspective

Social Cognitive Theory (SCT) suggests that behavior is a result of reciprocal relationships between personal and environmental factors (Bandura, 1989). In the context of health promotion and disease prevention, Bandura (2004) used this theory to identify the following core determinants of health practices: 1) knowledge of health risks and benefits associated with a health practice; 2) perceived self-efficacy or the belief that one

can exercise control over their own health habits; 3) outcome expectation -- costs and benefits for engaging in different health habits; 4) an individual's health goals, plans and strategies; and, 5) the perceived social and structural facilitators/obstacles. These core determinants highlight the necessity to consider the individual perceptions of risk, self-efficacy, expectations, and goals all relative to the influence of the individual's social and structural environment when predicting or attempting to change behavior.

Sexual health interventions utilizing SCT have been successful in improving preventive behaviors such as condom use, and reducing risky sexual behaviors by helping people identify health risks, promoting self-perceptions such as self-efficacy, and the development of behavioral skills particular to various environments (Jemmott, Jemmott, O'Leary, Icard, Rutledge, et al., 2015; O'Donnell, Stueve, Joseph, & Flores, 2014; Tobin, Kuramoto, German, Fields, Spikes, et al., 2013). As such, self-efficacy is a cornerstone of SCT (Bandura, 1978) and, as discussed above, plays an important role in risky sex behavior and consistent condom use. Although one's estimate of their capacity (self-efficacy) has a profound effect on their actual agency (Ferrari, Robinson, & Yasnitsky, 2010), self-efficacy is influenced by the reciprocal, dynamic, and continuous interaction between the person and environment (Bandura, 1978). An individual's estimate of their capacity to use condoms is, therefore, not made in isolation but is influenced by external factors (Bandura, 2002). It is the diversity in the "culturing" that creates differences between individuals' sense of capacity (Bandura, 2002).

As outlined above, racial health disparities are examples of how social, structural, and environmental conditions do not affect everyone in the same manner. Compared to Whites, Blacks and Latinos face many socioeconomic and socio-cultural differences that

create heavy demands on them and in turn influence both their self-perceptions and health behaviors. By extension, negative experiences within one's environment, evidenced by perceptions of discrimination and belief in HIV/AIDS conspiracy theories, influence a person's health behaviors.

Gaps and Limitations in the Current Research

Because of the frequent occurrence and potentially severe consequences of HIV and STIs among adolescents and young adults, particularly among people of color, a greater understanding of the factors associated with condom use in this high-risk population is needed. Much of the work to date has focused solely on individual- and interpersonal-level factors that affect condom use. A more ecological approach is necessary to understand how the interplay between individual and environmental factors influences sexual health behaviors. Little research has investigated the influence of social/structural inequity, specifically discrimination and resulting HIV/AIDS conspiracy beliefs, on sexual health outcomes and condom use. As discussed earlier, discrimination has been associated with increasing sexual risk-taking, condom use, greater number of lifetime sex partners, and lifetime history of STIs.

Previous research on the impact of discrimination and HIV/AIDS conspiracy beliefs has, however, focused primarily on Black MSM. A dearth of research has explored Latinos perceptions of discrimination or HIV/AIDS conspiracy beliefs. Additionally, little research has focused on discrimination among heterosexuals. This is the first study, to our knowledge, that investigated the association between demographic (e.g., race, age, gender) and socioeconomic (e.g., education, income) factors with experiences of discrimination, perceived healthcare discrimination, and HIV/AIDS

conspiracy beliefs and how the association differs for Blacks, Latinos, and Whites and by gender. This study also investigated the influence of experiences of discrimination, perceived healthcare discrimination, and HIV/AIDS conspiracy beliefs on condom use and if and how the impact differs for Blacks, Latinos, Whites and by gender.

Furthermore, research on the health impact of discrimination as well as research identifying predictors of condom use has been largely cross-sectional in nature. This prospective longitudinal research provided the opportunity to further our understanding of the predictive relationship between discriminatory experiences and HIV/AIDS conspiracy beliefs on condom use.

Specific Aims and Hypotheses

The purpose of the proposed research was two-fold. First, we examined the associations of perceived discrimination and endorsement of HIV/AIDS conspiracy beliefs with sociodemographic factors and investigated if the associations varied by race/ethnicity and gender. Second, as an extension of SCT, we examined if and how perceived discrimination and belief in HIV/AIDS conspiracy theories, adjusting for other individual factors, predicted condom use at a later time point. By adjusting for variables known to predict condom use, the present study addressed the following aims and hypotheses to address the gaps in understanding the role of discriminatory experiences and HIV/AIDS conspiracy beliefs on condom use.

Specific Aim #1: Examine if and how race is associated with Experiences of Discrimination (EOD), Perceived Healthcare Discrimination (HDS), and HIV/AIDS-Conspiracy Beliefs (HCB) and if and how gender moderates this relationship while controlling for number of children, age, education and working outside of the home.

Aim #1 Hypothesis: EOD, HDS, and HCB will be greater among Blacks, Latinos (versus Whites) and men (versus women) after controlling for number of children, age, education, and working outside of the home.

Specific Aim #2: Investigated if and how EOD, HDS, and HCB predicted condom use overall and by race and gender.

Aim #2 Hypothesis: EOD, HDS, HCB (now the independent variables) measured at baseline will be inversely related to condom use (dependent variable) at the subsequent time period (i.e., Time 2) after controlling for covariates (condom use at baseline, condom use self-efficacy, sexual decision-making, perceived invulnerability to harm, and socio-demographics).

CHAPTER 3: METHODS

Overview

Secondary data from the Project on Partner Dynamics (POPD) was used to examine the research questions posed in this study. The POPD was a prospective study funded by NICHD that examined relationship dynamics among women and men, aged 18 through 30, who were at increased risk of HIV/STIs. The overall goal of the POPD was to increase understanding about predictors of pregnancy and disease prevention among young adults. Such information is critical for the development of effective programs and for clinical counseling focused on pregnancy and HIV/STI prevention in this age group.

Participants

Between September 2006 and August 2008, participants were recruited directly through locations in the greater Los Angeles area, including community health centers, shopping malls, sexually transmitted disease and family planning clinics, and community colleges. In approaching potential participants, project staff adhered to a specific script that included information about the study and eligibility criteria. Interested individuals participated in a short, private interview to determine their eligibility. Trained interviewers conducted the screening interviews in private locations (e.g., offices, meeting rooms) at participating community agencies. Participants were also indirectly recruited through print and online advertisements.

Eligible participants were 18 to 30 years old and reported heterosexual sex without a condom at least once in the previous three months. In addition, eligible participants reported at least one of the following HIV/STI risk factors for either themselves or a current sex partner: (a) more than one sex partner in the previous year;

(b) an STI in the previous two years; (c) sex in the previous year with a partner who had an STI or HIV; or (d) ever using injection drugs. Pregnant women, those who were HIV positive, and those who expected to move away from the Los Angeles area in the following year were excluded.

Data Collection

In-person computer-assisted interviews (CAPI) of approximately one hour were administered using Questionnaire Development System (QDS) software. Interviewers entered participants' responses directly into a data file using laptop computers. Interviewers were trained in the administration of CAPI, confidentiality measures, and how to handle adverse events. In addition, interviewers were instructed about the meaning and intention of interview questions, the concepts underlying them, when and how to probe for additional information, and how to maintain rapport while recording data. The interviews were administered in private locations (e.g., offices, meeting rooms) at participating community agencies and participants were matched with interviewers by gender and, in most cases, by race or ethnicity. Although participants were offered the option of being interviewed in Spanish, all participants chose to be interviewed in English. For sensitive questions, participants were given the option of entering their answers directly into the computer. The institutional review boards of all associated institutions approved the study protocol and materials.

Over the course of one year, participants completed four in person interviews at four-month intervals (baseline through Time 4). This study used data from the baseline and Time 2 interviews to look at the impact of EOD, HDS, and HCB at a subsequent time point and to minimize the impact of participant attrition. At baseline, 536 eligible

participants were enrolled in POPD and 436 individuals were interviewed at Time 2, for a retention rate of 81% from baseline to Time 2. Participants were compensated \$30 and \$35 for each interview, respectively, and transportation and childcare costs were reimbursed up to \$20 for each interview. During each interview, participants provided data regarding each sexual partnership, identified by initials or nicknames, they had in the preceding four months. Nicknames or initials were used in partner-specific questions and to link data about partners across interviews.

Measures

Measures included validated scales from previous studies as well as items developed for this study.

Primary Independent and Dependent Variables.

Experience of discrimination (EOD). A modified version of the Experience of Discrimination (EOD) scale was used to measure perceived discrimination, which has been validated among various populations, including Latinos, in English and Spanish (Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005). Participants were asked, “Have you ever experienced discrimination, been prevented from doing something, or been hassled or made to feel inferior in any of the following situations because of your race, ethnicity, or color?” Participants answered nine specific situations adapted from the EOD scale (e.g., at school, getting medical care, getting housing). Response categories for all nine items were *never*, *rarely*, *sometimes*, *most of the time*, and *always*. Responses were classified into two variables: *Any Experience* and *Levels of Exposure*.

We first dichotomized the individual items to reflect no experience versus any experience. We then used these dichotomous items to create a summary variable, *Any*

Experience, which ranged in values from 0 to 9. The *Any Experience* variable was then used to create the ordinal variable of *Levels of Exposure* with no exposure (*Any Experience* = 0), some exposure (*Any Experience* = 1 or 2), and high exposure (*Any Experience* = 3 or more) (Krieger, et al., 2005).

Perceived healthcare discrimination (HDS). All respondents were first asked, “Have you ever been to a health care provider?” Only those who answered yes were then asked, “When getting health care of any kind, have you ever had any of the following things happen to you because of your race or ethnicity?” Seven items, adapted from Bird and Bogart (2001), were given (e.g., been treated with less courtesy than other people, received poorer service than others, felt like a doctor or nurse was not listening to what you were saying). Response categories were *never*, *rarely*, *sometimes*, *most of the time*, and *always*. Responses were classified into two variables: *Some Experience* and mean scale scores.

Some Experience was a dichotomous variable created by grouping item responses rated as *sometimes*, *most of the time*, and *always* versus *never* and *rarely*. HDS mean scale scores were calculated by taking the average of all dichotomous scale items for each participant. Higher scale scores indicated more perceived healthcare discrimination. Perceived healthcare discrimination was a dependent variable in Aim 1 and an independent variable in Aim 2. The HDS scale had good reliability in both samples (Aim 1 Alpha = 0.88; Aim 2 Alpha = 0.87).

HIV/AIDS conspiracy beliefs (HCB). Participants were asked to report the extent to which they agreed or disagreed with 18 statements that captured HIV/AIDS conspiracy beliefs (Bogart & Thorburn, 2005). Response options were *disagree strongly*,

disagree somewhat, no opinion, agree somewhat, and agree strongly. Responses were classified into two variables: *Belief Endorsement* and HCB mean scale scores.

Belief Endorsement was a dichotomous variable created by grouping item responses rated as *agree* and *strongly agree* versus *disagree strongly, disagree somewhat, and no opinion*. HCB mean scale scores were calculated by taking the average of all dichotomous scale items for each participant. Higher scale scores indicated stronger endorsement of conspiracy beliefs. The conspiracy beliefs scale was a dependent variable in Aim 1 and an independent variable in Aim 2. The HCB scale had good reliability in both samples (Aim 1 Alpha = 0.90; Aim 2 Alpha = 0.91).

Condom use. For Aim 2, condom use was assessed at baseline and Time 2. For each partner, participants were asked to report the number of times they had sex (vaginal and/or anal) in the previous four months and, of those times, the number of times a condom was used with that partner. Responses were first classified as a ratio of protected acts of intercourse to total acts of intercourse, and then dichotomized (none versus some/all).

Covariates.

Condom use self-efficacy. For Aim 2, condom use self-efficacy was measured using a six-item scale adapted from the Condom Use Self-Efficacy Scale developed by Brafford and Beck (1991). Participants completed the scale for each sexual partner they had in the previous four months. By using partner-specific questions, this scale assesses a person's confidence in using condoms with each specific partner rather than the overall confidence of the individual. For example, participants were asked, "How confident do you feel in your ability to discuss using condoms with (partner)?" "...in your ability to

suggest using condoms with (partner)?”, and “...in your ability to put a condom on correctly when you are having sex with (partner)?” Response options were *not at all confident, a little confident, moderately confident, very confident, and extremely confident*. Responses were classified as mean scale scores by taking the average of all scale items for each participant. Higher scale scores indicated greater sense of condom use self-efficacy. This scale demonstrated good reliability (Aim 2 Alpha = 0.89).

Sexual decision-making. For Aim 2, participants were asked to respond to six items assessing how much responsibility they had when making sexual decisions. For example, participants were asked, “In your relationship with (partner), how much have you taken part in deciding whether or not to get pregnant?” and “In your relationship with (partner) how much have you taken part in deciding whether or not to use a condom?” Response options were based on a 5-point Likert-type scale anchored by the options of *not at all* and *a great deal*. Responses were classified as mean scale scores by taking the average of all scale items for each participant. Higher scale scores indicated greater sexual decision-making. This scale had good reliability (Aim 2 Alpha = 0.74).

Perceived risk for STI/HIV. For Aim 2, participants were asked to respond to six items assessing their perception of their risk of contracting an STI or HIV from their partner. For example, items included, “How likely is it that you could get HIV from having sex with (partner) without using a condom?” and “How likely is it that (partner) has ever done something that could have increased your chances for getting a Sexually Transmitted Disease other than HIV?” Responses options were based on a 5-point Likert-type scale anchored by the options of *not at all likely* and *extremely likely*. Responses were classified as mean scale scores by taking the average of all scale items for each

participant. Higher scale scores indicated greater perceived risk for HIV/STI. This scale had good reliability (Aim 2 Alpha = 0.88).

Sexual risk behaviors. Also included in Aim 2 were variables assessing age at first sex, number of lifetime sexual partners, and whether participants had been tested for an STI during the last four months and ever tested for HIV/AIDS.

Sociodemographics. Sociodemographic variables were assessed at baseline and included the participant's race/ethnicity (Black, Latino, or White), gender, age in years, education (years of education categorized into *high school or less*, *some college*, and *college and beyond*), number of children, and if they work outside of the home.

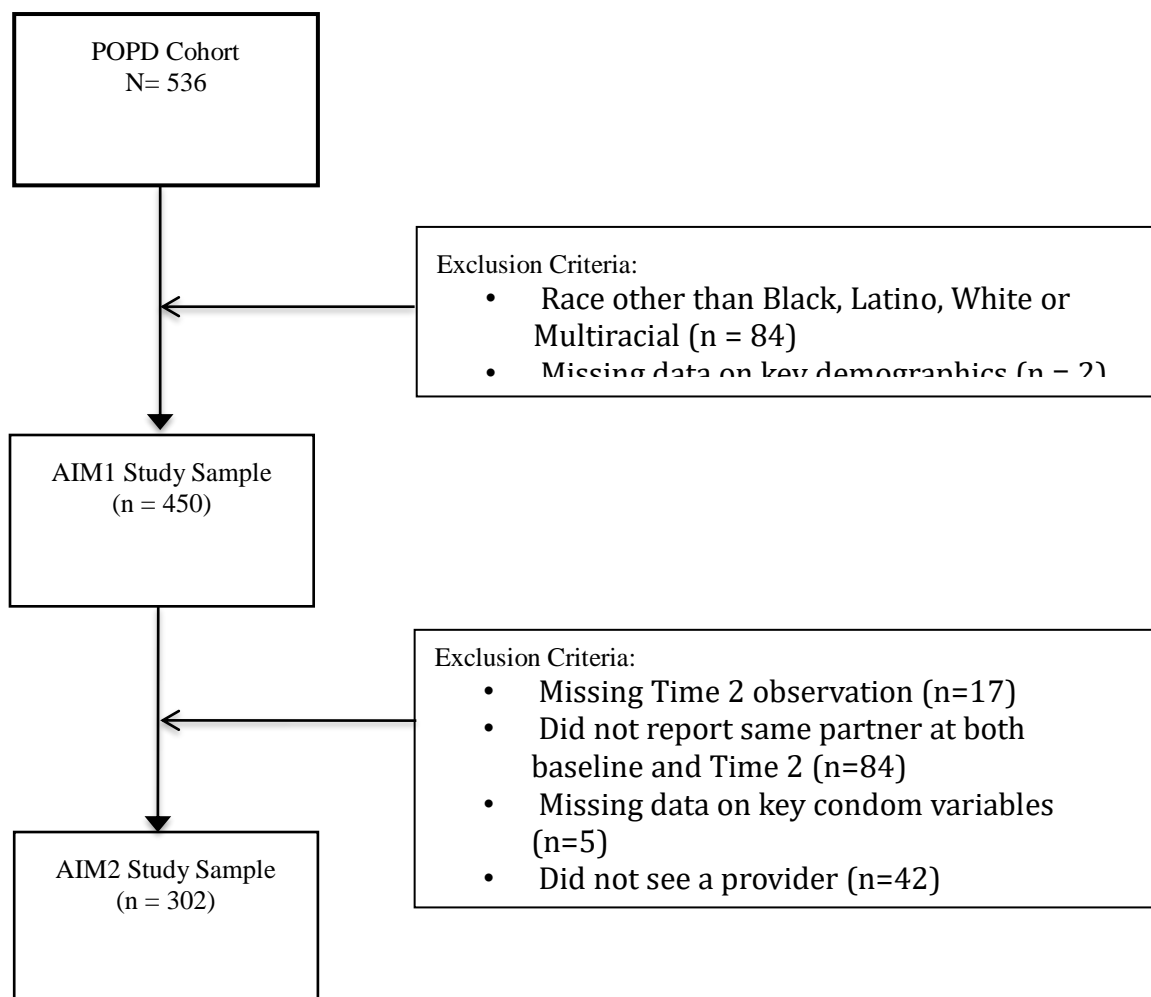
Sociodemographic variables were included in both Aims 1 and 2.

Analytic Plan

Sample Selection.

The analytic sample for Aim 1 consisted of 450 participants who completed the baseline survey and self-identified as only Black, Latino, or White. Eighty-six participants were excluded for reporting a different single race/ethnicity or multiple races.

The analytic sample for Aim 2 consisted of 302 participants (Figure 1). To be included in this sample the participant had to report the same partner(s) at both baseline and Time 2, provide data on Time 2 condom use variables (Aim 2 dependent variable), and self-identify as only Black, Latino, or White. Of the 436 participants who completed the interview at Time 2, 367 reported one or more partners across the baseline and Time 2 interviews. Of these, 307 reported a single partner across both time points and 60 participants reported multiple partners. For participants with multiple partners, a single partnership was selected randomly. One participant was excluded because of missing

Figure 1*Diagram of Sample Development*

information on Time 2 condom use variables and an additional 64 participants were excluded because they identified as a single race/ethnicity other than Black, Latino, or White or reported multiple races.

Analytic Plan for Aim 1.

First, I calculated descriptive statistics for the overall sample, by race/ethnicity, and by gender on all demographic variables. Additionally, descriptive statistics were

explored for the three dependent variables (EOD, HDS, and HCB). Second, I examined the bivariate relationships between EOD, HDS, and HCB and both race/ethnicity and gender by running simple logistic and linear regressions to calculate and compare the unadjusted odds and averages of experiencing discrimination or endorsing HIV/AIDS conspiracy beliefs.

Third, I ran a series of multivariable models, adjusting for all demographic covariates, to investigate if (1) race/ethnicity and gender were associated with EOD, HDS, and HCB and (2) if the association between race/ethnicity and EOD, HDS, and HCB varied by gender. Ordinal logistic regression models were used to examine the associations with EOD level of exposure and linear regression models were run for HDS and HCB mean scores. Race/ethnicity by gender interactions for each multivariable model were evaluated using likelihood-ratio tests to compare the interaction model and the main effects only model.

Analytic Plan for Aim 2.

First, I calculated descriptive statistics for the overall sample, by race/ethnicity, and gender for all demographic and partner-specific individual covariates. Second, I examined the bivariate relationships between condom use at Time 2 and all covariates using logistic regression. Third, to investigate if EOD, HDS, and HCB predicted condom use at Time 2, above and beyond demographic and partner-specific individual factors, I first ran a logistic regression model adjusting for all covariates. Lastly, I ran the logistic model separately by race/ethnicity and gender. All analyses were conducted with Stata Version 14 (StataCorp, 2015).

CHAPTER 4: RESULTS

Results for Aim 1

Descriptive Statistics.

Demographics. The sample was equally represented by race/ethnicity (Black 34%, Latino 33%, and White 33%) and gender (men 47% and women 53%) (Table 1). Additionally, the majority of the participants worked outside the home (73%) and did not have children (82%). Some significant differences in demographics, however, were found by race/ethnicity and gender. Specifically, Whites were significantly older than both Blacks and Latinos ($F = 17.67, p < 0.001$). Blacks and Latinos represented a larger percentage of the sample with low educational attainment, achieving a high school diploma or less (32% and 28%, respectively) versus 17% of Whites. Additionally, a larger percentage of women (33%) reported an education level of college or beyond versus (22%) of men. Across race/ethnicity, significant differences were also found in the percentage of those with children; a little more than a third of Blacks (39%) reported having children, while only 18% of Latinos and 8% Whites had children.

Everyday and Healthcare Discrimination. Over three-quarters (78%) of participants reported high exposure to Everyday Discrimination (Table 2). Over three-quarters also reported experiencing discrimination on the street or in a public setting (82%), about two-thirds experienced discrimination at school (68%) and in a store or restaurant (64%), and over half experienced discrimination when getting hired for a job (60%), at work (57%), and from police or in the courts (56%).

A majority of participants (84%) reported having ever been to a health care

Table 1

Demographic Characteristics of Participants

	Overall (n=450)	Black (n=152)	Latino (n=148)	White (n=150)	Test Statistic	Men (n=210)	Women (n=240)	Test Statistic
Age, M (SD) ^{a,b}	23.13 (3.83)	22.37 (3.92)	22.44 (3.65)	24.59 (3.50)	F = 17.67***	23.11 (3.94)	23.16 (3.74)	t = -0.15
Education								
High School or less	115 (25.56%)	49 (32.24%)	41 (27.70%)	25 (16.67%)	$\chi^2 = 27.02^{***}$	66 (31.43%)	49 (20.42%)	$\chi^2 = 9.76^{**}$
Some College	209 (46.44%)	75 (49.34%)	73 (49.32%)	61 (40.67%)		97 (46.19%)	112 (46.67%)	
College and beyond	126 (28.00%)	28 (18.42%)	34 (22.97%)	64 (42.67%)		47 (22.38%)	79 (32.92%)	
Race/Ethnicity								
Non-Hispanic Black	152 (33.78%)	---	---	---	---	73 (34.76%)	79 (32.92%)	$\chi^2 = 0.17$
Hispanic/Latino	148 (32.89%)					68 (32.38%)	80 (33.33%)	
Non-Hispanic White	150 (33.33%)					69 (32.86%)	81 (33.75%)	
Gender								
Male	210 (46.67%)	73 (48.03%)	68 (45.95%)	69 (46.00%)	$\chi^2 = 0.17$	---	---	---
Female	240 (53.33%)	79 (51.97%)	80 (54.05%)	81 (54.00%)				
Have Children								
Yes	83 (18.49%)	44 (38.95%)	27 (18.37%)	12 (8.00%)	$\chi^2 = 21.99^{***}$	40 (19.14%)	43 (17.92%)	$\chi^2 = 0.11$
No	366 (81.51%)	108 (71.05%)	120 (81.37%)	138 (92.00%)		169 (80.86%)	197 (82.08%)	
Work Outside Home								
Yes	330 (73.33%)	102 (67.11%)	112 (75.68%)	116 (77.33%)	$\chi^2 = 4.66$	153 (72.86%)	177 (73.75%)	$\chi^2 = 0.06$
No	120 (26.77%)	50 (32.89%)	36 (24.32%)	34 (22.67%)		57 (27.14%)	63 (26.25%)	

*p<0.05, **p<0.01, ***p<0.001

^a Significant difference between Black and White, p<0.05^b Significant difference between Latino and White, p<0.05

provider (Table 2). Of those, about a quarter of the participants, or fewer, reported experiencing most of the specific types of discrimination in a healthcare setting (Table 2). Notably, 37% reported that healthcare providers did not listen to them and only seven percent reported feeling as if healthcare providers were afraid of them. Significant differences in experiences of discrimination by race/ethnicity and gender are presented in the bivariate results (Tables 4 and 5) described below.

HIV/AIDS conspiracy beliefs. Overall, over half of participants endorsed the statements “A lot of information about AIDS is held back from the public” (60%), “AIDS was produced in a government laboratory” (52%), and “The government is telling the truth about AIDS” (50%) (Table 3).

Significant differences in HIV/AIDS conspiracy beliefs by race/ethnicity and gender are presented in the bivariate results (Tables 6 and 7) described below. Because of the exploratory nature of this study we decided not to stratify the alphas across multiple comparisons but rather present the bivariate information in both aims as illustrative information about discrimination and HIV/AIDS conspiracy beliefs.

Bivariate Associations.

Perceived everyday discrimination and race/ethnicity. Overall, Whites had significantly lower odds than both Blacks and Latinos of reporting either high or some levels of exposure to everyday discrimination (Table 4). Specifically, when comparing no exposure to high exposure, Blacks had 5.40 times the odds, and Latinos had 2.98 times the odds of reporting experiences of discrimination compared to Whites. Comparing some exposure to high exposure, Blacks had 4.26

Table 2
Descriptive Statistics for Experiences of Discrimination

	Overall (n=450)	Black (n=152)	Latino (n=148)	White (n=150)	Men (n=210)	Women (n=240)
Everyday Discrimination						
Experienced discrimination at... school	68.00%	72.37%	75.00%	56.67%	72.38%	64.17%
... getting hired or getting a job	59.60%	70.86%	60.54%	47.33%	65.87%	54.17%
... at work	56.92%	69.54%	56.54%	44.67%	59.62%	54.58%
... getting housing	38.17%	49.01%	39.46%	26.00%	40.38%	36.25%
... getting medical care	36.75%	38.82%	46.26%	25.33%	36.84%	36.67%
... getting services in a store or restaurant	64.44%	82.24%	68.92%	42.00%	64.76%	64.17%
... getting credit, bank loans, or mortgage	33.78%	39.33%	42.18%	20.00%	33.82%	33.75%
... on the street or in a public setting	81.56%	88.16%	83.11%	73.33%	85.71%	77.92%
... from police or in the courts	55.56%	71.05%	63.51%	32.00%	67.62%	45.00%
Everyday Discrimination- level of exposure						
No exposure	7.11%	3.29%	5.41%	12.67%	4.76%	9.17%
Some exposure	15.33%	7.89%	14.19%	24.00%	11.90%	18.33%
High exposure	77.56%	88.82%	80.41%	63.33%	83.33%	72.50%
Healthcare Discrimination						
Ever been to a health care provider	84.22%	79.61%	83.11	90.00%	72.86%	94.17%
Scale Score, <i>M (SD)</i>	0.72 (0.69)	0.83 (0.75)	0.89 (0.74)	0.47 (0.50)	0.70 (0.67)	0.74 (0.70)
Less courtesy	19.05%	25.00%	29.27%	4.44%	16.99%	20.44%
Less respect	17.94%	27.27%	24.39%	3.70%	15.69%	19.47%
Poorer service	23.34%	22.88%	30.08%	7.52%	23.03%	23.56%
Act as if... you are not smart	25.59%	26.45%	34.15%	17.04%	23.53%	26.99%
... afraid of you	7.39%	12.40%	8.13%	2.22%	11.11%	4.87%
... better than you	29.29%	29.75%	35.77%	22.96%	24.84%	32.30%
Not listening to you	36.68%	33.06%	43.09%	34.07%	32.03%	39.82%

Note Percentages represent aggregate of sometimes, most of the time, and always rating values

Table 3

Descriptive Statistics for HIV/AIDS Conspiracy Beliefs

HIV/AIDS Conspiracy Beliefs	Overall (n=450)	Black (n=152)	Latino (n=148)	White (n=150)	Men (n=210)	Women (n=240)
Scale Score, <i>M</i> (<i>SD</i>)	2.24 (0.61)	2.47 (0.57)	2.23 (0.65)	2.01 (0.51)	2.29 (0.60)	2.19 (0.61)
HIV medicines are saving lives in the Black/African American community	28.00%	40.79%	23.65%	19.33%	27.62%	28.33%
A lot of information about AIDS is held back from the public	59.78%	64.47%	54.73%	60.00%	56.67%	62.50%
HIV is a manmade virus	41.33%	56.58%	41.89%	25.33%	44.29%	38.75%
There is a cure for AIDS, but it is being withheld from the poor	41.11%	54.61%	39.86%	28.67%	41.43%	40.83%
The government is telling the truth about AIDS	50.44%	59.87%	46.62%	44.67%	49.52%	51.25%
The medicine used to treat HIV causes people to get AIDS	3.56%	3.29%	6.76%	0.67%	3.81%	3.33%
HIV was created and spread by the CIA	9.11%	13.16%	8.78%	5.33%	12.38%	6.25%
AIDS is a form of genocide against Blacks/African Americans	19.77%	32.24%	19.59%	7.33%	21.90%	17.92%
The medicine that doctors prescribe to treat HIV is poison	6.89%	7.89%	9.46%	3.33%	7.62%	6.25%
AIDS was created by the government to control the Black population	14.67%	23.03%	15.54%	5.33%	17.62%	12.08%
Doctors put HIV into condoms	1.33%	1.97%	1.35%	0.67%	2.38%	0.42%
People who take the new medicines for HIV are human guinea pigs for the government	32.44%	39.47%	33.11%	24.67%	31.43%	33.33%
Medical and PH institutions are trying to stop the spread of HIV in Black/African American communities	13.56%	10.53%	20.95%	9.33%	14.29%	12.92%
AIDS was produced in a government laboratory	52.00%	34.87%	52.70%	68.67%	45.71%	57.50%
The medicines used to treat HIV are saving lives in the Hispanic/Latino community	20.67%	31.58%	19.59%	10.67%	19.52%	21.67%
AIDS is a form of genocide against Hispanics/Latinos	10.89%	19.08%	11.49%	2.00%	11.43%	10.42%
AIDS was created by the government to control the Hispanic/Latino population	7.11%	10.53%	8.78%	2.00%	8.57%	5.83%
Medical and PH institutions are trying to stop the spread of HIV in Hispanic/Latino communities	9.78%	13.16%	8.78%	7.33%	11.43%	8.33%

Note: Percentages represent aggregate of agree and strongly agree rating values

Table 4

Bivariate Associations between Discrimination and Race/Ethnicity

	Black (n=152) OR (CI)	Latino (n=148) OR (CI)	White (n=150) reference	Test Statistic
Everyday Discrimination				
Experienced discrimination at... school ^{a,b}	2.51 (1.52, 4.15) 1.27 (0.79, 2.02)	1.98 (1.19, 3.30) ref	ref ---	$\chi^2 = 14.06^{***}$
... getting hired or getting a job ^{a,b}	2.49 (1.47, 4.23) 1.48 (0.91, 2.42)	1.69 (0.98, 2.91) ref	ref ---	$\chi^2 = 12.05^{**}$
... at work	1.64 (0.97, 2.80) 1.10 (0.66, 1.82)	1.50 (0.87, 2.57) ref	ref ---	$\chi^2 = 3.76$
... getting housing ^{a,c}	3.24 (1.70, 6.18) 1.76 (0.99, 3.09)	1.84 (0.93, 3.66) ref	ref ---	$\chi^2 = 14.24^{***}$
... getting medical care ^b	1.61 (0.84, 3.11) 0.77 (.04, 1.38)	2.09 (1.10, 3.97) ref	ref ---	$\chi^2 = 5.34$
... getting services in a store or restaurant ^{a,b,c}	5.56 (3.26, 9.48) 1.59 (0.99, 2.50)	3.51 (2.04, 6.02) ref	ref ---	$\chi^2 = 46.48^{***}$
... getting credit, bank loans, or mortgage ^{a,b}	3.21 (1.62, 6.35) 1.49 (0.84, 2.63)	2.16 (1.06, 4.41) ref	ref ---	$\chi^2 = 12.47^{**}$
... on the street or in a public setting ^{a,b}	2.32 (1.46, 3.68) 1.38 (0.87, 2.17)	1.68 (1.06, 2.68) ref	ref ---	$\chi^2 = 13.16^{**}$
... from police or in the courts ^{a,b}	7.42 (4.20, 13.09) 1.50 (0.95, 2.36)	4.95 (2.80, 8.78) ref	ref ---	$\chi^2 = 61.12^{***}$
Everyday Discrimination - level of exposure				
No exposure - Some exposure	1.27 (0.39, 4.13) 0.91 (0.24, 3.42)	1.38 (0.52, 3.71) ref	ref ---	$\chi^2 = 0.48$
Some exposure - High exposure	4.26 (2.10, 8.62) 1.99 (0.93, 4.21)	2.15 (2.11, 8.62) ref	ref ---	$\chi^2 = 18.98^{**}$
No exposure - High exposure	5.40 (1.95, 14.97) 1.81 (0.57, 5.70)	2.98 (1.25, 7.09) ref	ref ---	$\chi^2 = 14.18^{***}$
Healthcare Discrimination				
Ever been to a health care provider ^a	0.43 (0.22, 0.84) 1.82 (0.44, 1.42)	0.19 (0.28, 1.09) ref	ref ---	$\chi^2 = 6.64^*$
Scale Score, <i>M (SD)</i> ^{a,b}	0.83 (0.75)	0.89 (0.74)	0.47 (0.50)	F = 15.18 ^{**}
Less courtesy ^{a,b,c}	3.70 (2.14, 6.40) 0.98 (.060, 1.63)	3.76 (2.17, 6.49) ref	ref ---	$\chi^2 = 31.43^{***}$
Less respect ^{a,b}	3.45 (2.04, 5.85) 1.11 (0.67, 1.83)	3.12 (1.84, 5.27) ref	ref ---	$\chi^2 = 27.51^{***}$
Poorer service ^{a,b}	3.67 (2.18, 6.20) 1.15 (0.69, 1.91)	3.19 (1.90, 5.36) ref	ref ---	$\chi^2 = 30.51^{***}$
Act as if... you are not smart ^{a,b,c}	1.84 (1.11, 3.04) 0.77 (0.46, 1.27)	2.39 (1.45, 3.95) ref	ref ---	$\chi^2 = 12.57^{**}$
... afraid of you ^{a,b}	5.93 (2.72, 12.94) 1.16 (0.66, 2.02)	5.13 (2.34, 11.26) ref	ref ---	$\chi^2 = 28.82^{***}$
... better than you	0.87 (0.53, 1.43) 0.61 (0.38, 1.01)	1.43 (0.88, 2.34) ref	ref ---	$\chi^2 = 3.96$
Not listening to you	1.15 (0.70, 1.90) 0.65 (0.38, 1.11)	1.77 (1.05, 2.96) ref	ref ---	$\chi^2 = 4.99$

*p<0.05, **p<0.01, ***p<0.001

^a Significant difference between Black and White, p<0.05^b Significant difference between Latino and White, p<0.05^c Significant difference between Black and Hispanic, p<0.05

times the odds, and Latinos had 2.15 times the odds of reporting experiences of discrimination compared to Whites.

Whites had significantly lower odds than both Blacks and Latinos to report experiencing specific items of Everyday Discrimination (Table 4). Specifically, compared to Whites, Blacks had 7.42 times the odds, and Latinos had 4.95 times the odds of reporting experiences of discrimination from police or in the courts. Additionally, Blacks had 5.56 times the odds, and Latinos had 3.51 times the odds of reporting experiences of discrimination when getting service in a store or restaurant compared to Whites. Blacks and Latinos had significantly greater odds than Whites of experiencing discrimination at school (OR=2.51 and 1.98, respectively), getting credit, bank loans, or a mortgage (OR=3.21 and 2.16, respectively), and on the street or in a public setting (OR=2.32 and 1.68, respectively). Finally, Blacks had significantly greater odds compared to Whites of experiencing discrimination when getting hired for a job (OR=2.49) and when getting housing (OR=3.24). No significant differences were found between Blacks and Latinos on individual items of Everyday Discrimination.

Perceived everyday discrimination and gender. Women had significantly lower odds compared to men of reporting either high or some levels of exposure to everyday forms of discrimination (Table 5). Specifically, when comparing no exposure to high exposure, men had 2.21 times the odds of reporting experiences of discrimination compared to women. Comparing some exposure to high exposure, men had 1.77 times the odds of reporting experiences of discrimination compared to women.

Few significant differences were found between men and women on specific items of Everyday Discrimination (Table 5). Men had 2.55 times the odds compared to

Table 5

Bivariate Associations between Discrimination and Gender

	Men OR (CI)	Women reference	Test Statistic
Everyday Discrimination			
Experienced discrimination at... school	1.46 (0.98, 2.19)	ref	$\chi^2 = 3.49$
... getting hired or getting a job	1.63 (1.11, 2.39)	ref	$\chi^2 = 6.37^*$
... at work	1.23 (0.84, 1.79)	ref	$\chi^2 = 1.15$
... getting housing	1.19 (0.81, 1.75)	ref	$\chi^2 = 0.81$
... getting medical care	1.01 (0.69, 1.48)	ref	$\chi^2 = 0.00$
... getting services in a store or restaurant	1.03 (0.70, 1.51)	ref	$\chi^2 = 0.02$
... getting credit, bank loans, or mortgage	1.00 (0.68, 1.49)	ref	$\chi^2 = 0.00$
... on the street or in a public setting	1.70 (1.04, 2.78)	ref	$\chi^2 = 4.50^*$
... from police or in the courts	2.55 (1.74, 3.75)	ref	$\chi^2 = 23.48^{***}$
Everyday Discrimination Level of exposure			
No exposure - Some exposure	1.25 (0.51, 3.06)	ref	$\chi^2 = 0.24$
Some exposure -- High exposure	1.77 (1.04, 3.02)	ref	$\chi^2 = 4.53^*$
No exposure - High exposure	2.21 (1.02, 4.81)	ref	$\chi^2 = 4.38^*$
Healthcare Discrimination			
Scale Score, <i>M (SD)</i>	0.70 (0.67)	0.74 (0.70)	t = -0.46
Less courtesy	0.87 (0.57, 1.33)	ref	$\chi^2 = 0.39$
Less respect	0.94 (0.62, 1.42)	ref	$\chi^2 = 0.09$
Poorer service	0.83 (0.55, 1.26)	ref	$\chi^2 = 0.77$
Act as if... you are not smart	0.87 (0.58, 1.32)	ref	$\chi^2 = 0.41$
... afraid of you	2.28 (1.38, 3.78)	ref	$\chi^2 = 10.32^{**}$
... better than you	0.79 (0.52, 1.17)	ref	$\chi^2 = 1.44$
Not listening to you	0.97 (0.63, 1.50)	ref	$\chi^2 = 0.01$

*p<0.05, **p<0.01, ***p<0.001

women of reporting experiences of discrimination from police or in the courts.

Additionally men had 1.70 and 1.63 times the odds than women of reporting experiences of discrimination on the street or in a public setting or when getting hired for a job, respectively.

Perceived healthcare discrimination and race/ethnicity. All respondents were first asked, “Have you ever been to a health care provider?” Results indicated that Blacks had lower odds compared Whites to have ever seen a health care provider (OR = 0.43, 95% CI = 0.22, 0.84) (Table 4). Among those who had ever seen a provider, Blacks ($M = 0.83$) and Latinos ($M = 0.89$) had significantly greater mean scale scores of healthcare discrimination compared to Whites ($M = 0.47$, $p < 0.01$).

An exploration of individual items revealed that Blacks and Latinos had significantly higher odds compared to Whites of reporting being treated with less courtesy (OR=3.70 and 3.76, respectively), less respect (OR=3.45 and 3.12, respectively), receiving poorer service (OR=3.67 and 3.19, respectively), having providers act as if they are not smart (OR=1.84 and 2.39, respectively), and having providers act as if they are afraid of them (OR=5.93 and 5.13, respectively). No significant differences were found between Blacks and Latinos on the overall scale score or individual items of Healthcare Discrimination.

Perceived healthcare discrimination and gender. Men had lower odds compared to women of having ever seen a health care provider (OR = 0.17, 95% CI = 0.09, 0.31) (Table 5). Overall, the mean scale scores of men and women were not significantly different. However, men were 2.28 times more likely to report that a health care provider was afraid of them compared to women.

HIV/AIDS conspiracy beliefs and race/ethnicity. Blacks ($M = 2.47$) reported a significantly higher mean HCB scale score than both Latinos ($M = 2.23$) and Whites ($M = 2.01$), who were also significantly different from each other ($p < 0.05$) (Table 6).

Exploring individual HCB items, we found five items to be significantly different between all race/ethnicity groups. Specifically, Blacks had 6.01 times the odds compared to Whites, and had 1.95 times the odds compared to Latinos, to endorse that AIDS is a form of genocide against Blacks/African Americans. Latinos had 3.08 times the odds of agreeing with this statement compared to Whites. Additionally, Blacks had 3.87 times the odds compared to Whites and 1.89 times the odds compared to Latinos of endorsing that medicines used to treat HIV are saving lives in the Hispanic/Latino community. On the same item, Latinos had 2.04 times the odds compared to Whites of endorsing this belief. Blacks had 3.84 times the odds compared to Whites, and 1.81 times the odds compared to Latinos, of endorsing that HIV is a manmade virus. Latinos had 2.13 times the odds compared to Whites of endorsing the same item. Blacks had 2.99 times the odds compared to Whites, and 1.82 times the odds compared to Latinos, of endorsing that there is a cure for AIDS but it is being withheld from the poor and Latinos had 1.65 times the odds compared to Whites of endorsing the same item. Finally, Blacks had lower odds compared to both Whites (OR = 0.24, 95% CI = 0.15, 0.39) and Latinos (OR=0.48, 95% CI=0.30, 0.76) of endorsing that AIDS was produced in a government laboratory and Latinos had lower odds compared to Whites of endorsing with the same item (OR = 0.51, 95% CI = 0.32, 0.82).

We also found that Blacks and Latinos had greater odds of endorsing 3 items compared to Whites. Blacks and Latinos had 11.55 times and 6.36 times the odds,

respectively, compared to than Whites of endorsing that AIDS is a form of genocide against Hispanics/Latinos (Table 6). Blacks and Latinos had 5.31 times and 3.26 times the odds, respectively, compared to Whites of endorsing that AIDS was created by the government to control the Black population and 5.77 times and 4.72 times the odds, respectively, compared to Whites of endorsing that AIDS was created by the government to control the Hispanic/Latino population. No significant differences were found between Blacks and Latinos on these items. A number of additional items were found to be significantly different between Blacks and Whites or between Latinos and Whites (see Table 6).

HIV/AIDS conspiracy beliefs and gender. Overall, the mean HCB scale scores of men and women were not significantly different. However, when exploring individual items, we found two items to be significantly different between men and women. Men had 2.12 times the odds compared to women of endorsing that HIV was created and spread by the CIA and had lower odds compared to women of endorsing that AIDS was produced in a government laboratory (OR = 0.62, 95% CI = 0.42, 0.90) (Table 7).

Ordinal Logistic Regression Model: Associations with EOD.

We used two ordinal logistic regression models to test levels of EOD, a main effects only model and a race-by-gender interaction model. The model including the race-by-gender interaction term was found to be a significantly better fit than the main effects only model ($\chi^2(2) = 0.04, p < 0.05$) and, therefore, findings for that model are presented (Table 8). Interaction coefficients were used to calculate adjusted odds ratios. After controlling for demographic covariates, Black men had almost 50 times the odds ($\chi^2 = 49.88, 95\% \text{ CI} = 6.47, 384.27$) compared to White men of reporting experiences of

Table 6
Bivariate Associations between HIV/AIDS Conspiracy Beliefs and Race/Ethnicity

	Black (n=152) OR (CI)	Latino (n=148) OR (CI)	White (n=150) reference	Test Statistic
Scale Score, <i>M</i> (<i>SD</i>) ^{a,b,c}	2.47 (0.57)	2.23 (0.65)	2.01 (0.51)	F = 24.61**
HIV medicines are saving lives in the Black/African American community ^{a, c}	2.87 (1.71, 4.43) 2.22 (1.35, 3.66)	1.29 (0.74, 2.23) ref	ref ---	$\chi^2 = 18.91^{***}$
A lot of information about AIDS is held back from the public	1.21 (0.76, 1.93) 1.50 (0.94, 2.39)	0.81 (0.51, 1.28) ref	ref ---	$\chi^2 = 2.97$
HIV is a manmade virus ^{a,b,c}	3.84 (2.36, 6.26) 1.81 (1.14, 2.86)	2.13 (1.30, 3.48) ref	ref ---	$\chi^2 = 31.11^{***}$
There is a cure for AIDS, but it is being withheld from the poor ^{a,b,c}	2.99 (1.86, 4.82) 1.82 (1.15, 2.87)	1.65 (1.02, 2.67) ref	ref ---	$\chi^2 = 21.32^{***}$
The government is telling the truth about AIDS ^{a,c}	1.85 (1.17, 2.92) 1.71 (1.08, 2.70)	1.08 (0.69, 1.71) ref	ref ---	$\chi^2 = 8.31^*$
The medicine used to treat HIV causes people to get AIDS ^b	5.07 (0.59, 43.91) 0.46 (0.16, 1.41)	10.80 (1.36, 85.45) ref	ref ---	$\chi^2 = 9.00^*$
HIV was created and spread by the CIA ^a	2.69 (1.15, 6.31) 1.57 (0.75, 3.29)	1.71 (0.69, 4.23) ref	ref ---	$\chi^2 = 5.69^*$
AIDS is a form of genocide against Blacks/African Americans ^{a,b,c}	6.01 (2.98, 12.13) 1.95 (1.15, 3.32)	3.08 (1.48, 6.43) ref	ref ---	$\chi^2 = 31.38^{***}$
The medicine that doctors prescribe to treat HIV is poison ^b	2.49 (0.85, 7.24) 0.82 (0.36, 1.84)	3.03 (1.06, 8.64) ref	ref ---	$\chi^2 = 5.21$
AIDS was created by the government to control the Black population ^{a,b}	5.31 (2.37, 11.89) 1.63 (0.91, 2.91)	3.26 (1.41, 7.56) ref	ref ---	$\chi^2 = 20.83^{***}$
Doctors put HIV into condoms	3.00 (0.31, 29.17) 1.47 (0.24, 8.93)	2.04 (0.18, 22.75) ref	ref ---	$\chi^2 = 1.03$
People who take the new medicines for HIV are human guinea pigs for the government ^a	1.99 (1.22, 3.26) 1.32 (0.82, 2.11)	1.51 (0.91, 2.51) ref	ref ---	$\chi^2 = 7.69^*$
Medical and PH institutions are trying to stop the spread of HIV in Black/African American communities ^{b,c}	1.14 (0.54, 2.43) 0.44 (0.23, 0.85)	2.57 (1.31, 5.07) ref	ref ---	$\chi^2 = 9.86^{**}$
AIDS was produced in a government laboratory ^{a,b,c}	0.24 (0.15, 0.39) 0.48 (0.30, 0.76)	0.51 (0.32, 0.82) ref	ref ---	$\chi^2 = 35.28^{***}$
The medicines used to treat HIV are saving lives in the Hispanic/Latino community ^{a,b,c}	3.87 (2.08, 7.19) 1.89 (1.11, 3.22)	2.04 (1.06, 2.94) ref	ref ---	$\chi^2 = 20.68^{***}$
AIDS is a form of genocide against Hispanics/Latinos ^{a,b}	11.55 (3.44, 38.84) 1.82 (0.95, 3.47)	6.36 (1.82, 22.19) ref	ref ---	$\chi^2 = 26.65^{***}$
AIDS was created by the government to control the Hispanic/Latino population ^{a,b}	5.77 (1.64, 20.22) 1.22 (0.57, 2.64)	4.72 (1.32, 16.92) ref	ref ---	$\chi^2 = 11.08^{**}$
Medical and PH institutions are trying to stop the spread of HIV in Hispanic/Latino communities	1.91 (0.88, 4.15) 1.57 (0.75, 3.29)	1.22 (0.53, 2.81) ref	ref ---	$\chi^2 = 3.07$

*p<0.05, **p<0.01, ***p<0.001

^a Significant difference between Black and White, p<0.05

^b Significant difference between Latino and White, p<0.05

^c Significant difference between Black and Hispanic, p<0.05

Table 7

Bivariate Associations between HIV/AIDS Conspiracy Beliefs and Gender

HIV Conspiracy Beliefs	Men OR (CI)	Women reference	Test Statistic
Scale Score, <i>M (SD)</i>	2.28 (0.60)	2.20 (0.61)	t= 1.54
HIV medicines are saving lives in the Black/African American community	0.96 (0.64, 1.46)	ref	$\chi^2 = 0.03$
A lot of information about AIDS is held back from the public	0.79 (0.54, 1.15)	ref	$\chi^2 = 1.58$
HIV is a manmade virus	1.25 (0.86, 1.93)	ref	$\chi^2 = 1.58$
There is a cure for AIDS, but it is being withheld from the poor	1.02 (0.70, 1.49)	ref	$\chi^2 = 0.02$
The government is telling the truth about AIDS	0.93 (0.64, 1.35)	ref	$\chi^2 = 0.13$
The medicine used to treat HIV causes people to get AIDS	1.15 (0.42, 3.12)	ref	$\chi^2 = 0.07$
HIV was created and spread by the CIA	2.12 (1.09, 4.12)	ref	$\chi^2 = 5.10^*$
AIDS is a form of genocide against Blacks/African Americans	1.29 (0.81, 2.05)	ref	$\chi^2 = 1.12$
The medicine that doctors prescribe to treat HIV is poison	1.24 (0.57, 2.57)	ref	$\chi^2 = 0.33$
AIDS was created by the government to control the Black population	1.56 (0.92, 2.63)	ref	$\chi^2 = 2.74$
Doctors put HIV into condoms	5.83 (0.68, 50.30)	ref	$\chi^2 = 3.52$
People who take the new medicines for HIV are human guinea pigs for the government	0.92 (0.62, 1.36)	ref	$\chi^2 = 0.19$
Medical and PH institutions are trying to stop the spread of HIV in Black/African American communities	1.12 (0.66, 1.93)	ref	$\chi^2 = 0.18$
AIDS was produced in a government laboratory	0.62 (0.42, 0.90)	ref	$\chi^2 = 6.24^*$
The medicines used to treat HIV are saving lives in the Hispanic/Latino community	0.87 (0.55, 1.39)	ref	$\chi^2 = 0.31$
AIDS is a form of genocide against Hispanics/Latinos	1.11 (0.62, 2.01)	ref	$\chi^2 = 0.12$
AIDS was created by the government to control the Hispanic/Latino population	1.51 (0.73, 3.12)	ref	$\chi^2 = 1.27$
Medical and PH institutions are trying to stop the spread of HIV in Hispanic/Latino communities	1.42 (0.76, 2.65)	ref	$\chi^2 = 1.21$

*p<0.05, **p<0.01, ***p<0.001

everyday discrimination. Additionally, Latino men had 7.47 times the odds compared to White men of reporting experiences of everyday discrimination (95% CI = 2.73, 20.46). No significant differences were found by race/ethnicity among women. The Hosmer-Lemeshow goodness of fit test indicated no evidence against model fit, so we are able to assume that this model is adequately specified ($p=0.97$).

Multivariable Regression Model: Associations with HDS.

We used two multivariable regression models to understand the association of race and gender with HDS: a main effects only model and a race-by-gender interaction model. Findings from the linear regression main effects only model on HDS were significant ($F(7, 371) = 6.94, p<0.001$) however, the race-by-gender interaction effect was not significant. Although the Anderson-Darling test of normality indicated no evidence against normality of the HDS residuals ($p=1.00$) the Breusch-Pagan/Cook-Weisberg test indicated concern for heteroscedasticity ($p=0.00$).

To address concerns of heteroscedasticity, the healthcare discrimination variable was log transformed. The Anderson-Darling test of normality indicated no evidence against normality of the residuals ($p=1.00$) and the Breusch-Pagan/Cook-Weisberg test indicated no concern for heteroscedasticity ($p=0.00$) after the transformation. The results for the main effects only model remained significant and unchanged ($F(7, 371) = 6.94, p<0.000$) (Table 9). Again, no significant race-by-gender interactions were found so the main-effects only model is presented. After controlling for demographic covariates, Blacks and Latinos were significantly more likely than Whites ($b = 0.28, p<0.01$ and $b = 0.39, p<0.001$, respectively) to report healthcare discrimination. Additionally, participants

Table 8

Results from Ordinal Logistic Regression Models: Factors Associated with Levels of Perceived Everyday Discrimination

	Coefficient (95% CI)	Calculated Adjusted OR 95% CI)
Everyday Discrimination	$\chi^2 (9) = 58.74^{***}$; $R^2 = 0.10$	
Age	0.02 (-0.06, 0.09)	
Education	0.05 (-0.05, 0.15)	
Male	-0.28 (-0.95, 0.39)	
Black	0.71 (-0.04, 1.45)	
Latino	0.25 (-0.42, 0.92)	
Child	0.35 (-0.37, 1.07)	
Work	-0.03 (-0.57, 0.52)	
Male*Black	3.21 (1.05, 5.36)	
Male*Latino	1.76 (0.56, 2.96)	
Interaction of Race and Gender		
Males		
Black v White		49.88 (6.47, 384.27)*
Latino v White		7.47 (2.73, 20.46)*
Latino v Black		6.68 (0.78, 57.21)
Females		
Black v White		2.02 (0.96, 4.27)
Latino v White		1.29 (0.66, 2.52)
Latino v Black		1.58 (0.75, 3.29)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

with at least one child ($b = 0.27, p < 0.01$) were also more likely to have experienced healthcare discrimination.

Multivariable Regression Model: Associations with HCB.

We used two multivariable regression models to understand the association of race and gender with HCB: a main effects only model and a race-by-gender interaction model. Findings from the main effects only model on HCB were significant ($F(7, 442) = 9.49, p < 0.001$) and because the race-by-gender interaction effect was not significant in the multivariate linear regression, the results from the main effects only model are presented (Table 9). The Anderson-Darling test of normality indicated no evidence against normality of the residuals ($p = 0.97$) and Breusch-Pagan/Cook-Weisberg test indicated no evidence for heteroscedasticity ($p = 0.84$).

After controlling for demographic covariates, Blacks and Latinos were significantly more likely than Whites ($b = 0.41, p < 0.001$ and $b = 0.19, p < 0.01$, respectively) to report conspiracy beliefs about HIV/AIDS. Additionally, participants with at least one child ($b = 0.23, p < 0.01$) were also more likely to agree with conspiracy beliefs about HIV/AIDS.

Table 9
Results from Multivariable Logistic and Linear Regression Models: Factors Associated with Perceived Healthcare Discrimination and HIV/AIDS Conspiracy Beliefs

	Coefficient (95% CI)
Healthcare Discrimination	$\chi^2 (7) = 16.75^*$; $R^2 = 0.04$
Age	0.97 (0.91, 1.05)
Education	1.03 (0.92, 1.14)
Male	1.32 (0.82, 2.14)
Black	1.44 (0.81, 2.58)***
Latino	2.37 (1.28, 4.38)**
Child	1.57 (0.78, 2.18)**
Work	0.65 (0.36, 1.17)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	Coefficient (Std. Error)
HIV/AIDS Conspiracy Beliefs	$F (7,442) = 9.49^{***}$; $R^2 = 0.13$
Age	-0.00 (0.01)
Education	-0.02 (0.01)
Male	0.07 (0.05)
Black	0.41 (0.07)***
Latino	0.19 (0.07)**
Child	0.23 (0.07)**
Work	0.07 (0.06)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Results for Aim 2

Descriptive Statistics.

Demographics. Overall, the sample was equally represented by race/ethnicity (Black 33%, Latino 36%, and White 31%) and gender (men 47% and women 53%) (Table 10). Additionally, the majority did not have children (80%). Significant differences in demographics were found by race/ethnicity and gender. Specifically, Whites were significantly older than both Blacks and Latinos ($F = 11.05, p < 0.001$). Nearly one-third of Blacks (29%) reported having children, and only 19% of Latinos and 11% of Whites had children ($p < 0.01$).

Additionally, significant differences in sexual behavior and testing were found by race/ethnicity and gender. Specifically, Latinos had significantly fewer lifetime sexual partners than both Blacks and Whites ($F = 5.75, p < 0.001$). Additionally, men had significantly more lifetime sexual partners compared to women ($t = 3.58, p < 0.001$). Fewer Latinos (71%) reported ever receiving an HIV/AIDS test versus 81% of Blacks and 85% of Whites. Additionally, fewer men (36%) reported being tested for STIs in the last four months compared to women (53%).

Bivariate Associations.

Condom use at baseline and number of lifetime sexual partners were the only variables significantly associated with condom use at Time 2 for the overall sample (OR= 3.57; CI = 2.09, 6.12, $p < 0.001$ and OR=0.99; CI = (0.97, 1.00), $p < 0.05$, respectively) (Table 11). Analyses run separately by race/ethnicity indicated that condom use at baseline was significantly associated with condom use at Time 2 for all groups,

Table 10

Descriptive Information: Demographic, Partner-Specific Individual Factors, Discrimination and HIV Conspiracy Beliefs by Race and by Gender

Demographic Characteristics	Overall (n=302)	Black (n=98)	Latino (n=110)	White (n=94)	Test Statistic	Men (n=142)	Women (n=160)	Test Statistic
Age, <i>M</i> (<i>SD</i>)^{ab}	23.26 (3.80)	22.61 (4.00)	22.56 (3.51)	24.73 (3.52)	F = 11.05***	23.36 (3.91)	23.16 (3.70)	t = 0.45
Education								
High School or less	23.84%	26.53%	24.55%	20.21%	$\chi^2 = 6.65$	28.87%	19.38%	$\chi^2 = 4.64$
Some College	48.68%	51.02%	51.82%	42.55%		47.89%	49.38%	
College and beyond	27.48%	22.45%	23.64%	37.23%		23.24%	31.25%	
Race/Ethnicity		---	---	---	---			
Non-Hispanic Black	32.45%					35.21%	30.00%	$\chi^2 = 0.94$
Hispanic/Latino	36.42%					35.21%	37.50%	
Non-Hispanic White	31.13%					29.58%	32.50%	
Gender								
Male	47.02%	51.02%	45.45%	44.68%	$\chi^2 = 0.94$	---	---	---
Female	52.98%	48.98%	54.55%	55.32%				
Have Children								
Yes	19.60%	28.57%	19.27%	10.64%	$\chi^2 = 9.80^{**}$	19.86	19.38%	$\chi^2 = 0.01$
No	80.40%	71.43%	80.73%	89.36%		80.14	80.62%	
Age at First Sex, <i>M</i> (<i>SD</i>)	16.02 (2.53)	15.54 (2.53)	16.16 (2.44)	16.34 (2.59)	F = 2.72	15.62 (2.46)	16.37 (2.55)	t = -2.59
Lifetime Sexual Partners, <i>M</i> (<i>SD</i>)^{bc}	17.25 (22.49)	19.56 (25.17)	11.56 (14.25)	21.39 (25.92)	F = 5.75**	22.06 (26.03)	12.94 (17.75)	t = 3.58***
Condom Use at baseline^c	0.37 (0.38)	0.44 (0.41)	0.31 (0.35)	0.35 (0.38)	F = 3.21*	0.41 (0.40)	0.33 (0.36)	t = 1.77*
Condom Use at time 2	0.23 (0.35)	0.28 (0.37)	0.22 (0.32)	0.21 (0.36)	F = 0.54	0.23 (0.35)	0.24 (0.35)	t = -0.08
Ever Seen Health Care Provider	86.09%	80.61%	87.27%	90.43%	$\chi^2 = 4.06$	76.06%	95.00%	$\chi^2 = 22.55^{***}$
Tested for a STI during the past four months								
Yes	44.56%	47.42%	40.57%	46.15%	$\chi^2 = 1.11$	36.43%	51.95%	$\chi^2 = 7.15^{**}$
No	55.44%	52.58%	59.43%	53.85%		63.57%	48.05%	
Tested for HIV/AIDS ever								
Yes	78.57	81.44%	70.75%	84.62%	$\chi^2 = 6.30^*$	75.00%	81.82%	$\chi^2 = 2.03$
No	21.43	18.56%	29.25%	15.38%		25.00%	18.18%	
Partner-Specific Individual Factors, <i>M</i> (<i>SD</i>)								
Invulnerability to STI/HIV Scale	2.93 (1.94)	2.93 (2.02)	2.69 (2.05)	3.24 (1.70)	F = 2.03	2.88 (2.09)	2.99 (1.80)	t = -0.49
Decision Making Scale	4.07 (0.78)	4.00 (0.87)	4.06 (0.73)	4.15 (0.74)	F = 0.95	3.95 (0.83)	4.18 (0.72)	t = -2.54
Condom Use Self-Efficacy Scale ^{bc}	2.93 (0.67)	3.06 (0.71)	2.76 (0.68)	3.00 (0.58)	F = 5.94**	3.00 (0.64)	2.88 (0.70)	t = 1.54
Discrimination and HIV Conspiracy Beliefs								
Everyday Discrimination								
No exposure	6.62%	5.10%	3.64%	11.70%	$\chi^2 = 21.32^{***}$	4.23%	8.75%	$\chi^2 = 7.26^*$
Some exposure	14.90%	7.14%	12.73%	25.53%		10.56%	18.75%	
High exposure	78.48%	87.76%	83.64%	62.77%		85.21%	72.50%	
Health Care Discrimination Scale <i>M</i> (<i>SD</i>)^{ab}	0.75 (0.69)	0.80 (0.71)	0.93 (0.74)	0.50 (0.51)	F = 9.61**	0.76 (0.69)	0.75 (0.69)	t = 0.13
HIV/AIDS Conspiracy Beliefs <i>M</i> (<i>SD</i>)^{abc}	2.25 (0.62)	2.49 (0.60)	2.24 (0.66)	2.03 (0.52)	F = 13.93***	2.32 (0.60)	2.19 (0.64)	t = 1.98*

*p<0.05, **p<0.01, ***p<0.001

^a Significant difference between Black and White, p<0.05^b Significant difference between Latino and White, p<0.05^c Significant difference between Black and Latino, p<0.05

(Blacks: OR= 4.60; CI = 1.42, 14.91, $p<0.05$, Latinos: OR= 2.27; CI = 1.02, 5.03, $p<0.05$, and Whites: OR= 36.41; CI = 2.31, 17.83, $p<0.001$). Among Latinos only, having a high school education (OR= 0.26; CI = 0.08, 0.83, $p<0.05$) and having children (OR= 0.33; CI = 0.11, 0.97, $p<0.05$) were significantly associated with condom use at Time 2.

Similarly by gender, condom use at baseline was significant for both men (OR= 3.25; CI = 1.44, 7.33, $p<0.01$) and women (OR= 3.93; CI = 1.92, 8.07, $p<0.001$) (Table 12). Among women only, some exposure to everyday discrimination (OR= 5.50; CI = 1.26, 23.94, $p<0.05$) and condom use self-efficacy (OR= 1.88; CI = 1.14, 3.10, $p<0.05$) were significantly associated with condom use at Time 2.

Logistic Regression Model: Predicting Condom Use at Time 2.

We ran a multivariable logistic regression model to predict condom use at Time 2 (Table 13). We began by investigating potential multicollinearity between EOD, HDS, and HCB and found the correlations to be weak to moderate. Although the overall model was significant ($\chi^2(19) = 38.43$, $p<0.01$); neither EOD, HDS, nor HCB significantly predicted condom use at Time 2. Compared to those who did not use condoms at baseline, people who used condoms at baseline had 4.37 times the odds of using condoms at Time 2 (95% CI= 0.71, 2.30).

As a follow-up to these findings, we ran the multivariable logistic model separately for each race/ethnicity and gender. For race/ethnicity groups, the multivariate logistic model was only significant for Whites ($\chi^2(17) = 40.15$, $p<0.01$) (Table 14). Similar to the overall model, after controlling for covariates, neither EOD, HDS, nor

Table 11

Bivariate Associations Between Condom Use at Time 2: Demographics, Partner-Specific Individual Factors, Discrimination and HIV Conspiracy Beliefs Overall Sample and by Race

	Overall (n=302) (OR, CI)	Black (n=98) (OR, CI)	Latino (n=110) (OR, CI)	White (n=94) (OR, CI)
Age, M (SD)	0.98 (0.92, 1.04)	0.97 (0.88, 1.08)	0.92 (0.82, 1.03)	1.05 (0.94, 1.18)
Education				
High School or less	0.50 (0.26, 0.95)	0.44 (0.13, 1.45)	0.26 (0.08, 0.82)*	1.18 (0.39, 3.60)
Some College	0.80 (0.47, 1.37)	1.00 (0.37, 2.73)	0.66 (0.26, 1.68)	0.71 (0.28, 1.77)
College and beyond	--	---	3.90 (1.22, 12.43)*	
Race/Ethnicity				
Non-Hispanic Black	0.97 (0.55, 1.71)			
Hispanic/Latino	0.95 (0.55, 1.66)	---	---	---
Non-Hispanic White	---			
Gender				
Male	0.95 (0.60, 1.50)	1.10 (0.49, 2.43)	1.29 (0.61, 2.75)	0.57 (0.25, 1.30)
Female	---	---	---	---
Have Children				
Yes	0.81 (0.45, 1.44)	1.09 (0.45, 2.63)	0.33 (0.11, 0.97)*	1.91 (0.50, 7.25)
No	---	---	---	---
Age at first time you had vaginal or anal sex	1.09 (0.99, 1.19)	1.04 (0.88, 1.21)	1.19 (1.00, 1.42)	1.06 (0.90, 1.24)
Number of sexual partners you had in life	0.99 (0.97, 1.00)*	0.98 (0.96, 1.00)	0.97 (0.94, 1.01)	0.99 (0.98, 1.01)
Condom Use at baseline	3.57 (2.09, 6.12)***	4.60 (1.42, 14.91)*	2.27 (1.02, 5.03)*	6.41 (2.31, 17.83)***
Tested for a STI during the past four months				
Yes	1.25 (0.79, 1.99)	1.31 (0.59, 2.92)	0.82 (0.37, 1.80)	1.89 (0.82, 4.38)
No	---	---	---	---
Tested for HIV/AIDS ever				
Yes	0.81 (0.46, 1.42)	0.43 (0.15, 1.24)	0.86 (0.37, 1.99)	1.50 (0.46, 4.89)
No	---	---	---	---
Everyday Discrimination- level of exposure				
No exposure	---	---	---	---
Some exposure	2.23 (0.73, 6.85)	5.33 (0.38, 75.78)	4.00 (0.33, 48.66)	1.25 (0.29, 5.45)
High exposure	1.95 (0.73, 5.26)	3.32 (0.36, 30.93)	2.31 (0.23, 23.03)	1.69 (0.44, 6.40)
Health Care Discrimination Scale	0.94 (0.66, 1.35)	0.99 (0.53, 1.85)	0.87 (0.50, 1.52)	1.19 (0.51, 2.78)
HIV/AIDS Conspiracy Beliefs	0.90 (0.63, 1.30)	0.83 (0.42, 1.61)	0.93 (0.53, 1.66)	0.93 (0.43, 2.05)
Invulnerability from STI/HIV Scale	0.96 (0.86, 1.08)	0.85 (0.69, 1.05)	0.74 (0.77, 1.11)	1.23 (0.96, 1.57)
Decision Making Scale	1.02 (0.76, 1.37)	1.15 (0.72, 1.84)	1.00 (0.59, 1.70)	0.88 (0.50, 1.54)
Condom Use Self Efficacy Scale	1.41 (0.99, 2.02)	1.29 (0.72, 2.32)	1.23 (0.70, 2.20)	2.06 (0.97, 4.39)

* p<0.05, ** p<0.01 *** p<0.001

Table 12

Bivariate Associations Between Condom Use at Time 2: Demographic, Partner-Specific Individual Factors, Discrimination and HIV Conspiracy Beliefs Overall Sample and by Gender

	Overall (n=302) (OR, CI)	Men (n=142) (OR, CI)	Women (n=160) (OR, CI)
Age, M (SD)	0.98 (0.92, 1.04)	0.98 (0.90, 1.07)	0.98 (0.90, 1.07)
Education			
High School or less	0.50 (0.26, 0.95)	0.35 (0.13, 0.91)*	0.76 (0.31, 1.87)
Some College	0.80 (0.47, 1.37)	1.00 (0.43, 2.29)	0.66 (0.33, 1.35)
College and beyond	--	--	---
Race/Ethnicity			
Non-Hispanic Black	0.97 (0.55, 1.71)	1.38 (0.60, 3.19)	0.72 (0.33, 1.58)
Hispanic/Latino	0.95 (0.55, 1.66)	1.50 (0.65, 3.45)	0.66 (0.31, 1.40)
Non-Hispanic White	---	---	---
Gender			
Male	0.95 (0.60, 1.50)	---	---
Female	---	---	---
Have Children			
Yes	0.81 (0.45, 1.44)	1.13 (0.49, 2.60)	0.59 (0.26, 1.34)
No	---	---	---
Age at first time you had vaginal or anal sex	1.09 (0.99, 1.19)	1.11 (0.96, 1.28)	1.07 (0.94, 1.21)
Number of sexual partners you had in life	0.99 (0.97, 1.00)*	0.99 (0.98, 1.00)	0.98 (0.96, 1.00)
Condom Use at baseline	3.57 (2.09, 6.12)***	3.25 (1.44, 7.33)**	3.93 (1.92, 8.07)***
Tested for a STI during the past four months			
Yes	1.25 (0.79, 1.99)	1.42 (0.71, 2.83)	1.13 (0.60, 2.15)
No	---	---	---
Tested for HIV/AIDS ever			
Yes	0.81 (0.46, 1.42)	0.66 (0.30, 1.41)	1.03 (0.45, 2.36)
No	---	---	---
Everyday Discrimination- level of exposure			
No exposure	---	---	---
Some exposure	2.23 (0.73, 6.85)	0.36 (0.05, 2.60)	5.50 (1.26, 23.94)*
High exposure	1.95 (0.73, 5.26)	0.86 (0.17, 4.44)	2.98 (0.79, 11.24)
Health Care Discrimination Scale	0.94 (0.66, 1.35)	1.25 (0.71, 2.18)	0.77 (0.48, 1.24)
HIV/AIDS Conspiracy Beliefs	0.90 (0.63, 1.30)	1.20 (0.69, 2.10)	0.72 (0.44, 1.19)
Invulnerability from STI/HIV Scale	0.96 (0.86, 1.08)	1.06 (0.90, 1.24)	0.86 (0.72, 1.02)
Decision Making Scale	1.02 (0.76, 1.37)	0.97 (0.65, 1.45)	1.09 (0.70, 1.70)
Condom Use Self Efficacy Scale	1.41 (0.99, 2.02)	1.01 (0.60, 1.71)	1.88 (1.14, 3.10)*

*p<0.05, ** p<0.01 *** p<0.001

Table 13

Factors Associated with Condom Use at Time 2 in a Multivariable Logistic Regression

Variables	OR (CI)
Race/Ethnicity	
Non-Hispanic Black	0.81 (0.38, 1.75)
Hispanic/Latino	0.77 (0.38, 1.58)
Non-Hispanic White	---
Male	0.99 (0.54, 1.80)
Age	1.03 (0.94, 1.14)
Education	
High School or less	0.54 (0.21, 1.37)
Some College	0.89 (0.44, 1.82)
College and beyond	---
Have Children	0.81 (0.37, 1.79)
Age at First Sex	1.04 (0.91, 1.19)
Lifetime Sexual Partners	0.99 (0.97, 1.01)
Condom Use at baseline	4.37 (2.25, 8.51)***
Tested for a STI during the past four months	1.28 (0.71, 2.30)
Tested for HIV/AIDS ever	1.04 (0.43, 2.51)
Invulnerability to STI/HIV Scale	0.97 (0.83, 1.14)
Decision Making Scale	0.77 (0.50, 1.17)
Condom Use Self Efficacy Scale	1.23 (0.75, 2.03)
Everyday Discrimination	
No exposure	---
Some exposure	3.03 (0.78, 11.80)
High exposure	2.36 (0.66, 8.45)
Health Care Discrimination Scale	1.02 (0.63, 1.65)
HIV/AIDS Conspiracy Beliefs	1.14 (0.70, 1.83)

$\chi^2 (19) = 38.43^{**}$; $R^2 = 0.11$

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

HCB significantly predicted condom use at Time 2 among Whites. Compared to Whites who did not use condoms at baseline, Whites who used condoms at baseline (OR=35.13; 95% CI= 4.19, 294.44), who were older at age of first sex (OR=1.66; 95% CI= 1.04, 2.63), had a higher perceived risk for STI/HIV (OR=1.66; 95% CI= 1.01, 2.75), had less perceived sexual decision making (OR=0.27; 95% CI= 0.08, 0.86), and higher condom use self efficacy (OR=4.69; 95% CI=1.25, 17.58) had significantly greater odds of using condoms at Time 2. The Hosmer-Lemeshow goodness of fit test indicated no evidence against model fit ($p=0.25$).

Additionally, the multivariable logistic model for gender was only significant for women ($\chi^2(18) = 29.63, p < 0.05$) (Table 15). After controlling for covariates, neither HDS nor HCB significantly predicted condom use at Time 2. However, women who had some exposure to EOD (OR=6.40; 95% CI= 1.06, 38.9) had significantly greater odds of using condoms at Time 2. Also, compared to women who did not use condoms at baseline, women who used condoms at baseline (OR=3.90; 95% CI= 1.59, 9.59) also had significantly greater odds of using condoms at Time 2. The Hosmer-Lemeshow goodness of fit test indicated no evidence against model fit ($p=0.25$).

Table 14
Factors Associated with Condom Use at Time 2 in Logistic Regressions, Separately by Race

Variables	Black ¹ CI (OR)	Latino ² CI (OR)	White ³ CI (OR)
Male	2.25 (0.60, 8.48)	1.15 (0.31, 4.30)	0.53 (0.13, 2.24)
Age	1.04 (0.87, 1.24)	0.86 (0.67, 1.10)	1.26 (1.00, 1.59)
Education			
High School or less	0.26 (0.04, 1.89)	0.05 (0.01, 0.38)	6.19 (0.66, 58.34)
Some College	0.91 (0.21, 4.06)	0.25 (0.06, 1.09)	1.14 (0.25, 5.21)
College and beyond	---	---	---
Have Children	0.92 (0.24, 3.52)	0.52 (0.09, 3.05)	4.84 (0.43, 54.83)
Age at First Sex	0.90 (0.67, 1.20)	1.13 (0.85, 1.51)	1.66 (1.04, 2.63)*
Lifetime Sexual Partners	0.98 (0.95, 1.01)	0.98 (0.93, 1.04)	0.99 (0.96, 1.02)
Condom Use at baseline	6.19 (1.17, 32.95)	7.29 (1.82, 29.21)	35.13 (4.19, 294.44)**
Tested for a STI during the past four months	1.57 (0.44, 5.62)	0.44 (0.13, 1.53)	2.60 (0.59, 11.57)
Tested for HIV/AIDS ever	0.80 (0.12, 5.23)	1.83 (0.35, 9.73)	6.80 (0.47, 98.31)
Invulnerability to STI/HIV Scale	0.78 (0.55, 1.10)	0.90 (0.69, 1.16)	1.66 (1.01, 2.75)*
Decision Making Scale	1.29 (0.58, 2.86)	0.67 (0.29, 1.53)	0.27 (0.08, 0.86)*
Condom Use Self Efficacy Scale	0.71 (0.28, 1.78)	0.96 (0.33, 2.80)	4.69 (1.25, 17.58)*
Everyday Discrimination			
No exposure	---	---	---
Some exposure	2.13 (0.06, 80.28)	4.31 (0.78, 23.71)	1.31 (0.16, 10.62)
High exposure	1.90 (0.10, 36.56)	0.75 (0.33, 1.67)	4.81 (0.57, 40.76)
Health Care Discrimination Scale	0.89 (0.37, 2.16)	1.04 (0.46, 2.43)	0.60 (0.12, 3.14)
HIV/AIDS Conspiracy Beliefs	1.05 (0.39, 2.83)	1.84 (0.80, 4.25)	0.69 (0.19, 2.51)

¹ $\chi^2 (17) = 17.78; R^2 = 0.17$

² $\chi^2 (16) = 25.56; R^2 = 0.22$

³ $\chi^2 (17) = 40.15^{**}; R^2 = 0.36$

*p<0.05, **p<0.01, ***p<0.001

Table 15
*Factors Associated with Condom Use at Time 2 in Multivariable Logistic
 Regressions, Separately by Gender*

Variables	Men CI (OR)	Women CI (OR)
Race/Ethnicity		
Non-Hispanic Black	0.83 (0.20, 3.42)	0.53 (0.18, 1.56)
Hispanic/Latino	0.93 (0.23, 3.71)	0.69 (0.26, 1.81)
Non-Hispanic White	---	---
Age	1.07 (0.90, 1.28)	1.05 (0.91, 1.21)
Education		
High School or less	0.44 (0.09, 2.04)	0.80 (0.21, 3.10)
Some College	0.91 (0.26, 3.22)	0.87 (0.33, 2.29)
College and beyond	---	---
Have Children	0.66 (0.17, 2.61)	1.08 (0.34, 3.48)
Age at First Sex	1.14 (0.88, 1.48)	0.96 (0.80, 1.15)
Lifetime Sexual Partners	1.00 (0.98, 1.02)	0.98 (0.94, 1.01)
Condom Use at baseline	8.98 (2.28, 35.45)	3.90 (1.59, 9.59)**
Tested for a STI during the past four months	1.97 (0.72, 5.41)	1.00 (0.45, 2.24)
Tested for HIV/AIDS ever	0.60 (0.13, 2.70)	1.25 (0.37, 4.21)
Invulnerability to STI/HIV Scale	1.13 (0.88, 1.45)	0.82 (0.65, 1.04)
Decision Making Scale	0.89 (0.44, 1.79)	0.63 (0.35, 1.16)
Condom Use Self Efficacy Scale	0.74 (0.30, 1.81)	1.70 (0.84, 3.43)
Everyday Discrimination		
No exposure	---	---
Some exposure	0.68 (0.04, 10.69)	6.40 (1.06, 38.49)*
High exposure	0.75 (0.06, 9.12)	5.15 (0.94, 28.34)
Health Care Discrimination Scale	1.07 (0.48, 2.40)	0.87 (0.45, 1.68)
HIV/AIDS Conspiracy Beliefs	2.38 (0.89, 6.33)	0.88 (0.48, 1.66)

¹ χ^2 (18) = 27.18; R^2 = 0.19

² χ^2 (18) = 29.63[†]; R^2 = 0.15

*p<0.05, **p<0.01, ***p<0.001

CHAPTER 5: DISCUSSION

Summary of Findings

Although discrimination and its relationship to mental and physical health have been investigated, to date, research exploring the relationship between perceived discrimination and endorsement of HIV/AIDS conspiracy beliefs and safer sex health behavior is limited and warrants more in-depth investigations. Using a prospective study design we investigated whether the relationship between experiences of everyday discrimination (EOD), perceived healthcare discrimination (HDS), and HIV/AIDS conspiracy beliefs (HCB) and condom use differed for Whites, Blacks and Latinos and by gender. This is also the first study, to our knowledge, to investigate the association between socio-demographic factors and experience of discrimination, perceived healthcare discrimination, and HIV/AIDS conspiracy beliefs and how the associations differ for Whites, Blacks and Latinos, and by gender.

This study adds to the literature and advances our understanding of how perceptions of discrimination and HIV/AIDS conspiracy beliefs differ by race/ethnicity and gender and how these perceptions and endorsement are associated with sexual health behaviors (i.e., condom use) among heterosexual young adults. In this study, we found that although all racial groups experienced at least some level of discrimination and endorsed some HIV/AIDS conspiracy beliefs, the situations in which people felt discriminated against, the frequency with which they reported feeling discrimination, and endorsed conspiracy belief items varied by both race/ethnicity and gender.

More specifically, we found that Blacks and Latinos reported more experiences of everyday and healthcare discrimination in almost all forms and endorsed more

HIV/AIDS conspiracy beliefs than Whites. Additionally, we found that Black and Latino men reported stronger feelings of everyday discrimination than their female counterparts. Also, more reports of experiences of healthcare discrimination and endorsement of HIV/AIDS conspiracy beliefs were found for Blacks, Latinos, and participants with children compared to their counterparts.

However, everyday discrimination, healthcare discrimination, and endorsement of HIV/AIDS conspiracy beliefs, did not predict future condom use among a sample of Blacks, Latinos, Whites. We did find, however, that among women, exposure to everyday discrimination did predict future condom use. Finally, we found that past condom use predicted future condom use for all racial and both gender groups.

Perceived Everyday and Healthcare Discrimination

Race/ethnicity has been identified as the most common cause of experiences of everyday discrimination (Taylor, Miller, Mouzon, Keith, & Chatter, 2018). Our measures of everyday discrimination asked participants about their perceived discriminatory experiences while interacting in different social and institutional settings. We found that Black and Latino men perceived discrimination while seeking employment, housing, service at a store or restaurant; in any public setting; and when interacting with judiciary, banking, academia, and healthcare systems. Additionally, when taking all situations of discrimination into account, among men only, Blacks and Latino men were more likely to report greater levels of everyday discrimination overall than White men.

A Pew Research Center survey of a national sample of adults found comparable results (Parker, Horowitz, & Mahl, 2016). About 84% of Blacks in their sample indicated that blacks in US are treated less fairly than whites. Three quarters (75%) of Black

Americans report being treated less fairly than whites in courts, 66% when applying for a loan or mortgage, 64% in the workplace, 49% in stores or restaurants and 43% when voting in elections. Although comparable statistics were not available for Latinos, a recent survey did find that approximately half of Latinos in the U.S. reported having experienced discrimination or having been treated unfairly because of their race or ethnicity (Krogstad & Lopez, 2016).

When receiving healthcare, both Latinos and Blacks in this study reported being treated with less courtesy, less respect, and receiving poorer service because of their race or ethnicity, as well as, feeling a provider acted as if they were not smart or as if they were afraid of them. Previous research on provider's negative racial/ethnic perceptions and/or discriminatory practices has found that some providers do perceive Blacks and Latinos as less intelligent, less able to adhere to treatment recommendations, and more likely to engage in risky health behaviors (Mayo, Sherrill, Sundareswaran & Crew, 2007; Ratanawongsa, Haywood, Bediako, Lattimer, Lanzkron, Hill, et al., 2009; van Ryn & Burke, 2000). This body of literature suggests that the discriminatory perceptions of Blacks and Latinos in this sample may accurately reflect their experiences in how providers approached, interacted, appeared to value, and treated them as a patient (Hall, Chapman, Lee, Marino, Thomas, et al., 2018).

A recent investigation of provider perceptions of clients indicated that providers perceive Latinos and Blacks differently. Specifically, Blacks were more often perceived by providers as second-class citizens and more likely to commit a crime whereas Latinos were perceived as immigrants whose cultural practices were different and for whom English is a second language (Forrest-Bank & Jenson, 2015). These assumptions have

been found to influence provider patient interactions and treatment recommendations (D'Anna, Hansen, Mull, Canjura, Lee & Sumstine, 2018; Green, Carney, Pallin, Ngo, Long, Raymond, et al., 2007; Sabin, Rivara, & Greenwald, 2008).

Experiences of discrimination have been associated with lower quality of health care, failure to take medical advice, avoidance of recommended testing and screenings, and broad underutilization of health care services (LaVeist, Isaac, & Williams, 2009; James, 2017; Weech-Maldonado, Hall, Bryant, Jenkins, & Elliott, 2012). In addition to lower quality of health care, greater perceived discrimination and medical mistrust are also significantly associated with lower satisfaction with the health care received (Abraído-Lanza, Céspedes, Daya, Flórez, & White, 2011; López-Cevallos, Harvey, & Warren, 2014; Morales, Cunningham, Brown, Liu, & Hays, 1999).

Sorkin, Ngo-Metzger, & De Alba (2010) suggested that the provider patient interactions is a self-perpetuating cycle where people of color experience discrimination, react to it through lower adherence to treatment recommendations, and are subsequently perceived by the provider as unable or not smart enough to adhere to treatment recommendations. More research is needed to understand the nature of provider perceptions, patient perception of discrimination, and how patient-provider interactions, especially those of discriminatory nature, affect subsequent health behaviors and outcomes (Vines, Ward, Cordoba, & Black, 2018; Yin, Paradies, Ben, Denson, Elias, et al., 2015).

Even though our results indicated that Blacks, Latinos and men were more likely to perceive discrimination in everyday circumstances as well as in the healthcare setting, these experiences of discrimination did not predict future condom use. These findings

conflict with previous studies that found that discrimination was associated with attitudes toward condoms, lack of intent to use condoms, and engaging in unprotected sex (Bird et al., 2003; Bogart, et al., 2005; Bowleg, et al, 2013, Rosenthal, et al., 2015).

It is noteworthy, however, that access and use of condoms is not explicitly dependent on access to health care and provider-patient interactions. In contrast, access to and use of effective contraceptive methods are provider-dependent. Although this consideration might help explain why condom use was not associated with health care discrimination, Grollman (2017) also reported finding no evidence of a relationship between multiple forms of perceived interpersonal discrimination and contraceptive use among a sample of Black, Latino, and White heterosexual young adults 15-25 year olds.

Grollman concluded that the reason for this finding might be that his sample, like ours, excluded those who were having sex for the first-time. He further noted that cross-sectional investigations that included those who were having sex for the first-time found a negative effect for discrimination on condom and contraceptive use. This finding may indicate that experiences of discrimination have a greater effect on first sexual experiences among younger teens but less so as a person becomes more sexually experienced and enters adulthood. During young adulthood other factors may play a larger role in contraceptive and condom choice and use. For example, because decisions related to pregnancy and disease prevention are often made by young adults in the context of a specific relationship, a growing body of research has found that consistent condom use has been associated with sexual partners and relational variables (Katz, Fortenberry, Zimet, Blythe, & Orr, 2000; Manning, Giordano, Longmore, & Flanigan, 2012, Harvey, Washburn, Oakley, Warren, & Sanchez, 2016; Harvey, Oakley,

Washburn, & Agnew, (2018). It is also well established that condoms are used primarily in casual relationships or with new partners and use declines in relationships over time (Manlove, Welti, Barry, Peterson, Schelar, et al., 2011). It may be the heterogeneity in the qualities of sexual partnerships and corresponding motives for condom use (Harvey, et al., 2018) moderated the relationship between discrimination and condom use for our young adult sample.

Despite our findings that Black and Latino men reported stronger feelings of everyday discrimination than their female counterparts, we found that for women in this study exposed race-based everyday discrimination was predictive of future condom use. A growing body of literature has begun to focus on factors that influence coping and response to perceived discrimination. For example, among Blacks and Latinos, ethnic-racial socialization has been shown to moderate the association between discrimination and coping (Caughy, Nettles, & Lima, 2011), self-regulation (Smetana, 2000), positive adjustment (Brown, Linver, Evans, & DeGennaro, 2009) and promotion of ethnic identity and self-esteem among women (Burt & Simons, 2015). One study found that among young black women, in particular, ethnic identity was associated with both self-efficacy and engaging in HIV-preventive behavior (Corneille & Belgrave, 2007). It is plausible that for women the association between everyday discrimination could have been moderated by racial-ethnic socialization and led to an increase in condom use, an adaptive response. Future research should consider how individual differences, such as ethnic identity, styles of coping with discrimination, and the influence of different relationships on the association between exposure to discrimination and health behaviors.

HIV/AIDS Conspiracy Beliefs

Theorists argue that race based discrimination exists in the foundation of American society (through slavery) and has, overtime, become reinforced and even more deeply entrenched in our many institutions (Feagin, 1991). Institutionally based race discriminatory practices have thwarted people of color in areas like housing, education, employment, healthcare, and criminal justice (Bailey, Krieger, Agenor, Graves, Linos, & Bassett, 2017) reflecting perceptions reported by the present sample. Blacks and Latinos have both current and historic personal experiences with discrimination that have made them more cautious and slow to trust our public institutions (Larson & Heyman, 2010). These authors stated that “trust relationships must be built over time so that they become the social framework in which health interventions—and positive health outcomes—can thrive” (p. 272.). Individuals likely draw on their experiences of oppression and describe members of the dominant culture as motivated by negative intent (Wyatt, et. al., 2013). HIV/AIDS conspiracy theory beliefs find their basis in this longstanding history of racial discrimination and disparity in the United States health care system (Graham, Giordano, et al., 2010; Ross, Essien, & Torres, 2006).

The expression of this effect is reflected in the reports from our Latino and Black participants. Blacks and Latinos endorsed more HIV/AIDS conspiracy beliefs compared to Whites. Specifically, Blacks and Latinos endorsed that AIDS is a form of genocide against Blacks/African Americans and Hispanic/Latinos, that HIV is a manmade virus, there is a cure for AIDS but it is being withheld from the poor Blacks, and that AIDS was created by the government to control the Black and Hispanic/Latino populations. These findings replicate previous research (Ball, et al., 2013, Bogart, et al., 2005 Bogart, et al., 2006; Bogart, et al., 2010; Bogart, et al., 2011) indicating that misinformation about HIV

research and treatment continues to exist. These findings demonstrate a need for a better understanding of the sources of beliefs and how Public Health professionals can better inform the public about the successes across racial groups affected by HIV and HIV treatments.

Despite these findings, endorsement of conspiracy beliefs did not influence condom use. Our findings do not support previous studies that have found associations between HCB and inconsistent condom use (Bird, et al., 2003; Bogart, et al., 2005), increased condom use (Ross et al., 2006) or decreased use condoms (Bogart, et. al, 2011).

Perceived discrimination and HIV/AIDS conspiracy beliefs may be too distal and do not directly influence behavior. To understand the dynamic relationship between discrimination and HIV/AIDS conspiracy beliefs on sexual health behavior requires consideration of competing influences (Bandura, 2002). Future research should consider the contribution of more proximal measures of social determinants of health (e.g., social services, housing quality, neighborhood segregation), as well as, as additional individual factors (e.g., racial-ethnic socialization, measures of well-being, stress, a broader range of sexual behaviors and attitudes) as a way to elucidate the nature of this association. An alternative explanation for these findings might be that the HCB scale did not include items that address preventative behaviors like condom use. Future research investigating the impact of discrimination and HIV/AIDS conspiracy beliefs on health behaviors may require a greater understanding of the constellation of risk and protective factors available to a person (Assari, 2018) and how they work to help/hinder sexual health behavior.

Limitations and Strengths

This study is not without limitations. For example, all measures used in the present study were based on self-report. This raises concern about recall bias.

A related limitation is the acknowledgement that self-reports of perceived discrimination may not reflect actual experience of discrimination. Grollman (2017) argues that self-reports do reflect actual experiences and, rather than abandoning them, suggests when collecting self-report data investigators focus on measuring discrimination in a specific settings (e.g., criminal justice, healthcare).

This study also used secondary data, which limited the measures availability for these analyses. For example, the variable of race/ethnicity was measured as a single construct. It has been suggested that, because race and ethnicity tap into different constructs (Bonilla-Silva, 2004) they should be measured separately. The construct of race is defined as the socially constructed and imposed category of a person based on their visible attributes like skin color (e.g., Black or White). On the other hand, ethnicity is defined as the kinship, culture, and having a shared history with a particular group, which can, and does, differentially exist within the same race as well as across racial groups (Valdez & Golash-Boza, 2017). For example, many ethnicities could exist among Black people (African American, Jamaican American, Cuban American) and multiple races could all identify with the same ethnicity (Black Hispanics, White Hispanics). Our single construct of race/ethnicity made it impossible to explore further intricacies between race and ethnicity and the resulting associations with discrimination, HIV/AIDS conspiracy beliefs, and condom use.

In addition, the inclusion criteria for this study and the location of study recruitment make our conclusions less generalizable. For example, participants had to

identify as Black, Latino, or White only. This requirement slightly reduced our sample size, because we did not include those with multiple races or those who identified as a race/ethnicity other than Black, Latino, or White. The education level and employment status in our sample were fairly homogeneous and may not be representative of other metropolitan or rural areas. Additionally, this study was conducted in the greater Los Angeles area and may not reflect the perceptions of other large urban centers or people in smaller metropolitan and rural areas. Future studies may consider replicating this study using a more diverse sample and different settings.

Despite these limitations, our sample was unique in its representation of comparable numbers of young adult men and women, as well as, approximately equal numbers of participants identifying as Black, Latino, or White. This study assessed multiple perspectives of racial/ethnic discrimination and HIV/AIDS conspiracy beliefs in an effort to target the variations of experiences and beliefs that could contribute to perceptions of discrimination. Additionally, the longitudinal nature of the data in this study allowed us to examine how experiences of discrimination and HIV/AIDS conspiracy beliefs predicted condom use at a subsequent study time point while adjusting for a number of variables known to be associated with condom use as well as risk factors for HIV/STI.

Implications

The goal of this study was to understand how perceptions of discrimination and endorsement of HIV/AIDS conspiracy beliefs differ by race and gender and determine whether these constructs predicted condom use. The present study contributes to a large body of literature by providing insight into how racial/ethnic group perceptions of

EOD, HCB, and HBC vary by race and gender. Although previous research found associations between perceptions of EOD, HCB, HBC and condom use the present study did not support these findings.

Moving forward, it is important that researchers, policymakers, and practitioners continue to examine the long-lived legacy of race-based discrimination when investigating disparities in health behavior and outcomes. These investigations will need to acknowledge the interplay between individuals and systems (e.g., education, healthcare, public safety and crime prevention, the banking industry), and understand how racial discrimination alters the pathways for people of color that lead to health disparities (Krieger, 2014; Hardeman, Murphy, Karbeah, & Kozhimannil, 2018). In 2002, Camara Jones published a seminal article outlining the role of Public Health in confronting institutional racial discrimination. Jones made suggestions about how Public Health research, policy, and practice could work to both understand and intervene. Her points remain relevant as does her call for Public Health to take a proactive and bold stance if it wants to mitigate the effects of racial discriminations on health and well being (Hardeman, et al. 2018).

Implications for Public Health Research

The next stage of research investigating the association between discrimination and HIV/AIDS conspiracy beliefs on sexual health behaviors needs to expand our understanding of 1) the pathways between factors associated with perceptions of discrimination and conspiracy beliefs, and, 2) how these factors along with perceptions of discrimination and conspiracy beliefs influence safer sex behavior. The following recommendations are a response to Hardean, Murphy, Karbeah, & Kozhimannil (2018)

who expressed concern about the dearth of research explicitly identifying institutional level race based discrimination as the primary variable under investigation with the objective of understanding its impact on health equity. It is from this perspective that we discuss the implications for Public Health research on sexual health.

First, research efforts need to deepen our understanding of what it means to be a person of color in the United States (Jones, 2002). The category of race is insufficient and reflects the discriminatory nature of the United States racial stratification system where Whites are on top and Blacks are on the bottom (Bonilla-Silva, 2010). Race, as an imposed social construction, falls short of providing insight into the meaning of being a person of color, and how this information is internalized and impacts perception and reactions to experiences of discrimination (Jones, 2002). Jones argues for the need to separate measures of race and ethnicity. Ethnicity acknowledges diversity within groups defined by race and introduces the role of cultural influences on health. Evidence from ethnic-socialization literature, strongly suggests ethnicity is a category of meaning and, very early in life, influences perceptions, attitudes, expectations and sexual health behavior. Public Health professionals and researchers may benefit by measuring race and ethnicity separately and analyzing their effects on perceptions of discrimination and sexual health behavior.

Exposure to discrimination of any kind has direct and indirect effects on reducing an individual's capacity to engage in healthy behavior (Branscombe et al., 1999; Pascoe et al., 2009). The literature on discrimination has focused a great deal on understanding the negative effect of race discrimination on emotional well-being and has found evidence that supports this relationship. For example, effects of discrimination on anger

and distress (Fitz & Zucker, 2015), self esteem (Yip, 2014; Williams, Neighbors, & Jackson, 2008), depressive mood (Seaton, Neblett, Upton, & Hammond, 2011), self-blame (Blodorn, Major & Kaiser, 2016) and loneliness (Juang, Ittel, Hoferichter, and Gallarin, 2016). As it pertains to this study, however, very few studies have examined the impact of race discrimination on sexual behavior. The next step is to investigate how discrimination related emotional well-being impacts condom use directly or indirectly through its effect on, for example, condom use self-efficacy, invulnerability to HIV/STIs, sexual decision making and condom use.

A growing body of literature demonstrates that communities of color develop protective strategies in response to discrimination. Strategies like resilience (Harper, ade, Onyango, Abuor, Bauermeister, et al., 2015; Strayhorn, 2014), strong ethnic identity (Valdex, et al., 2017), and the ability to tune out majority members' negative views of people of color (Hoggard, Jones, & Sellers, 2017) prepare people of color to navigate future discriminatory experiences. These strategies serve as protective factors for individuals confronted by race discrimination. Currently no research has investigated how these protective factors operate in the relationship between perceptions of discrimination and condom use.

We also need to incorporate measures of the social determinants of health that affect quality of life and influences health behavior and outcomes (Koh, H. K., Piotrowski, J. J., Kumanyika, S., and Fielding, 2011). For race groups, inequitable access to resources is the core source of health disparities (Assari, 2018). This inequity has historical roots and has led to exclusion in access to education, health services, and the opportunity for economic advancement (Kartasasmita & Wilson, 2018). This effect of

exclusion reveals itself in qualities like neighborhood safety, familial relationship, and relationships with public safety, and social networks (Viner, Ozer, Denny, Marmot, Resnick, Fatusi, & Currie, 2012); found to be particularly true for people of color (Riina, Lippert, & Brooks-Gunn, 2016). Social context influences decisions about condom use and “its importance is sometimes independent of socio-demographic characteristics, partnership factors, sexual history, HIV-related factors, and health care access” (Baidoobonso, Baure, Speechley, & Lawson, 2016, p. 85). Including proxy measures of social determinants of health like residential stability, neighborhood safety, familial relationship, and qualities of social networks/relationships are important to understanding impact of the structural inequities on condom use.

Discrimination is an extremely complex and often subtle and covert problem. The connection of discrimination and condom use is best visualized as a complex web of relationships. Currently, no larger theoretically based model of this relationship has been developed. The current recommendations are by no means comprehensive but are an attempt to begin to map out the constellation of risk and protective factors identified in the literature that are associated with perceptions of discrimination and its direct and indirect effect on condom use or risky sexual behavior. Moving forward, it is recommended that both qualitative and quantitative methods be used in a systematic way to provide richer and deeper data.

Implications for Public Health

The field of Public Health must be vigilant, mindful, and purposeful in understanding its role in health disparities. To mitigate discrimination, policymakers and practitioners must take into account individual factors and structural sources of

discrimination when planning their work. Policy makers are encouraged to support policies that promote equity in the availability of resources necessary to improve social determinants of health and to evaluate and alter policies that perpetuate disadvantage for people of color. Practitioners are encouraged to be aware of how discrimination based inequity affects communities and how this interplay between the individual and their community impacts efficacy of interventions and changes in health behavior.

Conclusions

This study contributes to a growing understanding of how different racial/ethnic groups experience discrimination across various settings and everyday activities and their endorsement of HIV conspiracy beliefs. Notably, we included Latinos who have, outside of immigration issues, been largely absent from the broader discrimination conversation. These discriminatory experiences are reflected in conspiracy beliefs and the mistrust of our government, health systems, and public health systems. The field of Public Health must face the problems of racism and discrimination as we do any other toxic pathogen and must address them in the areas of economic stability, education, social and community contexts, health and healthcare, neighborhood and built environment (Koh, et al., 2011). In so doing, the field of Public Health becomes proactive in its efforts to mitigate the effects of racial discriminations on population health.

REFERENCES

- Abel, G., & Brunton, C. (2005). Young people's use of condoms and their perceived invulnerability to sexually transmitted infections. *Australian and New Zealand Journal of Public Health, 29*(3), 254-260.
- Abraído-Lanza, A. F., Céspedes, A., Daya, S., Flórez, K. R., & White, K. (2011). Satisfaction with Health Care among Latinas. *Journal of Health Care for the Poor and Underserved, 22*(2), 491–505. <http://doi.org/10.1353/hpu.2011.0042>
- Adimora, A. A., & Schoenbach, V. J. (2002). Contextual Factors and the Black-White Disparity in Heterosexual HIV Transmission. *Epidemiology and Society, 13*(6), 707-712.
- Adoh, O., Sng, E., & Loprinzi, P. D. (2017). Safe sex self-efficacy and safe sex practice in a Southern United States College. *Health Promotion Perspectives, 7*(2) 74-79.
- Agnew, C. R., Harvey, S. M., VanderDrift, L. E., & Warren, J. (2017). Relational underpinnings of condom use: Findings from the project on partner dynamics. *Health Psychology: Official Journal Of The Division Of Health Psychology, American Psychological Association, 36*(7), 713-720.
doi:10.1037/hea0000488
- Armstrong, K., Putt, M., Halbert, C. H., Grande, D., Schwartz, J. D., & ... Shea, J. A. (2013). Prior Experiences of Racial Discrimination and Racial Differences in Health Care Systems Distrust. *Medical Care, 51*(2), 144-150.
- Armstrong, K., Ravenell, K. L., McMurphy, S., & Putt, M. (2007). Racial/ethnic differences in physician distrust in the United States. *American Journal of Public Health, 97*(7), 1283-1289.

- Assari, S. (2018). Health Disparities due to Diminished Return among Black Americans: Public Policy Solutions. *Social Issues and Policy Review*, 12, 112-145.
- Ayala, G., Bingham, T., Kim, J., Wheeler, D. P., & Millett, G. A. (2012). Modeling the impact of 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(S2), S242-S249.
- Aziz, M., & Smith, K. Y. (2011). Challenges and Success in Linking HIV-Infected Women to Care in the United States. *Clinical Infectious Diseases*, 52(2), S231-S237.
- Baidooobonso, S., Bauer, G. R., Speechley, K. N., & Lawson, E. (2016). Social and Proximate Determinants of the Frequency of Condom Use Among African, Caribbean, and Other Black People in a Canadian City: Results from the BLACCH Study. *Journal Of Immigrant And Minority Health*, 18(1), 67-85.
- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. *Lancet*, 389, 1453-1463.
- Ball, K., Lawson, W., & Alim, T. (2013). Medical Mistrust, Conspiracy Beliefs & HIV-Related Behavior Among African Americans. *Journal of Psychology and Behavioral Science*, 1(1), 1-7.
- Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist*, 33, 344-358.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373.

- Bandura, A. (1989). Human Agency in Social Cognitive Theory. *American Psychologist*, 44(9), 1175-1184.
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology and Health*, 13, 623-649.
- Bandura, A., (2002). Social Cognitive Theory in Cultural Context. *Applied Psychology: An International Review*, 51(2), 269-290.
- Bandura, A. (2004). Health Promotion by Social Cognitive Means. *Health Education & Behavior*. 31, 143-164. DOI:10.1177/1090198104263660
- Benkert, R., Peters, R. M., Clark, R., & Keves-Foster, K. (2006). Effects of perceived racism, cultural mistrust and trust in providers on satisfaction with care. *Journal of National Medical Association*, 98(9), 1532-1540.
- Bennett, G. G., Wolin, K. Y., Robinson, E. L., Fowler, S., & Edwards, C. L. (2005). Perceived racial/ethnic harassment and tobacco use among African American young adults. *American Journal of Public Health*, 95(2), 238-240.
- Bird, S. T., & Bogart, L. M. (2001). Perceived race-based and socioeconomic status (SES)-based discrimination in interactions with health care providers. *Ethnicity & Disease*, 11(3), 554-563.
- Bird, S., & Bogart, L. M. (2003). Birth control conspiracy beliefs, perceived discrimination, and contraception among African Americans: An exploratory study. *Journal of Health Psychology*, 8(2), 263-276.
- Blodorn, A., Major, B., & Kaiser, C. (2016). Perceived discrimination and poor health: Accounting for self-blame complicates a well-established relationship. *Social Science & Medicine* (1982), 15327-34.

- Blume, A. W., Lovato, L. V., Thyken, B. N., & Denny, N. (2012). The relationship of microaggressions with alcohol use and anxiety among ethnic minority college students in a historically White institution. *Cultural Diversity and Ethnic Minority Psychology, 18*(1), 44-54.
- Bogart, L. M., Galvan, F. H., Wagner, G. J., & Klein, D. J. (2011). Longitudinal association of HIV conspiracy beliefs with sexual risk among black males living with HIV. *AIDS and Behavior, 15*(6), 1180-1186.
- Bogart, L. M., Landrine, H., Galvan, F. H., Wagner, G. J., & Klein, D. J. (2013). Perceived discrimination and physical health among HIV-positive Black and Latino men who have sex with men. *AIDS and Behavior, 17*(4), 1431-1441.
- Bogart L. M., & Thorburn, S. (2005). Are HIV/AIDS conspiracy beliefs a barrier to HIV prevention among African Americans? *Journal of Acquired Immune Deficiency Syndrome, 38*(2), 213-218.
- Bogart L. M., & Thorburn S. (2006). Relationship of African Americans' sociodemographic characteristics to belief in conspiracies about HIV/AIDS and birth control. *Journal of the National Medical Association, 98*(7), 1144-1150.
- Bogart, L. M., Wagner, G., Galvan, F. H. & Banks, D. (2010). Conspiracy Beliefs about HIV Are Related to Antiretroviral Treatment Nonadherence among African American Men with HIV. *Journal of Acquired Immune Deficiency Syndrome, 53*(5): 648–655. DOI:10.1097/QAI.0b013e3181c57dbc
- Bogart, L. M., Wagner, G. J., Green, H. D., Mutchler, M. G., Klein, D. J., McDavitt, B. Lawrence, S. J., & Hilliard, C. L. (2016). Medical mistrust among social network members may contribute to antiretroviral treatment nonadherence in African

- Americans living with HIV. *Social Science & Medicine*, 164, 133-140.
- Bohnert, A. S., & Latkin, C. A. (2009). HIV Testing and Conspiracy Beliefs Regarding the Origins of HIV among African Americans. *AIDS Patient Care and STDs*, 23(9), 759-763.
- Bonilla-Silva, E. (2006). From bi-racial to tri-racial: Towards a new system of racial stratification in the USA. *Ethnic and Racial Studies*, 27(6), 931-950.
- Borrell, L. N., Kiefe, C. I., Diez-Roux, A. V., Williams, D. R., & Gordon-Larsen, P. (2013). Racial discrimination, racial/ethnic segregation, and health behaviors in the CARDIA study. *Ethnicity and Health*, 18(3), 227-243.
- Bowleg, L. (2012). The Problem with the Phrase Women and Minorities: Intersectionality - an Important Theoretical Framework for Public Health. *American Journal of Public Health*, 102(7), 1267-1273.
- Bowleg, L., Teti, M., Malebranche, D. J., & Tschann, J. M. (2013). "It's an Uphill Battle Everyday": Intersectionality, Low-Income Black Heterosexual Men, and Implications for HIV Prevention Research and Interventions. *Psychology of Men and Masculinity*, 14(1) 25-34.
- Bowleg, L., Torsten, N., & Kyung-Hee, C. (2008). Evaluating the validity and reliability of a modified schedule of sexist events: Implications for public health research on women's HIV risk behaviors. *Women & Health* 47,19-40.
- Brafford, L. J., & Beck, K. H. (1991). Development and validation of a condom self-efficacy scale for college students. *Journal of American College Health*, 39(5), 219-225.

- Brah, A., & Phoenix, A. (2013). Ain't I a woman? Revisiting intersectionality. *Journal of International Women's Studies*, 5(3), 75-86.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, 77(1), 135-149.
- Brien, T. M., Thombs, D. L., Mahoney, C. A., & Wallnau, L. (1994). Dimensions of self-efficacy among three distinct groups of condom users. *Journal of American College Health*, 42(4), 167-174.
- Brown, T. L., Linver, M. R., Evans, M., & DeGennaro, D. (2009). African-American parents' racial and ethnic socialization and adolescent academic grades: teasing out the role of gender. *Journal of Youth and Adolescence*, 38(2), 214-227.
- Burt, C. H., & Simons, R. L. (2013). Interpersonal Racial Discrimination, Ethnic-racial Socialization, and Offending: Risk and Resilience among *African American Females*, *Justice Quarterly*, 32(3), 532-570.
- Carey, M. P., Maisto, S. A., Kalichman, S. C., Forsyth, A. D., Wright, E. M., & Johnson, B. T. (1997). Enhancing motivation to reduce the risk of HIV infection for economically disadvantaged urban women. *Journal of Consulting and Clinical Psychology*, 65(4), 531-541.
- Carvalho, T., Alvarez, M., Barz, M., & Schwarzer, R. (2015). Preparatory behavior for condom use among heterosexual young men: A longitudinal mediation model. *Health Education and Behavior*, 42(1), 92-99.
- Casagrande, S. S., Gary, T. L., LaVeist, T.A., Gaskin, D. J., & Cooper, L. A. (2007). Perceived discrimination and adherence to medical care in a racially integrated

community. *Society of General Internal Medicine*, 22, 389-395.

Caughy, M. O., Nettles, S.M. & Lima, J. J. (2011). Profiles of Racial Socialization Among African American Parents- Correlates, Context, and Outcome. *Children and Family Studies*, 20, 491-502.

Centers for Disease Control and Prevention (CDC). (2012). Sexual Experience and Contraceptive Use Among Female Teens — United States, 1995, 2002, and 2006–2010. *MMWR*, 61(17), 297-301.

Centers for Disease Control and Prevention (CDC). (2013). HIV Surveillance Report. http://www.cdc.gov/hiv/pdf/g-1/hiv_surveillance_report_vol_25.pdf. Accessed March 20, 2016.

Centers for Disease Control and Prevention (CDC). (2014). Heterosexual Transmission of HIV --- 29 States, 1999- 2002. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5306a3.htm>. Accessed March 20, 2016.

Centers for Disease Control and Prevention (CDC). (2015). CDC Fact Sheet: Reported STIs in the United States: 2015 National Data for Chlamydia, Gonorrhea, and Syphilis. <https://www.cdc.gov/nchhstp/newsroom/docs/factsheets/std-trends-508.pdf>. Accessed, March 20, 2017.

Centers for Disease Control and Prevention (CDC). (2016). HIV in the United States: At A Glance. <https://www.cdc.gov/hiv/statistics/overview/ataglance.html>. Accessed March 20, 2017.

Centers for Disease Control and Prevention (CDC). (2017). Sexually Transmitted Diseases: Adolescents and Young Adults. <https://www.cdc.gov/std/life-stages->

[populations/adolescents-youngadults.htm](#). Accessed March 20, 2017.

Centers for Disease Control and Prevention (CDC). (2018). HIV Among Women.

<https://www.cdc.gov/hiv/group/gender/women/index.html> Accessed March 10, 2018.

Chambers, K. B., & Rew, L. (2003). Safer sexual decision making in adolescent women:

Perspectives from the conflict theory of decision-making. *Issues In Comprehensive Pediatric Nursing*, 26, 129-143.

Chen, M., Rhodes, P. H., Hall, I. H., Kilmarx, P. H., Branson, B. M., & Valleroy, L. A.

(2012). Prevalence of undiagnosed HIV infection among persons aged ≥ 13 years—National HIV Surveillance System, United States, 2005–2008. *MMWR*, 61(02), 57-64.

Chen, D., & Yang, T. (2014). The pathways from perceived discrimination to self-rated

health: An investigation of the roles of distrust, social capital, and health behaviors. *Social Science and Medicine*, 104, 64-73.

Choi, K., Bowleg, L., & Neilands, T. (2011). The Effects of Sexism, Psychological

Distress, and Difficult Sexual Situations on U.S. Women's Sexual Behaviors. *AIDS Education and Prevention*, 23, 397-411.

Cipres, D., Rodriguez, A., Alvarez, J., Stern, L., Steinhauer, J., & Seidman, D. (2016).

Racial/ethnic differences in young women's health-promoting strategies to reduce vulnerability to sexually transmitted infections. *Journal of Adolescent Health*, 1-7.

Corneille, M. A., & Belgrave, F. Z. (2007). Ethnic Identity, Neighborhood Risk, and

Adolescent Drug and Sex Attitudes and Refusal Efficacy: The Urban African American Girls' Experience. *Journal of Drug Education*, 37(2), 177-190.

- D'Anna, L. H., Hansen, M., Mull, B., Canjura, C., Lee, E., & Sumstine, S. (2018). Social Discrimination and Health Care: A Multidimensional Framework of Experiences among a Low-Income Multiethnic Sample. *Social Work In Public Health, 33*(3), 187-201.
- Diaz, 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), 255-267.
- Dumpont, D. M., Allen, S. A., Brockmann, B. W., Alexander, N. E., & Rich, J. D. (2013). Incarceration, community health, and health disparities. *Journal of Health Care for the Poor and Underserved, 24*(1), 78-88.
- El-Sadr, W. M., Mayer, K. H., & Hodder, S. L. (2010). AIDS in America – Forgotten but not gone. *New England Journal of Medicine, 362*(11), 967-970.
- Espada, J. P., Morales, A., Gullen-Riquelme, A., Ballester, R., & Orgiles, M. (2016). Predicting condom use in adolescents: a test of three socio-cognitive models using a structural equation modeling approach. *BMC Public Health, 16*: 35, DOI:10.1186/s12889-016-2702-0
- Essien, E. J., Ross, M. W., Fernandez-Esquer, M. E., & Williams, M. L. (2005). Reported condom use and condom use difficulties in street outreach samples of men of four racial and ethnic backgrounds. *Journal of STD and AIDS, 16*(11), 739-743.
- Feagin, J. (1991). The Continuing Significance of Race: Antiblack Discrimination in Public Places. *American Sociological Review, 56*(1), 101-116.

- Fernandez-Esquer, M. E., Atkinson, J., Diamond, P., Useche, B., & Mendiola, R. (2004). Condom use self-efficacy among US-and foreign-born Latinos in Texas. *Journal of Sex Research, 41*(4), 390-399.
- Ferrari, M., Robinson, D. K., & Yasnitsky, A. (2010). Wundt, Vygotsky and Bandura: A cultural-historical science of consciousness in three acts. *History of the Human Sciences, 23*(3), 95-118.
- Fitz, C. C. & Zucker, A. N. (2015). Everyday Exposure to Benevolent Sexism and Condom Use Among College Women. *Women & Health, 55*(3), 245-262
- Ford, C. L., Daniel, M., Earp, J. L., Kaufman, J. S., Golin, C. E., & Miller, W. C. (2009). Perceived everyday racism, residential segregation, and HIV testing among patients at a sexually transmitted disease clinic. *American Journal Of Public Health, 99* Suppl 1S137-S143. doi:10.2105/AJPH.2007.120865
- Forrest-Bank, S. & Jenson, J. M. (2015). Differences in Experiences of Racial and Ethnic Microaggression among Asian, Latino/Hispanic, Black, and White Young Adults. *Journal of Sociology & Social Welfare, 42*(1), 141- 161.
- Finer, L. B., & Philbin, J. M. (2013). Sexual initiation, contraceptive use, and pregnancy among young adolescents. *Pediatrics, peds.2012 3495*; DOI:10.1542/peds.2012-3495.
- Frew, P. A., Parker, K., Vo, L., Haley, D., O'Leary, A., ... & del Rio, C. (2016). Socioecological factors influencing women's HIV risk in the United States: qualitative findings from the women's HIV SeroIncidence study (HPTN 064). *BMC Public Health, 16*:803 DOI:10.1186/s12889-016-3364-7

- Friedman, S. R., Flom, P. L., Kottiri, B. J., Neaigus, A., Sandoval, M., Curtis, R., ... & Zenilman, J. M. (2001). Consistent condom use in the heterosexual relationships of young adults who live in a high-HIV-risk neighbourhood and do not use "hard drugs". *AIDS Care, 13*(3), 285-296.
- Gamble, V. N. (1997). Under the shadow of Tuskegee: African Americans and health care. *American Journal of Public Health, 87*(11), 1773-1778.
- Gaston, G. B., & Alleyne-Green, B. (2013). The Impact of African Americans' beliefs about HIV medical care on treatment adherence: A systematic review and recommendations for interventions. *AIDS Behavior, 17*, 31–40.
DOI:10.1007/s10461-012-0323-x
- Gibbs, L. (2013). Gender, relationship type and contraceptive use at first intercourse. *Contraception, 87*(6), 806-812.
- Gibbs, L., Manning, W. D., Longmore, M. A., & Giordano, P. C. (2014). Qualities of romantic relationships and consistent condom use among dating young adults.
Open Access:
<http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1282&context=sociologyfacpub>.
- Gilley, B. J., & Keesee, M. (2007). Linking 'White Oppression' and HIV/AIDS in American Indian etiology: Conspiracy Beliefs among AI MSMs and their peers. *American Indian and Alaska Native Mental Health Research: The Journal of the National Center, 14*(1), 44-62.
- Graham, J. L., Giordano, T. P., Grimes, R. M., Slomka, J., Ross, M., & Hwang, L. Y. (2010). Influence of trust on HIV diagnosis and care practices: a literature

- review. *Journal of the International Association of Physicians in AIDS Care (JIAPAC)*, 9(6), 346-352. DOI:1545109710380461
- Green, A. R., Carney, D. R., Pallin, D. J., Ngo, L. H., Raymond, K. L., Iezzoni, L. I., & Banaji, M. R. (2007). Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine*, 22(9), 1231-1238.
- Grollman, E. A. (2017). Sexual Health and Multiple Forms of Discrimination Among Heterosexual Youth. *Social Problems*, 64(1), 156-175.
- Grossman, C. I., Purcell, D. W., Rotheram-Borus, M. J., & Veniegas, R. (2013). Opportunities for HIV combination prevention to reduce racial and ethnic health disparities. *American Psychologist*, 68(4), 237-246.
- Hall, W. J., Chapman, M. V., Lee, K. M., Merino, Y. M., Thomas, T. W., Payne, B. K., Eng, E., Day, S. H., & Coyne-Beasley, T. (2015). Implicit Racial/Ethnic Bias Among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review. *American Journal Of Public Health*, 105(12), e60-e76.
- Hardeman, R. R., Murphy, K. A., Karbeah, J., & Kozhimannil, K. B. (2018). Naming Institutionalized Racism in the Public Health Literature: A Systematic Literature Review. *Public Health Reports (Washington, D.C.: 1974)*, 33354918760574. doi:10.1177/0033354918760574
- Harper, G. W., Wade, R. M., Onyango, D. P., Abuor, P. A., Bauermeister, J. A., Odero, W. W., & Bailey, R. C. (2015). Resilience among gay/bisexual young men in Western Kenya: psychosocial and sexual health outcomes. *AIDS*, 29, 3S261-S269.

- Hammond, W. P. (2010). Psychosocial correlates of medical mistrust among African American men. *American Journal of Community Psychology, 45*(1-2), 87-106.
- Harvey, S. M., Bird, S. T., Galavotti, C., Duncan, E. A., & Greenberg, D. (2002). Relationship power, sexual decision making and condom use among women at risk for HIV/STDs. *Women & Health, 36*(4), 69-84.
- Harvey, S. M., Oakley, L.P., Washburn, I., & Agnew, C. R. (2018). Contraceptive method choice among young adults: Influence of individual and relationship factors. *The Journal of Sex Research, 1-10*.
- Harvey, S. M., Washburn, I., Oakley, L., Warren, J., & Sanchez, D. (2016). Competing priorities: Partner-specific relationship characteristics and motives for condom use among at-risk young adults. *The Journal of Sex Research, 1-12*.
- Haviland, M. G., Morales, L. S., Dial, T. H., & Pincus, H. A. (2005). Race/ethnicity, socioeconomic status, and satisfaction with health care. *American Journal of Medical Quality: The Official Journal of The American College of Medical Quality, 20*(4), 195-203.
- He, F., Hensel, D. J., Harezlak, J., & Fortenberry, J. D. (2016). Condom use as a function of number of coital events in new relationships. *Sexually Transmitted Diseases, 43*(2), 67-70.
- Heads, A. M., Castillo, L. G., Glover, A., & Schmitz, J. (2017). Emotion regulation moderates the relationship between perceived discrimination and risk behaviors in African American college students. *Drug & Alcohol Dependence, 171*, e86.
DOI:10.1016/j.drugalcdep.2016.08.243
- Healthy People (2017). Sexually Transmitted Diseases.

<https://www.healthypeople.gov/2020/topics-objectives/topic/sexually-transmitted-diseases>. Accessed March 20, 2017.

- Higgins, J. A., Hoffman, S., Graham, C. A., & Sanders, S. A. (2008). Relationships between condoms, hormonal methods, and sexual pleasure and satisfaction: an exploratory analysis from the Women's Well-Being and Sexuality Study. *Sexual Health, 5*(4), 321-330.
- Hock-Long, L., Henry-Moss, D., Carter, M., Hatfield-Timajchy, K., Erickson, P. I., Cassidy, A., ... & Chittams, J. (2013). Condom use with serious and casual heterosexual partners: Findings from a community venue-based survey of young adults. *AIDS and Behavior, 17*(3), 900-913.
- Hoggard, L. S., Jones, S. T., & Sellers, R. M. (2016). Racial Cues and Racial Identity: Implications for How African Americans Experience and Respond to Racial Discrimination. *Journal of Black Psychology, 43*(4), 409-432.
- Hutchinson, A. B., Begley, E. B., Sullivan, P., Clark, H. A., Boyett, B. C., & Kellerman, S. E. (2007). Conspiracy beliefs and trust in information about HIV/AIDS among minority men who have sex with men. *Journal of Acquired Immune Deficiency Syndromes, 45*(5), 603-605.
- Huynh, V. W., Guan, S. A., Almeida, D. M., McCreath, H., & Fuligni, A. J. (2016). Everyday discrimination and diurnal cortisol during adolescence. *Hormones and Behavior, 80*76-8081. DOI:10.1016/j.yhbeh.2016.01.009
- James, S. A. (2017). The strangest of all encounters: racial and ethnic discrimination in US health care. *Cadernos De Saude Publica, 33*(Suppl 1), e00104416. doi:10.1590/0102-311X00104416

- Jemmott, J. B., Jemmott, L. S., O'Leary, A., Icard, L. D., Rutledge, S. E., Stevens, R., Hsu, J., & Stephens, A. J. (2015). On the efficacy and mediation of a One-on-One HIV risk-reduction intervention for African American Men Who have Sex with Men: a randomized controlled trial. *AIDS Behavior*, 9(7), 1247–1262.
- Jipguep, M. C., Sanders-Phillips, K., & Cotton, L. (2004). Another look at HIV in African American women: The impact of psychosocial and contextual factors. *Journal of Black Psychology*, 30(3), 366–385.
- Jones, C. P. (2002). Confronting Institutionalized Racism. *Phylon*, 50(1/2), 7-22.
- Juang, L. & Ittel, A. & Hoferichter, F. & Miriam Gallarin, M. (2016). Perceived Racial/Ethnic Discrimination and Adjustment Among Ethnically Diverse College Students: Family and Peer Support as Protective Factors. *Journal of College Student Development*, 57(4), 380-394.
- Kaestle, C. E., Morisky, D. E., & Wiley, D. J. (2002). Sexual intercourse and the age difference between adolescent females and their romantic partners. *Perspectives on Sexual and Reproductive Health*, 304-309.
- Kaiser Family Foundation (2015). The Center for Disease Control (CDC) STD Prevention Funding: 2015. <http://kff.org/hivaids/state-indicator/cdc-funding-std-prevention/?currentTimeframe=0&selectedRows=%7B%22wrapups%22:%7B%22united-states%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>. Accessed March 20, 2017.
- Kalichman, S. C., Rompa, D., & Coley, B. (1997). Lack of positive outcomes from a cognitive-behavioral HIV and AIDS prevention intervention for inner-city men:

lessons from a controlled pilot study. *AIDS Education and Prevention*, 9(4), 299-313.

Kaplan, K. C., Hormes, J. M., Wallace, M., Rountree, M., & Theall, K. P. (2016). Racial discrimination and HIV-related risk behaviors in Southeast Louisiana. *American Journal of Health Behavior*, 40(1), 132-143.

Karlsen, S., & Nazroo, J. Y. (2002). Relation between racial discrimination, social class, and health among ethnic minority groups. *American Journal of Public Health*, 92(4), 624-631.

Kartasmita, P.S., & Wilson, N. (2018) Resilience Pathways Against Poverty and Extremism: Framing Public Issues Within State Policy and Community Action. In: *International Conference on Public Policy, Social Computing and Development*, 20th October 2017, Hotel Grandika, Indonesia

Kelly, J. A., St. Lawrence, J. S., Brasfield, T. L. (1991). Predictors of vulnerability to AIDS risk behavior relapse. *Journal of Consulting and Clinical Psychology*, 59(1), 163-166. DOI:10.1037/0022-006X.59.1.163

Kerr, J. C., Valois, R. F., Siddiqi, A., Venable, P., & Carey, M. P. (2015). Neighborhood condition and geographic locale in assessing HIV/STI risk among African American adolescents. *AIDS and Behavior*, 19(6), 1005-1013.

Kogan, S. M., Cho, J., Barnum, S., Barton, A., Hicks, M. R., & Brown, G. L. (2017). Pathways to HIV-related behavior among heterosexual, rural Black men: A person-centered analysis. *Archives Of Sexual Behavior*, 46(4), 913-924. doi:10.1007/s10508-015-0661-7

- Koh, H. K., Piotrowski, J. J., Kumanyika, S., & Fielding, J. E. (2011). Healthy people: a 2020 vision for the social determinants approach. *Health Education & Behavior: The Official Publication of The Society For Public Health Education*, 38(6), 551-557.
- Krieger, N. (2014). Discrimination and health inequities. *International Journal of Health Services*, 44(4), 643-710.
- Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005). Experiences of discrimination: validity and reliability of a self-report measure for population health research on racism and health. *Social Science & Medicine*, 61(7), 1576-1596.
- Krogstad, J. M., & López, G. (2016). Roughly half of Hispanics have experienced discrimination. *Pew Research Center*, available at: <http://www.pewresearch.com>.
- Larson, H. J., & Heymann, D. L. (2010). Public health response to influenza A(H1N1) as an opportunity to build public trust. *JAMA*, 303(3), 271-272.
- LaVeist, T. A., Isaac, L. A., & Williams, K. P. (2009). Mistrust of health care organizations is associated with underutilization of health services. *Health Services Research*, 44(6), 2093-2105.
- López-Cevallos, D. F., Harvey, S. M., & Warren, J. T. (2014). Medical mistrust, perceived discrimination, and satisfaction with health care among young-adult rural Latinos. *The Journal Of Rural Health: Official Journal Of The American Rural Health Association And The National Rural Health Care Association*, 30(4), 344-351.

- Manlove, J., Welti, K., Barry, M., Peterson, K., Schelar, E., & Wildsmith, E. (2011). Relationship characteristics and contraceptive use among young adults. *Perspectives on Sexual and Reproductive Health, 43*(2):119-128
- Mayo, R. M., Sherrill, W. W., Sundareswaran, P. & Crew, L. (2007). Attitudes and Perceptions of Hispanic Patients and Health Care Providers in the Treatment of Hispanic Patients: A Review of the Literature. *Hispanic Health Care International, 5*(2), 64-72.
- Mays, V. M., Jones, A. L., Delany-Brumsey, A., Coles, C., & Cochran, S. D. (2017). Perceived discrimination in health care and mental health/substance abuse treatment among Blacks, Latinos, and Whites. *Medical Care, 55*(2), 173-181. doi:10.1097/MLR.0000000000000638
- Merritt, M. M., Bennett Jr, G. G., Williams, R. B., Edwards, C. L., & Sollers III, J. J. (2006). Perceived racism and cardiovascular reactivity and recovery to personally relevant stress. *Health Psychology, 25*(3), 364-369.
- Molina, K. M., & Simon, Y. (2014). Everyday discrimination and chronic health conditions among Latinos: the moderating role of socioeconomic position. *Journal of Behavioral Medicine, 37*(5), 868-880.
- Morales, L. S., Cunningham, W. E., Brown, J. A., Honghu, L., & Hays, R. D. (1999). Are Latinos Less Satisfied with Communication by Health Care Providers? *Journal of General Internal Medicine, 14*, 409-417.
- Mugavero, M. J., Lin H. Y., Allison, J. J., Willig, J. H., Chang PW, ... & Saag, M. S. (2007). Failure to establish HIV care: characterizing the "no show" phenomenon. *Clinical Infectious Disease, 45*, 127-130.

- Mullin, B. A., & Hogg, M. A. (1999). Motivations for group membership: The role of subjective importance and uncertainty reduction. *Basic and Applied Social Psychology, 21*(2), 91-102.
- Mullinax, M., Sanders, S., Dennis, B., Higgins, J., Fortenberry, J. D., & Reece, M. (2016). How condom discontinuation occurs: Interviews with emerging adult women. *The Journal of Sex Research, 1-9*.
- Nesoff, E. D., Dunkle, K., & Lang, D. (2016). The impact of condom use negotiation self-efficacy and partnership patterns on consistent condom use among college-educated women. *Health Education & Behavior, 43*(1), 61-67.
- O'Donnell, L., O'Donnell, C. R., & Stueve, A. (2001). Early sexual initiation and subsequent sex-related risks among urban minority youth: The reach for health study. *Family Planning Perspectives, 268-275*.
- O'Donnell, L., Stueve, A., Joseph, H. A., & Flores, S. (2014). Adapting the voices HIV behavioral intervention for Latino men who have sex with men. *AIDS Behavior, 18*(4), 767-775.
- O'Leary, A., Jemmott, L. S., & Jemmott III, J. B. (2008). Mediation analysis of an effective sexual risk-reduction intervention for women: the importance of self-efficacy. *Health Psychology, 27*(2S), S180-S184.
- Ott, M. A., Adler, N. E., Millstein, S. G., Tschann, J. M., & Ellen, J. M. (2002). The trade-off between hormonal contraceptives and condoms among adolescents. *Perspectives on Sexual and Reproductive Health, 6-14*.

- Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., & ... Gee, G. (2015). Racism as a Determinant of Health: A Systematic Review and Meta-Analysis. *Plos One*, *10*(9), e0138511.
- Parker, K., Horowitz, J., & Mahl, B. (2016). On views of race and inequality, blacks and whites are worlds apart. *Social Trends*, *Pew Research Center*.
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: a meta-analytic review. *Psychological Bulletin*, *135*(4), 531-554.
- Paz-Bailey, G., Koumans, E. H., Sternberg, M., Pierce, A., Papp, J., Unger, E. R., ... & Markowitz, L. E. (2005). The effect of correct and consistent condom use on chlamydial and gonococcal infection among urban adolescents. *Archives of Pediatrics & Adolescent Medicine*, *159*(6), 536-542.
- Pearson, J. (2006). Personal control, self-efficacy in sexual negotiation, and contraceptive risk among adolescents: The role of gender. *Sex Roles*, *54*(9-10), 615-625.
- Pettifor, A. E., Measham, D. M., Rees, H. V., & Padian, N. S. (2004). Sexual power and HIV risk, South Africa. *Emerging Infectious Diseases*, *10*(11), 1996-2004.
- Pieterse, A. L., & Carter, R. T. (2007). An examination of the relationship between general life stress, racism-related stress, and psychological health among black men. *Journal of Counseling Psychology*, *54*(1), 101-109.
- Quesada, J., Hart, L. K., & Bourgois, P. (2011). Structural vulnerability and health: Latino migrant laborers in the United States. *Medical Anthropology*, *30*(4), 339-362.
- Quinn, P. D., & Fromme, K. (2010). Self-regulation as a protective factor against risky drinking and sexual behavior. *Psychology of Addictive Behaviors*, *24*(3), 376-385.

- Ratanawongsa, N., Haywood, C., Bediako, S. M., Lattimer, L., Lanzkron, S., Hill, P. M., Powe, N. R., & Beach, M. C. (2009). Health care provider attitudes toward patients with acute vaso-occlusive crisis due to sickle cell disease: Development of a scale. *Patient Education and Counseling*, 76(2), 272 – 278.
- Reed, E., Santana, M. C., Bowleg, L., Welles, S. L., Horsburgh, C. R., & Raj, A. (2013). Experiences of racial discrimination and relation to sexual risk for HIV among a sample of urban black and African American men. *Journal of Urban Health*, 90(2), 314-322.
- Rhodes, S. D., & McCoy, T. P. (2015). Condom use among immigrant Latino sexual minorities: Multilevel analysis after respondent-driven sampling. *AIDS Education and Prevention*, 27(1), 27-43.
- Richeson, J. A., & Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology*, 88(6), 934-947.
- Riina, E. M., Lippert, A., & Brooks-Gunn, J. (2016). Residential Instability, Family Support, and Parent-Child Relationships Among Ethnically Diverse Urban Families. *Journal of Marriage and The Family*, 78(4), 855-870.
- Ross, M. W., Essien, E. J., & Torres, I. (2006). Conspiracy beliefs about the origin of HIV/AIDS in four racial/ethnic groups. *Journal of Acquired Immune Deficiency Syndromes*, 41(3), 342–344. <http://doi.org/10.1097/01.qai.0000209897.59384.52>
- Russell, S. L., Katz, R. V., Wang, M. Q., Lee, R., Green, B. L., Kressin, N. R., & Claudio, C. (2011). Belief in AIDS origin conspiracy theory and willingness to

- participate in biomedical research studies: findings in Whites, Blacks, and Hispanics in seven cities across two surveys. *HIV Clinical Trials*, 12(1), 37-47.
- Sabin, J. A., Rivara, F. P., & Greenwald, A. G. (2008). Physician implicit attitudes and stereotypes about race and quality of medical care. *Medical Care*, 46(7), 678-685.
- Sanchez, D., Whittaker, T. A., & Hamilton, E. (2016). Perceived discrimination, peer influence and sexual behaviors in Mexican American preadolescents. *Journal of Youth and Adolescence*, 45(5), 928-944.
- Sanders-Phillips, K., Settles-Reaves, B., Walker, D., & Brownlow, J. (2009). Social inequality and racial discrimination: Risk factors for health disparities in children of color. *Pediatrics*, 124(Supplement 3), S176-S186.
- Seaton, E. K., Neblett, E. W., Upton, R. D., & Hammond, W. P. (2011). The moderating capacity of racial identity between perceived discrimination and psychological well-being over time among African American youth. *Child Development*, 82(6), 1850–1867.
- Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial identity, racial discrimination, perceived stress, and psychological distress among African American young adults. *Journal of Health and Social Behavior*, 302-317.
- Senn, T. E., Walsh, J. L., & Carey, M. P. (2016). Mediators of the relation between community violence and sexual risk behavior among adults attending a public sexually transmitted infection clinic. *Archives of Sexual Behavior*, 45(5), 1069-1082.

- Shafii, T., Stovel, K., Davis, R., & Holmes, K. (2004). Is condom use habit forming? Condom use at sexual debut and subsequent condom use. *Sexually Transmitted Diseases, 31*(6), 366-372.
- Sharma, B. B., Small, E., Mengo, C., & Ude, P. (2017). Women's autonomy and attitudes toward condom use: A multi-country analysis. *Social Work in Public Health, 32*(4), 238-253.
- Shi, L., & Stevens, G. D. (2005). Vulnerability and unmet health care needs. *Journal of General Internal Medicine, 20*(2), 148-154.
- Sims, M., Diez-Roux, A. V., Gebreab, S. Y., Brenner, A., Dubbert, P., Wyatt, S., & ... Taylor, H. (2016). Perceived discrimination is associated with health behaviours among African-Americans in the Jackson Heart Study. *Journal of Epidemiology And Community Health, 70*(2), 187-194. DOI:10.1136/jech-2015-206390
- Simmons, W. P., & Parsons, S. (2005). Beliefs in conspiracy theories among African Americans: A comparison of elites and masses. *Social Science Quarterly, 86*(3), 582-598.
- Sionean, C., Le, B. C., Hageman, K., Oster, A. M., Wejnert, C., Hess, K. L., & Paz-Bailey, G. (2014). HIV risk, prevention, and testing behaviors among heterosexuals at increased risk for HIV infection—National HIV Behavioral Surveillance System, 21 US cities, 2010. *MMWR Surveillance Summary, 63*(14), 1-39.
- Smart Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: a multimotive model. *Psychological Review, 116*(2), 365-383.

- Smetana, J. G. (2000). Middle-class African American adolescents' and parents' conceptions of parental authority and parenting practices: A longitudinal investigation. *Child Development, 71*, 1672–1686.
- Snead, M. C., O'Leary, A. M., Mandel, M. G., Kourtis, A. P., Wiener, J., Jamieson, D. J., ... & Rietmeijer, C. A. (2014). Relationship between social cognitive theory constructs and self-reported condom use: assessment of behaviour in a subgroup of the Safe in the City trial. *BMJ open, 4*(12), 1-6.
- Sorkin, D. H., Ngo-Metzger, Q., & De Alba, I. (2010). Racial/ethnic discrimination in health care: Impact on perceived quality of care. *Journal of General Internal Medicine, 25*(5), 390-396.
- StataCorp (2015). *Stata Statistical Software: Release 14*. College Station, TX: StataCorp LP.
- Stepanikova, I., Bateman, L. B., & Oates, G. R. (2017). Systemic inflammation in midlife: race, socioeconomic status, and perceived discrimination. *American Journal of Preventive Medicine, 52*(1), S63-S76.
- Stetler, C., Chen, E., & Miller, G. E. (2006). Written disclosure of experiences with racial discrimination and antibody response to an influenza vaccine. *International Journal of Behavioral Medicine, 13*(1), 60-68.
- Stevenson, H. C., & Arrington, E. G. (2009). Racial/ethnic socialization mediates perceived racism and the racial identity of African American adolescents. *Cultural Diversity & Ethnic Minority Psychology, 15*(2), 125-136.

- Strayhorn, T. L. (2014). Beyond the Model Minority Myth: Interrogating the Lived Experiences of Korean American Gay Men in College. *Journal of College Student Development, 55*(6), 586-594.
- Stock, M. L., Gibbons, F. X., Peterson, L. M., & Gerrard, M. (2013). The effects of racial discrimination on the HIV-risk cognitions and behaviors of Black adolescents and young adults. *Health Psychology, 32*(5), 543-550.
- Stokes, L. R., Harvey, S. M., & Warren, J. T. (2016). Individual, interpersonal, and structural power: Associations with condom use in a sample of young adult Latinos. *Health Care for Women International, 37*(2), 216-236.
- Sutton, M. Y., Gray, S. C., Elmore, K., & Gaul, Z. (2017). Social determinants of HIV disparities in the Southern United States and in counties with historically Black Colleges and Universities (HBCUs), 2013–2014. *PloS one, 12*(1), e0170714. DOI:10.1371/journal.pone.0170714
- Taylor, R. J., Miller, R., Mouzon, D., Keith, V. M., & Chatters, L. M. (2018). Everyday Discrimination among African American Men: The Impact of Criminal Justice Contact. *Race and Justice, 8*(2), 154-177.
- Thompson-Robinson, M. V., Richter, D. L., Shegog, M. L., Weaver, M., Trahan, L., Sellers, D. B., & Brown, V. L. (2005). Perceptions of partner risk and influences on sexual decision-making for HIV prevention among students at historically black colleges and universities. *Journal of African American Studies, 9*(2), 16-28.
- Thorburn, S., & Bogart, L. M. (2003) Birth control, conspiracy beliefs, perceived discrimination and contraception among African Americans: An exploratory study. *Journal of Health Psychology, 8*(2), 263-276.

- Tobin, K., Kuramoto, S.J., German, D., Fields, E., Spikes, P. S., Patterson, J., & Latkin, C. (2013). Unity in diversity: results of a randomized clinical culturally tailored pilot HIV prevention intervention trial in Baltimore, Maryland, for African American Men Who have Sex with Men. *Health Education Behavior, 40*(3), 286–295.
- Valdez, Z. and Golash-Boza, T. (2017). U.S. racial and ethnic relations in the twenty-first century. *Ethnic and Racial Studies, 40*(13), 2181-2209.
- van Ryn, M., & Burke, J. (2000). The effect of patient race and socio-economic status on physicians' perceptions of patients. *Social Science & Medicine, 50*(6), 813-828.
- VanderDrift, L. E., Agnew, C. R., Harvey, S. M., & Warren, J. T. (2013). Whose intentions predict? Power over condom use within heterosexual dyads. *Health Psychology: Official Journal Of The Division Of Health Psychology, American Psychological Association, 32*(10), 1038-1046. doi:10.1037/a0030021
- Viner, R. M., Ozer, E. M., Denny, S., Marmot, M., Resnick, M., Fatusi, A., & Currie, C. (2012). Adolescence and the social determinants of health. *The Lancet, 379*(9826), 1641-1652.
- Vines, A. I., Ward, J. B., Cordoba, E., & Black, K. Z. (2017). Perceived Racial/Ethnic Discrimination and Mental Health: a Review and Future Directions for Social Epidemiology. *Current Epidemiology Reports, 4*(2), 156-165.
- Weech-Maldonado, R., Hall, A., Bryant, T., Jenkins, K. A., & Elliott, M. N. (2012). The relationship between perceived discrimination and patient experiences with health care. *Medical Care, 50*(9 Suppl 2), S62-S68.
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in

health: Evidence and needed research. *Journal of Behavioral Medicine*, 32, 20–47.

Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2008). Racial/ethnic discrimination and health: Findings from community studies. *American Journal of Public Health*, 98(Suppl 9), S29–S37.

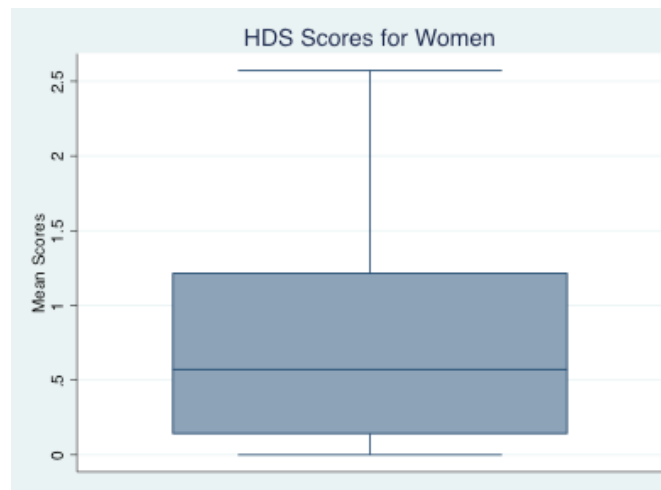
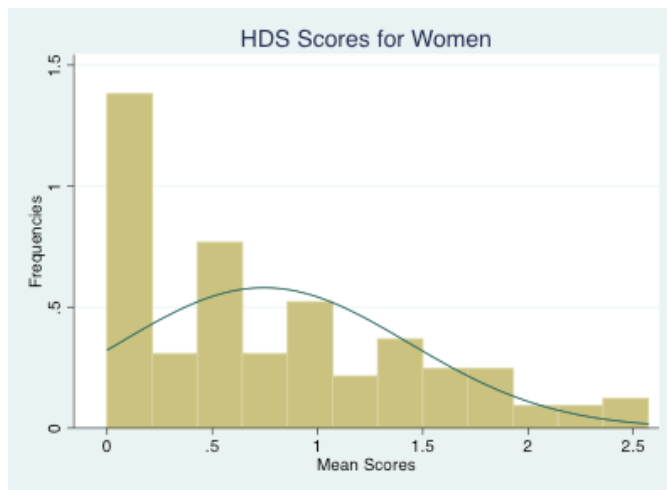
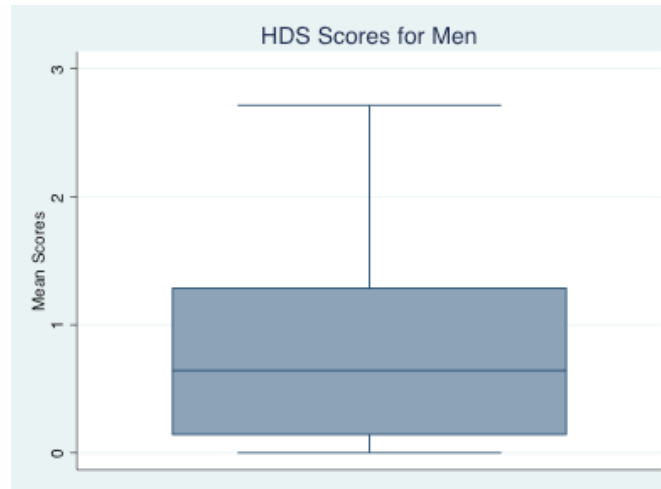
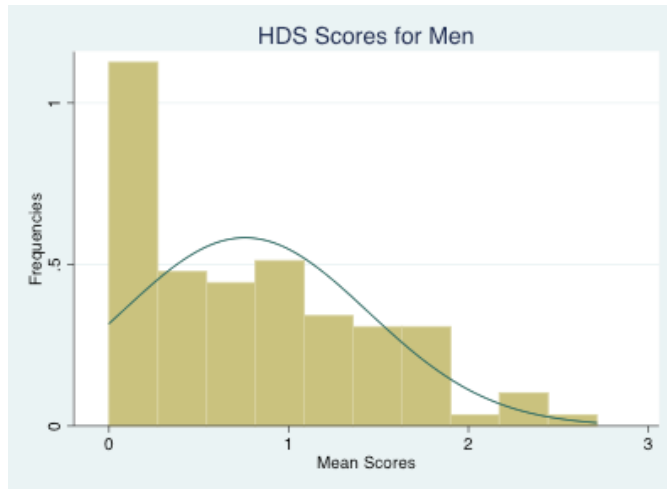
Wingood, G. M., & DiClemente, R. J. (1998). Partner influences and gender-related factors associated with non-condom use among young adult African American women. *American Journal of Community Psychology*, 26(1), 29-51.

Wyatt, G. E., Gómez, C. A., Hamilton, A. B., Valencia-Garcia, D., Gant, L. M., & Graham, C. E. (2013). The intersection of gender and ethnicity in HIV risk, interventions, and prevention: New frontiers for psychology. *American Psychologist*, 68(4), 247-260.

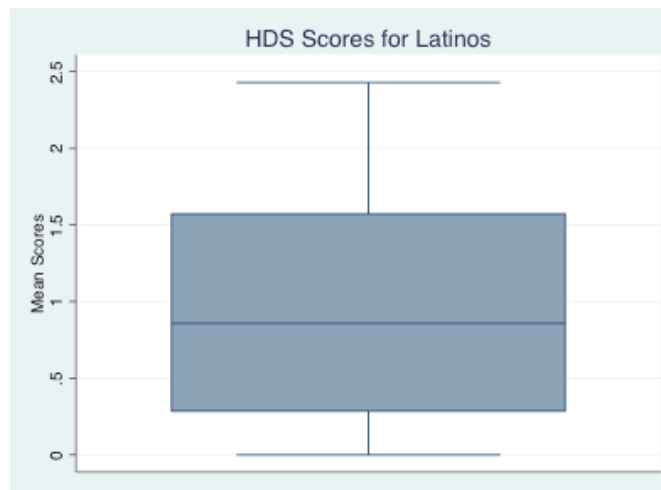
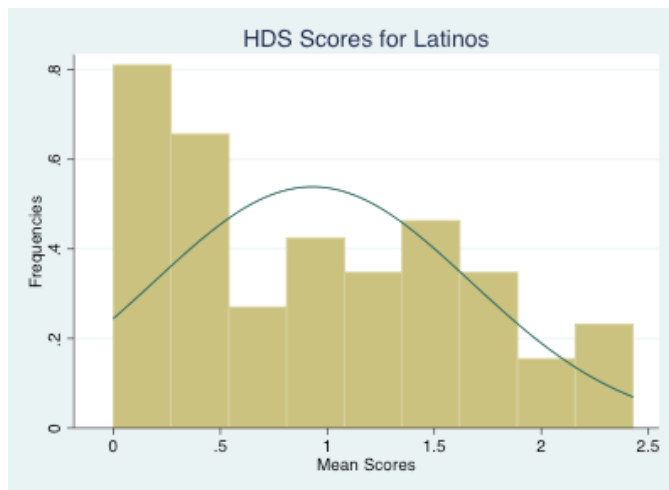
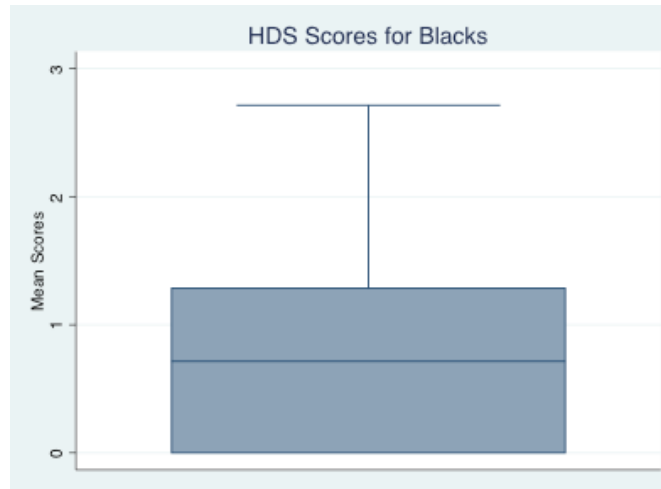
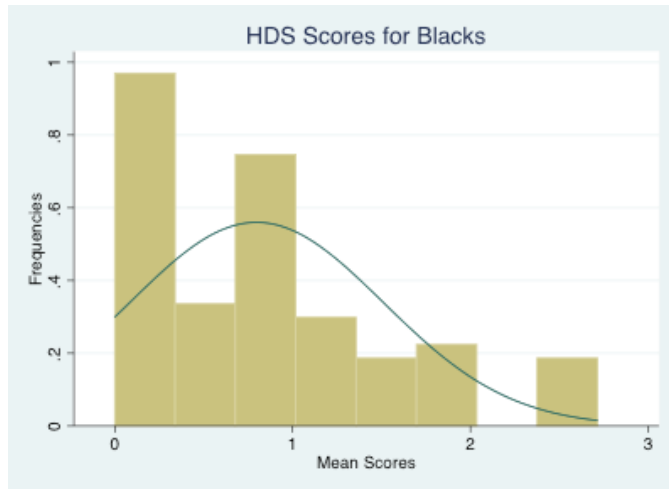
Yip, T. (2015). The effects of ethnic/racial discrimination and sleep quality on depressive symptoms and self-esteem trajectories among diverse adolescents. *Journal of Youth and Adolescence*, 44(2), 419-430.

APPENDICES

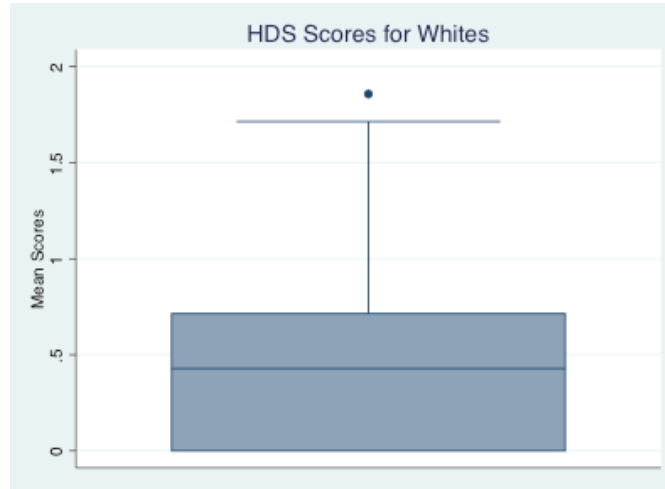
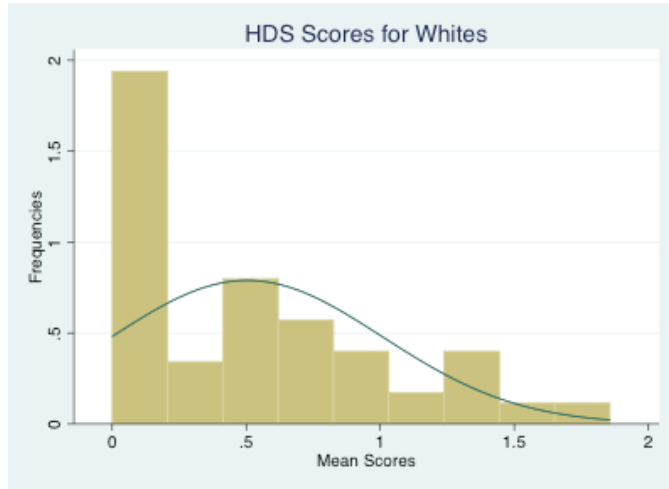
Appendix A: Histograms and Boxplots - HDS Scores For Men and Women



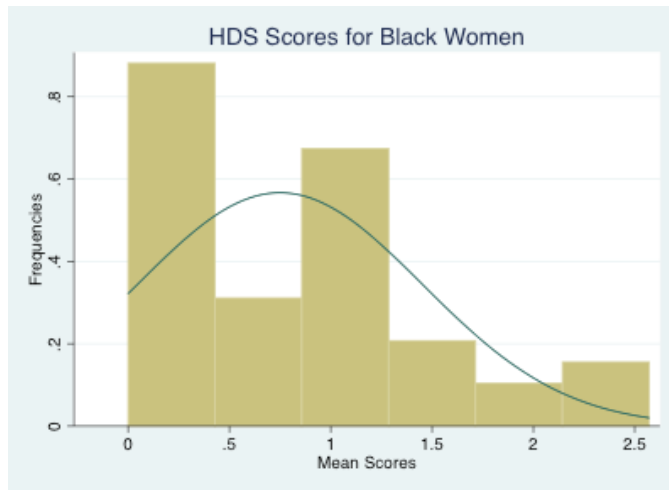
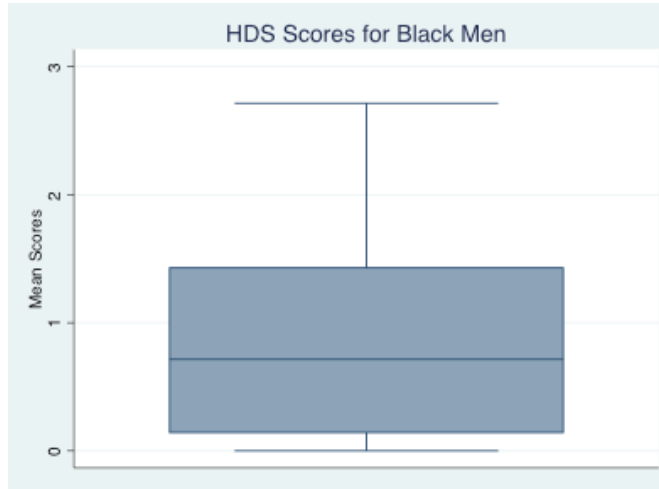
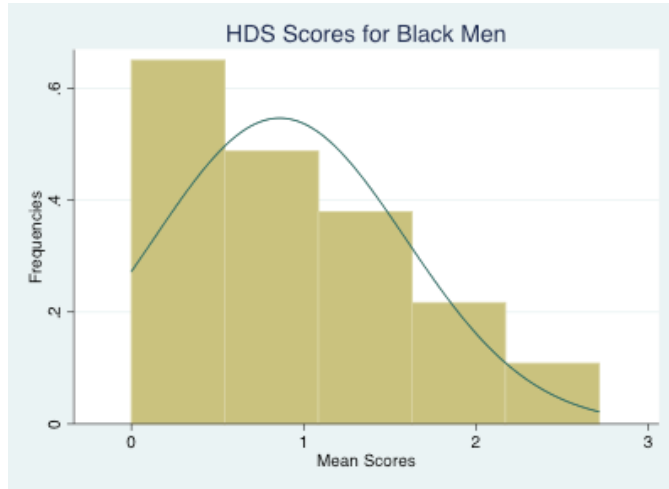
Appendix B: Histograms and Boxplots - HDS Scores for Blacks and Latinos



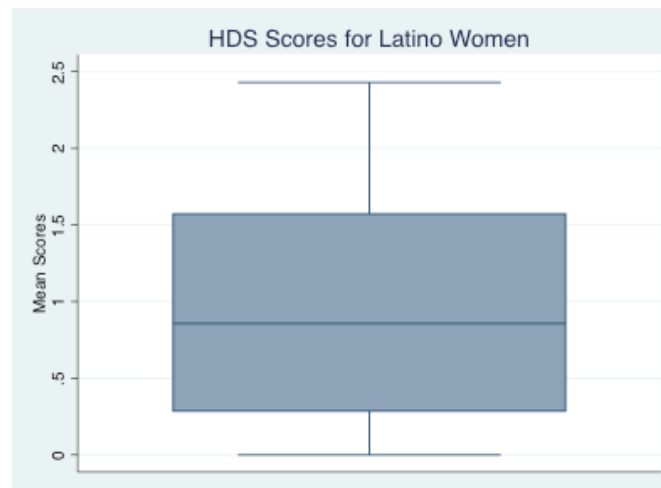
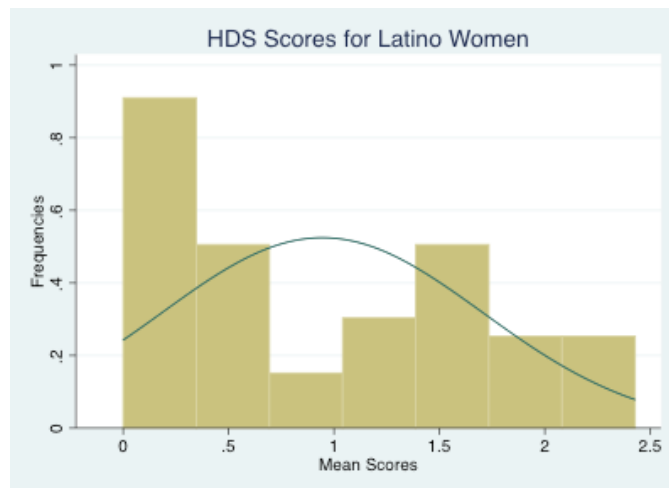
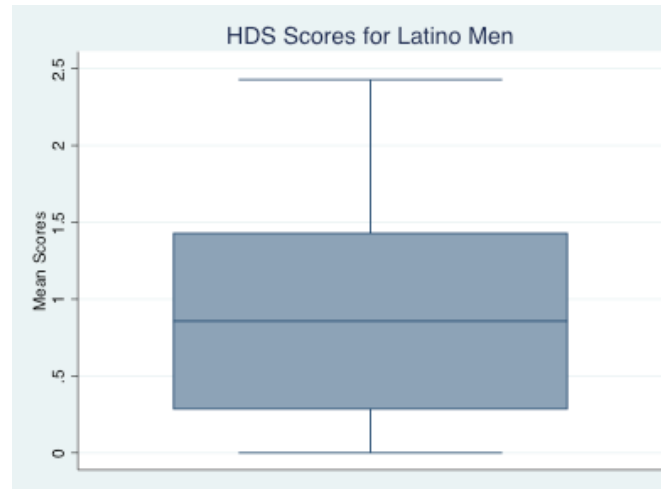
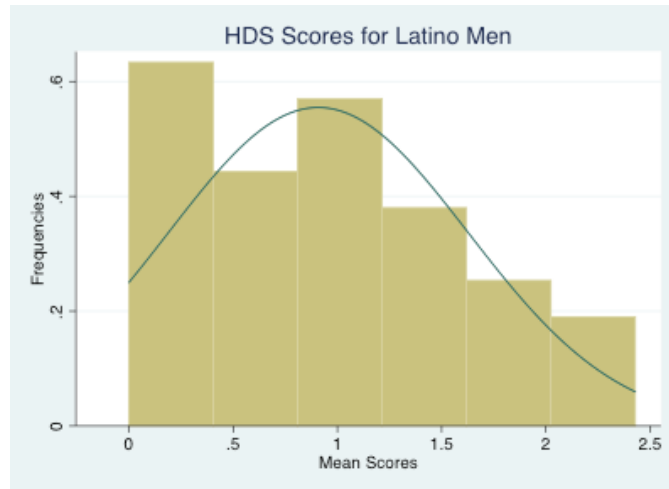
Appendix C: Histograms and Boxplots - HDS Scores for Whites



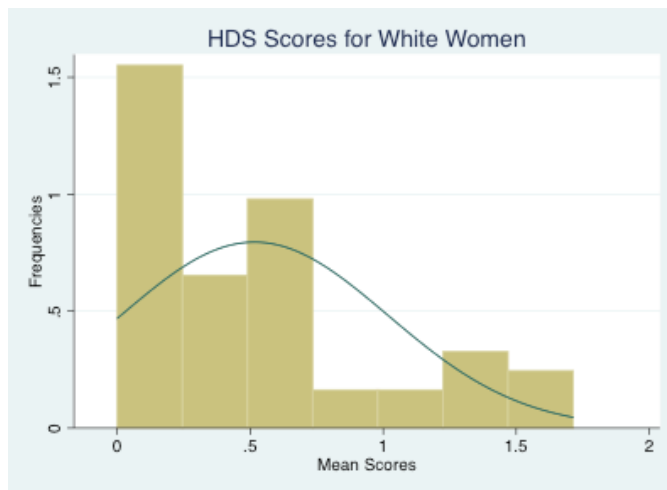
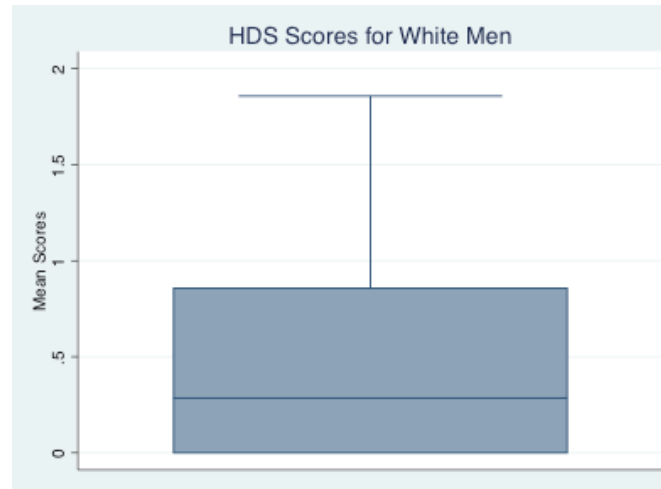
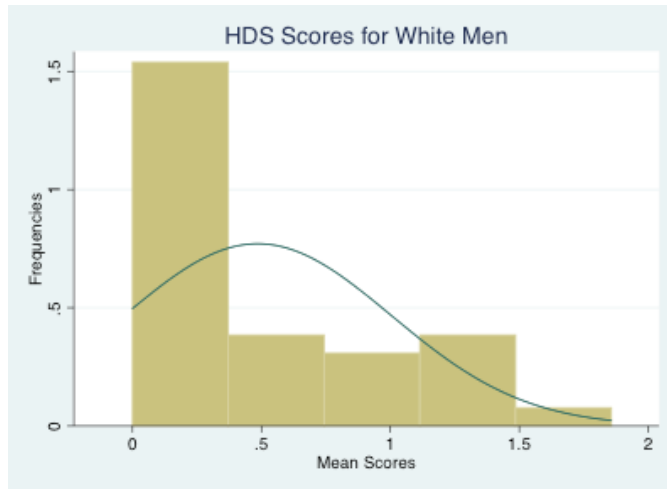
Appendix D: Histograms and Boxplots - HDS Scores for Black Men and Black Women



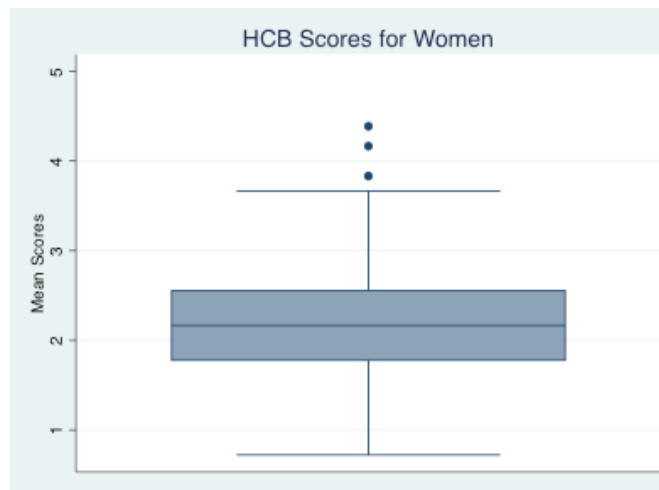
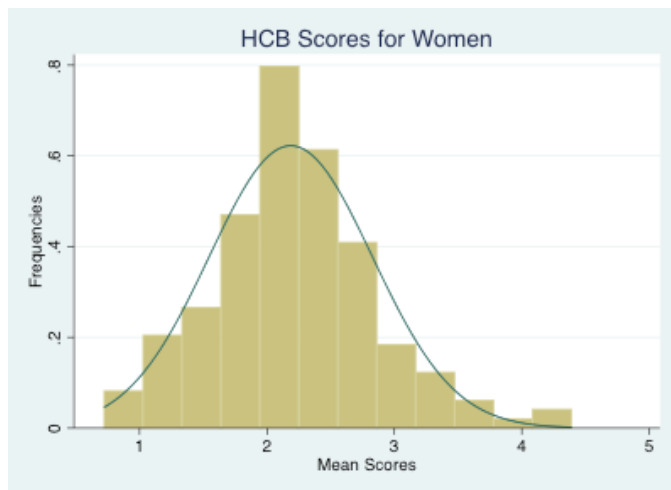
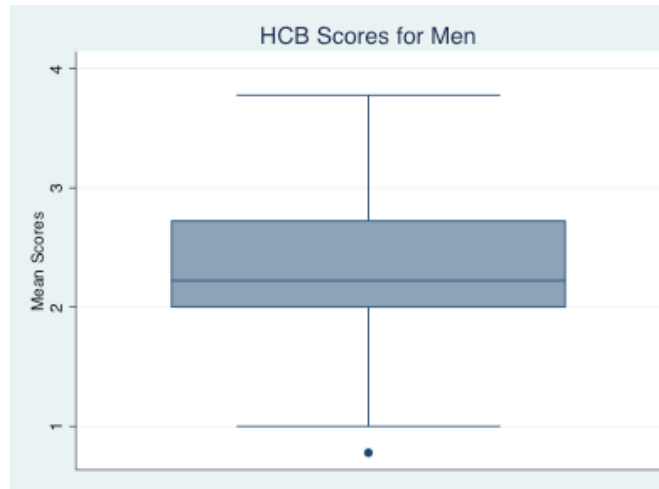
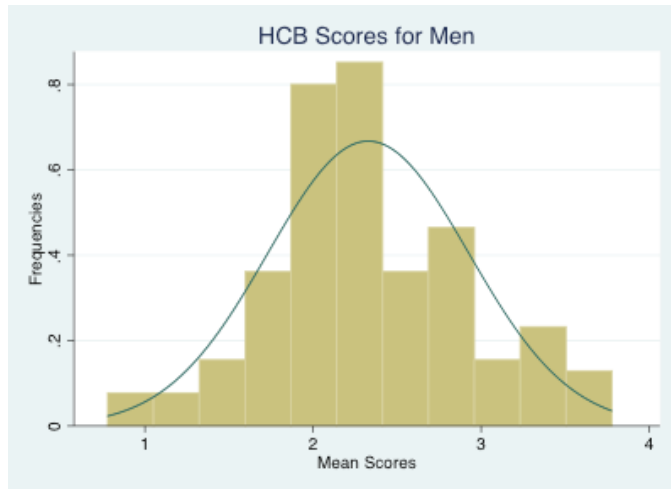
Appendix E: Histograms and Boxplots - HDS Scores for Latino Men and Latino Women



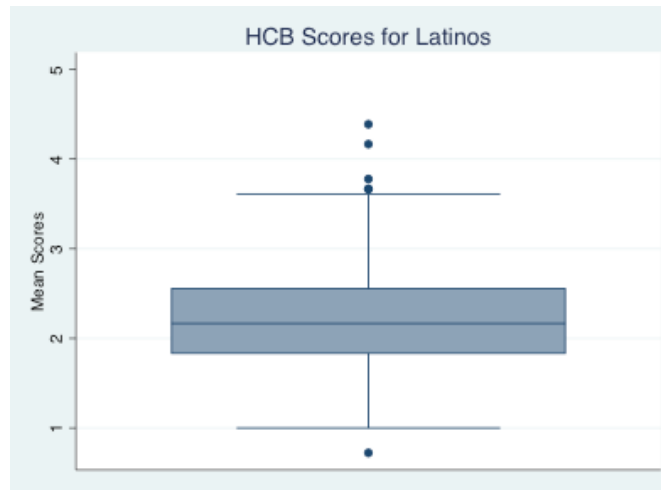
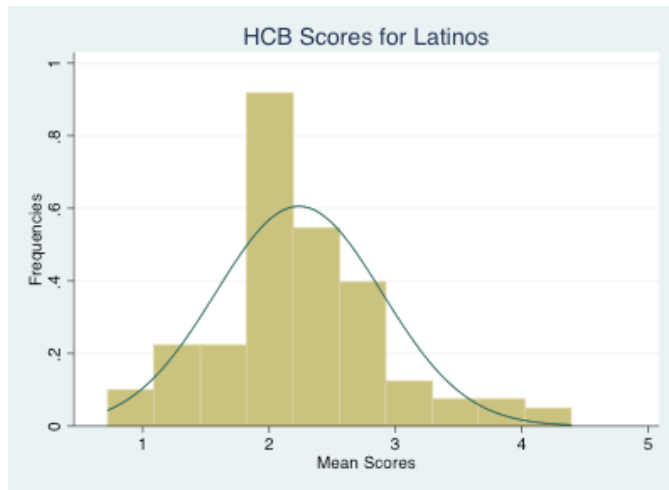
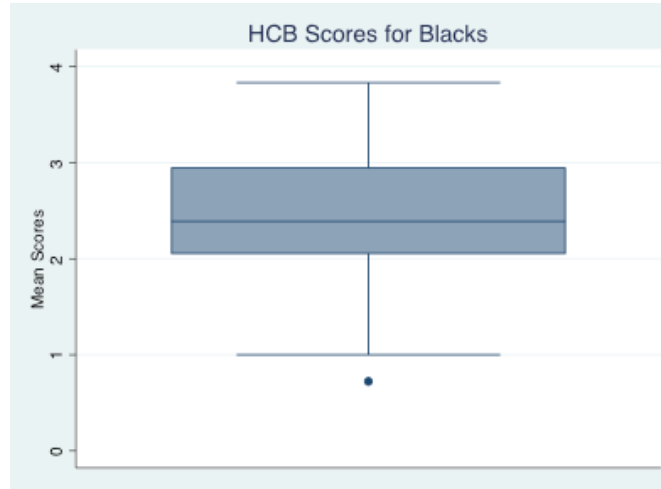
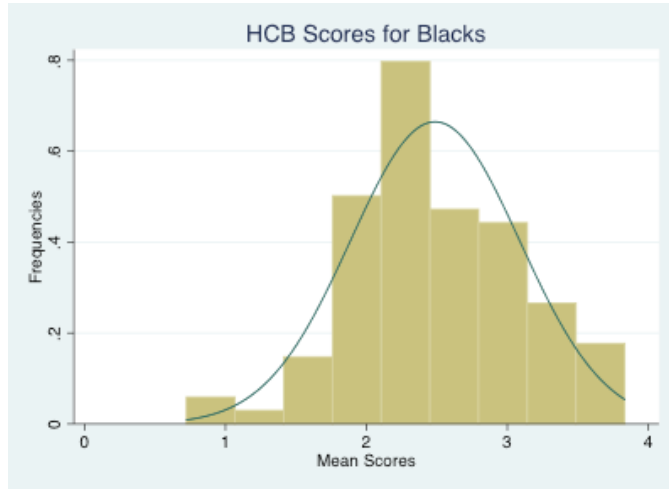
Appendix F: Histograms and Boxplots - HDS Scores for White Men and White Women



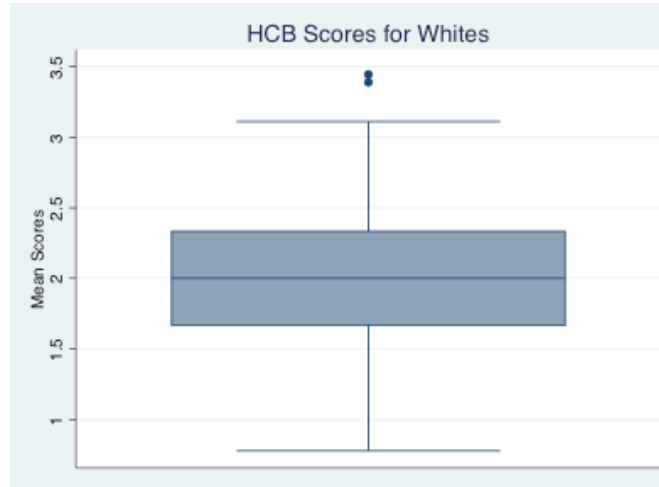
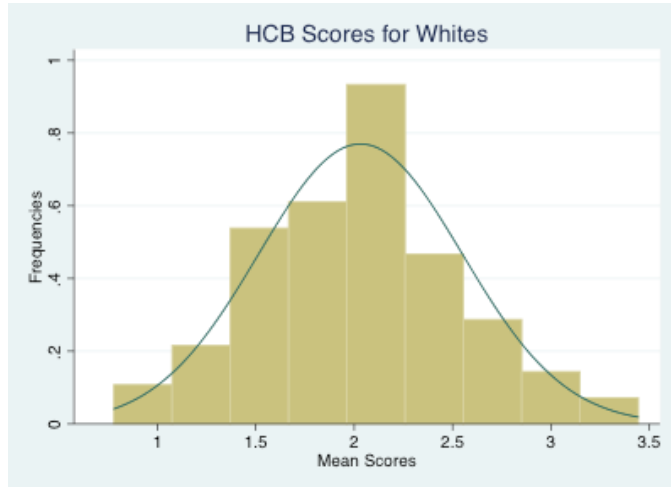
Appendix G: Histograms and Boxplots - HCB Scores for Men and Women



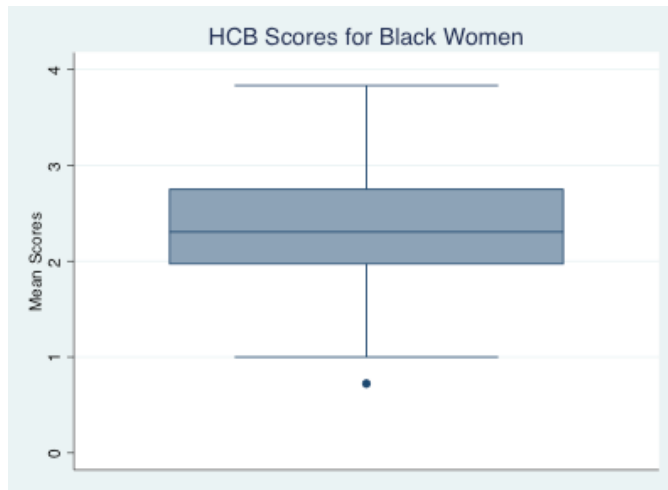
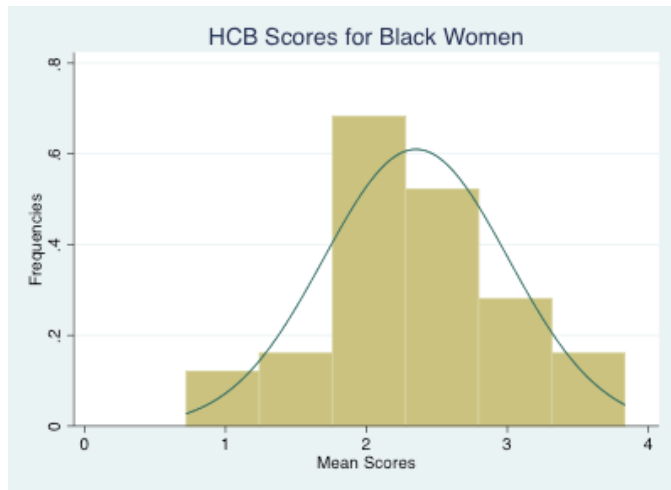
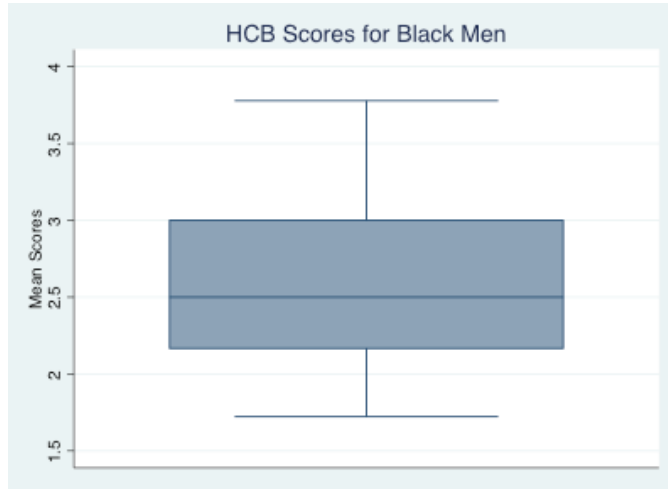
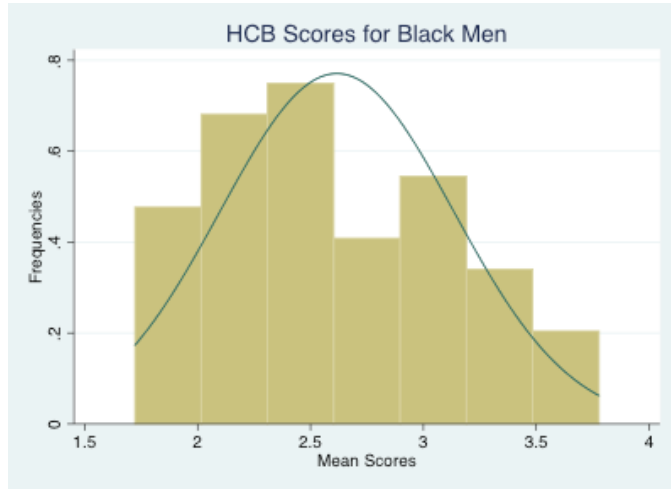
Appendix G: Histograms and Boxplots - HCB Scores for Black and Latinos



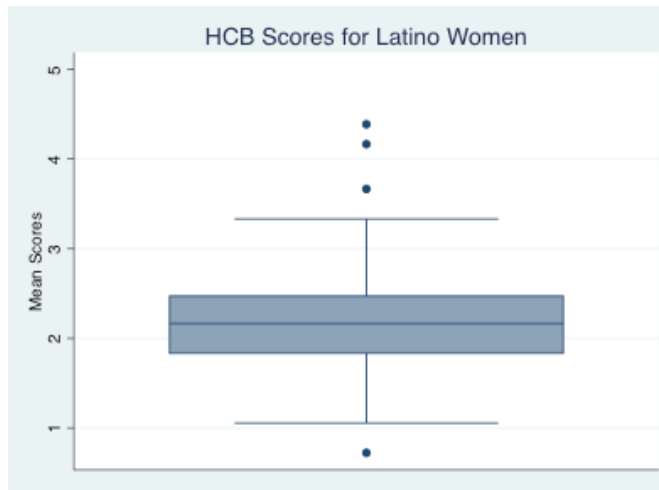
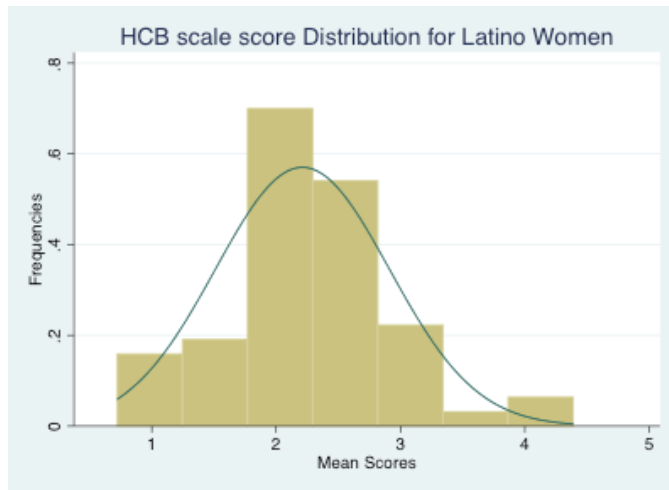
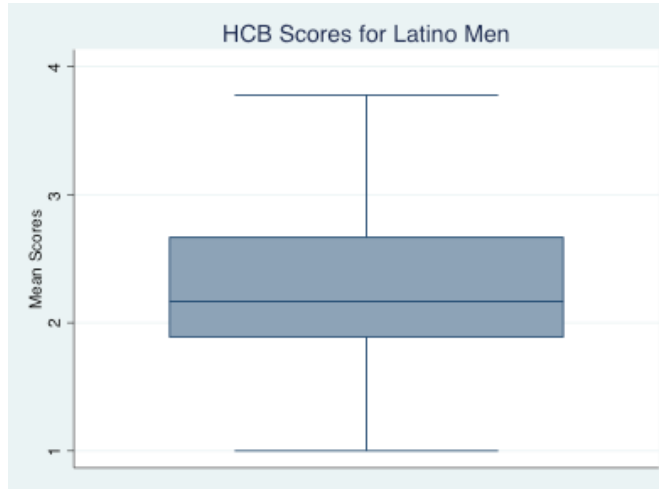
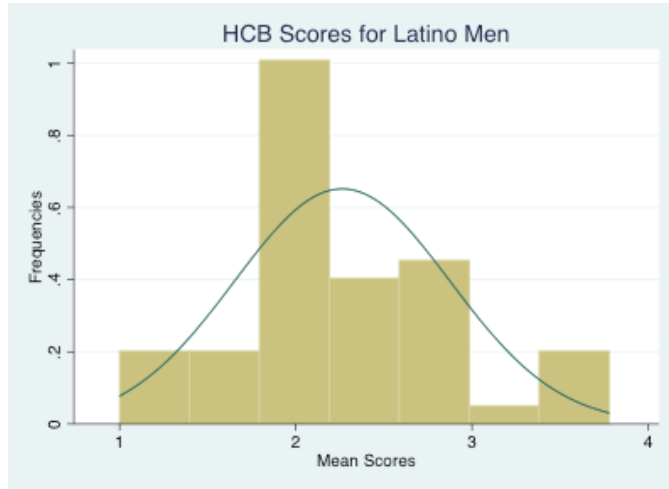
Appendix G: Histograms and Boxplots - HCB Scores for Whites



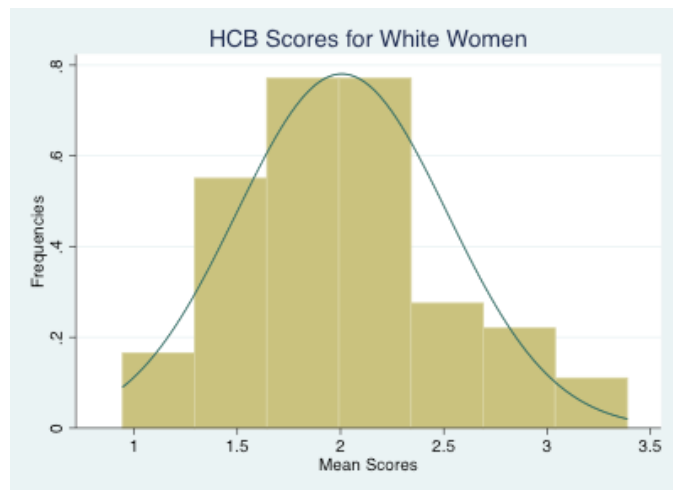
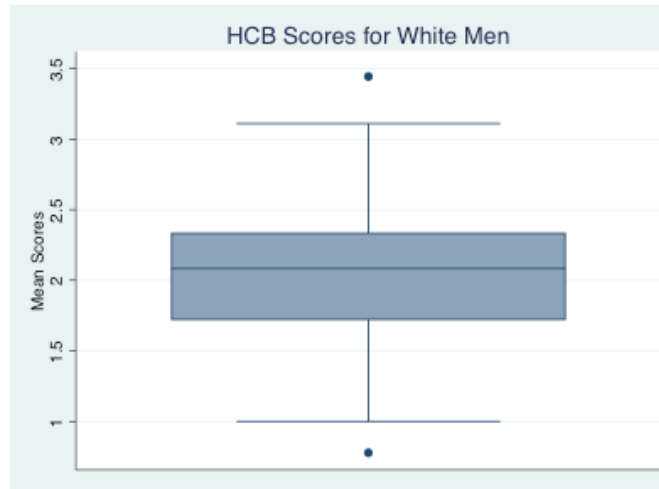
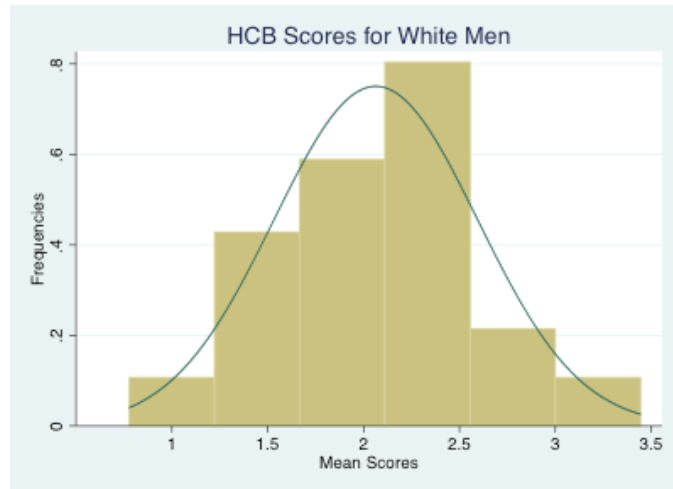
Appendix G: Histograms and Boxplots - HCB Scores for Black Men and Black Women



Appendix H: Histograms and Boxplots - HCB Scores for Latino Men and Latino Women



Appendix I: Histograms and Boxplots - HCB Scores for White Men and White Women



Appendix J: Spearman Correlation Matrix of EOD, HDS, and HCB

	EOD	HDS
HDS	0.44 0.00	
HCB	0.20 0.00	0.31 0.00

Appendix K: Impact of Decision to require at least 80% response to each scale

Scale	Response (Total N= 302)	Description of Missing Cases
EOD	No missing	
HCB	No missing	
Vulnerability to HIV/STIs	2 missing	1 female AA, 1 male AA
Sexual Decision Making	8 missing*	2 females, 6 males 1 AA, 4 Latino, 3 White
Condom Use Self Efficacy	8 missing*	2 females, 6 males 1 AA, 4 Latino, 3 White

* missing cases were the same for Sexual Decision Making and Condom Use Self Efficacy Scales