

SOCIAL AND CONTEXTUAL (DIS)ADVANTAGES: THE INTERSECTION OF FOUR
RISK FACTORS ON PERCEIVED RISK FOR HIV TRANSMISSION
AMONG AFRICAN AMERICAN WOMEN LIVING IN THE
SOUTHERN UNITED STATES

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JAMEISHA B. BROWN, B.S.

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ABSTRACT

JAMEISHA B. BROWN

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Using the Health Belief Model and Cultural Ecology as a framework, this study sought to analyze HIV risk perceptions and reported sexual behaviors among African American women to inform prevention interventions to reduce health inequities. The HIV Risk Assessment Study collected social and contextual correlate data from (N=98) African American women ages 18-65 living in the South. Results disclosed self-reported relationship status correlated with perceived risk for acquiring HIV and significant associations were found among self-efficacy for HIV/STI testing and perceived risk for acquiring HIV. Though (N=41) women received an HIV test in the past 6 months, this result was not related to perceived risk. There was no significant correlation between HIV knowledge, attitudes towards condoms, and HIV risk perceptions. Outcomes indicated that HIV prevention interventions that target HIV risk perceptions, race/gender and geographic location are needed to reduce HIV acquisition rates among marginalized groups.

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CHAPTER I

INTRODUCTION

This thesis conveys the results of secondary data analysis of a survey on attitudes toward HIV/AIDS among African American women living in the southern United States. The purpose of this study was to identify social and contextual correlates that may influence the disparity of HIV/AIDS transmission among African American women living in the South. The first chapter of the thesis presents the statement of the problem, purpose and nature of the study.

Statement of the Purpose

Advances in public health and medical interventions make Human Immunodeficiency Virus (HIV), the precursor to Acquired Immunodeficiency Syndrome (AIDS), a virus once considered terminal; now immensely manageable with medicines (Kaiser Family Foundation [KFF], 2014). Despite treatment milestones to reduce the rates of transmission the virus continues to marginalize already oppressed groups. The HIV epidemic persists to disproportionately affect African Americans. Markedly with increasing prevalence, African Americans in the United States are diagnosed with HIV at higher rates than other racial/ethnic groups. In 2013, African Americans represented nearly (14%) of the U.S. population, and yet they accounted for almost half (45%) of new HIV cases.

African Americans bear a burden of HIV incidence that is eight times greater than their white counterparts (KFF, 2014). African American men who identify as bisexual and men who have sex with men (MSM), represented more than half (51%) and overall African American men accounted for (72%) of new HIV infections in 2010 (KFF, 2014). The majority of African Americans newly diagnosed (61% in 2011) and living with HIV (55% in 2010) were regionally located in the South (KFF, 2014). This statistical evidence hints that African Americans living in the south are the fastest growing contributor to the epidemic in the country. Though the statistics of the epidemic among African American men are startling, rates among women tend to be overshadowed and underrepresented in interventions. African American women accounted for an estimated two-thirds (64%) of new HIV cases, 20 and 4 times the rate of their white and Latina counterparts, respectively in 2011 (Avert.org, 2014; CDC, 2014; KFF, 2014). Heterosexual relations with high-risk males were the most common mode of transmission of HIV infection in more than three-fourths (nearly 85%) of African American females living with HIV (CDC, 2015a, 2015b; KFF. 2014). Therefore, African American women between ages 18-65 living in the southern United States is the target population for this study to gather data of the perceptions of HIV among this demographic.

Evidence is mounting that African American women contend with inimitable challenges due to the intersections of gender, race and social class that

affect heterosexual risks for HIV (Carpenter, 2012; Gilbert & Wright, 2003; KFF, 2014; Scott, 2009). African American women living in the south are more likely to be a part of or lead impoverished households (Avert.org, 2014; Pew Research Center, 2013; Reif, Whetten, Wilson, & Gong, 2012). Since African American males are the likely partners of African American women, high incarceration rates of African American men reduces available male partners, leading to a male-female ratio imbalance and economic instability among African American families (Fullilove, 2012; Reif, Whetten, Wilson, & Gong, 2012). Additionally, women's inferior economic position can make sexual decision-making difficult. Economic vulnerability may propagate African American women's lack of power in heterosexual relationships as they may become socially dependent upon their partner for housing, transportation or other financial support. Social dependency reduces an individual's confidence and capacity to negotiate condom use or insist faithfulness, both are necessary for reducing HIV transmission (Ford, Daniel, Earp, Kaufman, Golin & Miller, 2009; McNair & Prather, 2004; Tillerson, 2008). Despite their knowledge of proper contraceptive methods, economic inferiority and limited African American male partner availability may compel African American women to make compromises when partners refuse to use condoms (Fullilove, 2012; Langen, 2005; McLellan-Lemal, Toledo, O'Daniels, Villar-Loubet, Adimora & Marks, 2013; Paxton, Williams, Bolden, Guzman & Harawa, 2013). The data in this review subsequently indicates a combination of race,

social class and gender inequalities that might reveal causal factors associated with an excessively higher burden of HIV/AIDS in African American women living in the south.

Research Question

Do relationship status, HIV knowledge, attitudes towards condom use, and self-efficacy in seeking HIV and STI testing influence perceived risk of HIV transmission among African American women living in the south?

Hypotheses

H₁ There is no association between relationship status and perceived risk for HIV transmission among African American women.

H₂ There is no association between knowledge about HIV and perceived risk for HIV transmission among African American women.

H₃ There is no association between attitudes toward the effectiveness of condoms and perceived risk for HIV transmission among African American women.

H₄ There is no association between self-efficacy in seeking HIV and STI testing and perceived risk for HIV transmission among African American women.

Delimitations

The original study was delineated to the extent that participants self-identified as a Black or African American woman between ages 18-65. This study chose not to deliberate about gay men and MSM though they characterize a bulk

of the HIV epidemic. African American women place second, after MSM, in the disparate encumbrance of HIV/AIDS, and factors that may influence their perceived risk for HIV transmission was of interest to this study. Lastly, the results of this study may be only generalizable to African American women living in the targeted region, the seventeen states that constitute the southern region of the U.S.

Limitations

The original study collected survey data over a 6 month period prior to the initiation of secondary data analysis for the purpose of this research, thus limiting the opportunity to include additional survey participants. The targeted sample size of 100 completed surveys may not have produced results generalizable to all African American women in the U.S. Additionally, assessing the dependent variable, perceived risk for HIV, among African American women living in the south might not have generated results that are applicable to other U.S. regions or racial/ethnic groups of women. This study pursued to explore only attitudes toward the effectiveness of condoms; not actual condom use as a sexual health practice, which may have been a stronger predictor of perceived risk for HIV transmission (Widman, Golin, Grodensky & Suchindran, 2013). The data items included in this study was abstracted from an original online survey where participant responses were self-reported. Finally, the results of this study were

found through the identification of potential correlations; therefore, causality is not inherent in this type of study methodology.

Assumptions

The researcher entered this study with several preconceived notions regarding the potential results. Anonymity and confidentiality of research participation were preserved because the researcher did not have access to this information. The study analyzed data from a completed online survey that the investigator assumed was representative of the population of African American women that are at increased risk for HIV. The researcher assumed that the participants were honest and truthful in their responses to the items on the original survey.

Definition of Terms

Perceived risk: encompasses both elements of perceived susceptibility and perceived severity of HIV/AIDS (Napper, Fisher & Reynolds, 2012; Rosenstock, Stretcher & Becker, 1994).

Perceived severity: is an individual's opinion of the seriousness of HIV/AIDS and its consequences (Rosenstock, Stretcher & Becker, 1994). Perceived severity speculates that the perception of the seriousness of HIV is influenced by HIV knowledge and preconceived beliefs about how the virus can affect one's life.

Perceived susceptibility: is an individual's opinion of the likelihood of getting HIV (Rosenstock, Stretcher & Becker, 1994). Perceived susceptibility suggests that greater the opinion of the likelihood of getting HIV, the greater the likelihood of engaging in behaviors to decrease risk, for example HIV testing, STI testing, limited sexual partners and condom use.

Importance of the Study

From the beginning of the early epidemic, white homosexual males were framed as the face of the burden of HIV/AIDS. Presently, African American MSM are the subgroup most affected by HIV/AIDS (CDC, 2015ab). However, this framing continues to fail to acknowledge that heterosexual females, specifically African American women represent an increasing proportion of new HIV cases among women. African Americans living in the south comprise more than 55% of people living with HIV/AIDS in 2010 (KFF, 2014). Recognizing the social and contextual factors at play and perceived risk for HIV transmission that may be perpetuating an elevated burden is vital given their growing representation in new cases of HIV transmission among African American women.

CHAPTER II
REVIEW OF LITERATURE: HIV/AIDS AND AFRICAN AMERICAN
WOMEN

In the three decades since HIV/AIDS was first identified, the body of literature addressing the illness has increased rapidly. As evident in the literature, the image of those perceived to be most impacted or at risk for HIV and the actual representation is drastically different from the early epidemic. Presented in Chapter 2 is: 1) a synthesis of research that provides an historical overview of the HIV/AIDS epidemic in the United States (U.S.), 2) supports the disproportionate burden of HIV among African American women in the southern region of the U.S., 3) offers an overview of variables that are widely associated with HIV/AIDS behavior among these women, 4) and also reviews the Health Belief Model and Cultural Ecology, two key theories that are used as the basis for this study.

Overview of HIV/AIDS in the United States

Human Immunodeficiency Virus (HIV) causes a slow degeneration of the immune system with the development of opportunistic infections, malignancies (e.g. Kaposi's sarcoma, leukemia) and frequently, impairment of the central nervous system, which toward the end of the continuum of illnesses is referred to as AIDS (AIDS.gov, 2015). Of the estimated more than 1.2 million people living

with HIV in the United States in 2013 nearly (16%) were unaware of their status (AIDS.gov, 2015; Centers for Disease Control and Prevention (CDC), 2014).

HIV affects the immune system, including white blood cells, lymphocytes, which enable the body to fight off infection (e.g. *Pneumocystis carinii* pneumonia) and cells of the organs. Acquired Immunodeficiency Syndrome (AIDS) is defined as the final stage of infection related to HIV. AIDS is characterized by a low CD4 or T-cell count equal or less than 200, or one or more opportunistic infections (AIDS.gov, n.d.; 2015). These cells manufacture antibodies to protect against the invasion of viruses and bacteria (AIDS.gov, n.d.; 2015).

During sexual intercourse, the virus can enter the body through orifices and broken skin including the lining of the vagina, vulva, penis, anus or mouth during sexual contact (CATIE, 2009). In some cases, HIV may be transmitted through the sharing of unsterile needles during intravenous (IV) drug use and direct contact with infected blood. Prior to the screening of blood for evidence of infectious diseases, and before the introduction of heat-treating techniques in the mid-1980s, HIV was transmitted through transfusions of contaminated blood products (CDC, 1988; Food and Drug Assistance (FDA), 2009). High concentrations of HIV is found in blood, vaginal secretions, seminal fluids and breast milk, hence increasing the risk of transmission when directly exposed to these sources or through vertical transmission, mother-to-child (Abrams, 2007; CDC, 1988).

HIV Transmission and Risk Categories

In 2013, more than 47,000 people were diagnosed with HIV in the United States (CDC, 2015a). Subsequently, more than 26,000 people were diagnosed with AIDS (CDC, 2015a). Since the epidemic began in the 1980s, an estimated more than 658,000 people have succumbed to AIDS related illnesses in the United States (CDC, 2015a). Because HIV has a latency period of about 10 years before it is clinically diagnosable, the precise number of deaths attributable to the infection is unknown.

Presently, homosexual, bisexual or men who have sex with men and women (MSMW) represent more than (60%) of new cases of HIV (CDC, 2015). African Americans constitute only (13-14%) of the U.S. population, but account for nearly half of new HIV cases (CDC, 2015b). The significance of the burden becomes clear when one considers that 1 in 16 African American men and 1 in 32 African American women will be diagnosed with HIV in their lifetime (CDC, 2015b).

HIV Prevention

There are biomedical interventions, such as antiretroviral therapy, pre-exposure prophylactics (PrEP) for gay and MSM, and vaginal microbicides for women to help prevent HIV acquisition (Abdool, 2010; AIDS.gov, 2014; Grant, 2010). Though these preventive strategies are available, African Americans with HIV/AIDS are more likely than other racial groups to postpone seeking medical

care and become hospitalized, with the result that they are more likely to die from a compromised immune system (AIDS.gov, n.d.; CDC, 2015ab; Gebo et al, 2005; KFF, 2014; Parker, 2015). Later stage diagnosis of HIV infection, is the consequence of missed opportunities to seek medical treatment and prevention of HIV transmission. Lack of awareness of HIV status and preventive methods affects sexual networks and communities. Efforts to understand the challenges that inhibit African Americans from seeking testing for HIV and STIs are vital.

Research for more than a decade primarily focused on HIV acquisition among gay men or MSM in preventive interventions during the 1980s to early 90s. Women that were infected were rarely acknowledged during the early epidemic (El-Bassel, Caldiera, Rugless, & Gilbert, 2009). Presently, women comprise nearly one-half of all adults with HIV infection or AIDS worldwide to date. Women are most likely to acquire HIV through heterosexual intercourse followed by injection drug use. More specifically, African American women continue to be one of the fastest growing population subgroups infected with HIV, besides African American MSM. African American men who are the least likely to disclose their sexual orientation or status, consequently increasing the risk for HIV transmission to their partners because of racial and sexual stigmatization rooted in gender (masculinity) and African American culture (Halkitis, 2012; Higgins, Hoffman & Dworkin, 2010; Parker, 2015; Rosenthal & Levy, 2010; Valleroy, MacKellar, Karon, Rosen, McFarland, Shehan, et al, 2000).

Burden of HIV among African American Women

The marginalization of African American women is threefold because of gender, race/ethnicity and social class. Gender power imbalances impact African American women's ability to negotiate safer sex practices and male condom use. Despite sociopolitical advances of minorities, African American women still experience discrimination, structural and economic disadvantages, and live in a society where white privilege is dominant (Pellowski, Kalichman, Matthews & Adler, 2013). By examining the underlying causes of African American women's vulnerability to the HIV/AIDS epidemic, this paper attempts to elucidate the social and contextual underpinnings that may facilitate transmission and acquisition of HIV (DiClemente et al, 2004; McNair & Prather, 2004). The relative contributions of relationship status, HIV knowledge, attitudes toward condoms use, self-efficacy in seeking HIV and STI testing on the level of perceived risk for HIV transmission among African American women are principal to the purpose of this paper (Higgins, Hoffman & Dworkin, 2010; Newsome, Airhihenbuwa & Snipes, 2011; Shisana, Zungu-Dirwayi, Toefy, Simbayi, Malik, & Zuma, 2004).

The magnitude of the burden of HIV acquisition among women is complex, multifaceted, and not well understood (Abdool Karim, Sibeko & Baxter, 2010; Pequegnat, & Stover, 1999). Women of racial and ethnic minorities share a disparate impact of HIV/AIDS. Strikingly, African American women characterize

the bulk of new HIV and AIDS diagnoses among all women (KFF, 2014). African American women accounted for (64%) of new AIDS diagnoses among women, followed by Latinas at (17%) and white women at (15%) in 2010 (CDC, 2014; KFF, 2014; Southern States Manifesto, 2012). More than (80%) of HIV infections among African American women were acquired through heterosexual contact (KFF, 2014). Injection-drug use related to sharing unsterile needles accounted for (11%) among this population (CDC, 2015ab, 2014; KFF, 2014). Contrarily, injection drug use was the main route of transmission among African American women through the mid-1990s. Many studies have conveyed that social inequalities are often facilitators of the disparities in health seen in African American and other minority communities (Marmot, 2005; Coral et. al, 2012; LaVeist & Isaac, 2013, Rosenthal & Levy, 2010).

Social and Contextual Influences of HIV/AIDS Disparity

It is imperative to recognize the challenges encountered by African American women in regards to HIV/AIDS. African American women contend with social and contextual factors in the manner that these social normative pressures, social-control agencies (e.g. racialized policing of drugs and stigmatized sex behaviors), social relationships and available resources (e.g. social and health services) influence their risk and protective behaviors for HIV/AIDS (Friedman, Cooper & Osborne, 2009; McNair & Prather, 2004). McNair and Prather (2004) have provided a precise definition for social and

contextual, which will be the foundation from which this study is drawn. Social factors impact groups similarly, but are external to an individual, for instance cultural beliefs, values and practices (McNair & Prather, 2004). For African American women in this study the social dynamics of interest are sex ratio imbalance, reduced sexual autonomy and attitudes toward condoms among the Black community (McNair & Prather, 2004). Conversely, contextual stimuli are aspects of the environment that influence an individual's perspective, therefore, have importance only for that person (McNair & Prather, 2004). African American women's relationship histories, HIV knowledge, self-efficacy in seeking HIV and STI testing and perceived risk for HIV transmission are contextual elements.

Grasping the social and contextual factors that stimulate higher HIV transmission rates among African Americans, more specifically African American women may help to interpret the shaping of their sexual health practices, that are attitudes toward condoms use, HIV and STI testing and subsequently perceived risk for HIV. Though these social and contextual issues are common among other groups, the interconnectedness of these factors combined with the risk behavior of the African American woman's male sexual partner may place her in a uniquely vulnerable position of risk or some instances serve as a protective barrier for HIV transmission (Friedman, Cooper & Osborne, 2009; Higgins, Hoffman & Dworkin,

2010; Maman, Campbell, Sweat & Gielen, 2000; McNair & Prather, 2004; Wingwood & DiClemente, 2000).

Variables Associated with HIV/AIDS Behavior

Relationship Status

African American women have a higher tendency than other racial/ethnic groups to believe that being in a monogamous or committed relationship is a protective barrier for HIV (McNair & Prather, 2004; Paxton, Williams, Bolden, Guzman & Harawa, 2013; Perkins, Stennis, Spriggs, Kwegyir-Afful & Prather, 2014; Rosenthal & Levy, 2010). African American women are least likely to get married in comparison to other racial/ethnic groups (CDC, 2008; Newsome, Airhihenbuwa & Snipes, 2014). For African American females some research endorses that being married may not be a protective factor for HIV transmission as opposed to African American males (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Shisana, Zungu-Dirwayi, Toefy, Simbayi, Malik & Zuma, 2004). However, married women are underrepresented in HIV/AIDS preventive interventions (Shisana, Zungu-Dirwayi, Toefy, Simbayi, Malik & Zuma, 2004). Research investigators must consider that married women are also at risk of infection because they likely do not use condoms, trusting that their spouses are not engaging in extramarital affairs (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Higgins, Hoffman & Dworkin, 2010; Shisana, Zungu-Dirwayi, Toefy, Simbayi, Malik, & Zuma, 2004; Thompson-Robinson, Richter,

Shegog, Weaver, Trahan, Sellers & Brown, 2005). Additionally, recent research studying the early epidemic of HIV/AIDS in the 1990s, for African American women, marital status had little impact on who was more likely to die of HIV/AIDS (Kposowa, 2013). According to an 11-year study conducted at the height of the epidemic between 1983-1984, unmarried men (i.e. divorced, widowed, or separated) were more than 6 times more likely to die of HIV/AIDS than married men. African American men that never married were more than 13 times more likely to die of the disease than married men (Kposowa, 2013). This study implies that being married is a defense mechanism for African American men, but not women.

Research consistently demonstrates that African American women are just as likely to engage in unprotected sex or have multiple sexual partners as their racial/ethnic counterparts (Adimora, Schoenbach, & Floris-Moore, 2009; CDC, 2008; Friedman, Cooper & Osborne, 2009; Maman, Campbell, Sweat & Gielen, 2000; Tillerson, 2008). Though, African American women are more likely to have sex partners with higher risk of HIV, a trend that may be associated with a plethora of social and structural factors (Davis, 2012; Newsome, Airhihenbuwa & Snipes, 2014; Shisana, Zungu-Dirwayi, Toefy, Simbayi, Malik & Zuma, 2004; Tillerson, 2008; Whyte IV, Whyte & Cormier, 2008). At present, heterosexual contact carries the highest concern for HIV risk for African American women, particularly those who are young and living in the southern U.S. (Adimora,

Schoenbach, & Floris-Moore, 2009; CDC, 2008, 2015; KFF, 2014; Lee & Fleming, 2001; Southern States Manifesto, 2012). Moreover, African American women are positioned for higher rates of HIV acquisition within relationships by African American men who have sex with men and women, but do not identify as gay or bisexual. Not disclosing bisexual dealings with their female partners is referred to as being in the closet or on the “down low” (Millet, Malbranche, Mason & Spikes, 2005). Social and contextual factors as in women’s imbalance of control within relationships, past sexual risk behavior and their relationship history might place them at increased risk for HIV through heterosexual contact (Adimora, Schoenbach, & Floris-Moore, 2009; Davis, 2012; Higgins, Hoffman & Dworkin, 2010; Whyte IV, Whyte & Cormier, 2008).

African Americans represent nearly half, (1 million) of the estimated 2.3 million people that are incarcerated in the U.S. (NAACP, 2015). African Americans are largely incarcerated due to over-sentencing and drug policy (Abiona, Adefuye, Balogun, & Sloan, 2009). Racialized policing leads to high incarceration rates of African American males, in turn, dismantling familial relationships and sexual networks (Abiona, Adefuye, Balogun, & Sloan, 2009; Fullilove, 2012; LaVeist & Isaac, 2013). This disruption decreases the number of available partners for African American women (Adimora, Schoenbach, & Floris-Moore, 2009; CDC, 2015c; Fullilove, Fullilove & Gross, 1990). Additionally, high risk behavior while incarcerated can increase risk for HIV transmission.

These behaviors include unsterile instruments in drug use and tattooing and unprotected sex with consensual same-sex inmates, conjugal visits, rape and relations with staff (Abiona, Adefuye, Balogun, & Sloan, 2009; WHO, 2007). At present, many U.S. prisons do not provide sterile needle exchange programs and free condom distribution (Advert.org, 2014; WHO, 2007). Prior exposure to HIV in confined prison and detention institutions contributes to increased HIV epidemics in the communities where the prisoners return upon release (Jurgens, Nowak & Day, 2011).

Research increasingly argues that African Americans are more likely to have sexually concurrent relationships owing mostly to low marriage rates (Carey, Senn, Seward & Vanable, 2010; CDC, 2008; Grieb, Davey-Rothwell & Latkin, 2012). Sexual concurrency refers to having more than one sexual partner within the same period of time (CDC, 2008; Davis, 2012). Women may feel threatened if they inquire about their partner's faithfulness. Although, women may become aware they may feel inclined to ignore a partner's infidelity due to fear of rejection, violence, withdrawal of social and financial support (Adimora, Schoenbach, & Floris-Moore, 2009; Newsome & Airhihenbuwa, 2013; Rosenthal & Levy, 2010). The more common acceptance of a male partner's infidelity with another female is most likely driven by the imbalance in the male to female sex ratio (Crepaz, Marshall, Aupont, Jacobs, Mizuno, Kay, Hubbard McCree & O'Leary, 2009; Feguson, Quinn, Eng & Sandelowski, 2006). Likewise, married

women or women in relationships, where they are socially and economically dependent, may endure infidelity for the sake of their children's well-being, forgoing their own health and risk for HIV (Adimora, Schoenbach, & Floris-Moore, 2009; Higgins, Hoffman & Dworkin, 2010; Langen, 2005; Tolan, 2005). An expanding body of literature is leaning toward the connection between women's risk of contracting HIV from male partners and physical abuse during childhood or adolescence, rape, and abusive relationships (Dolcini & Catania, 2000; Higgins, Hoffman & Dworkin, 2010; Maman, Campbell, Sweat & Gielen, 2000; Rosenthal & Levy, 2010; Tillerson, 2008).

HIV Knowledge

Knowledge is essential in influencing behavior (Perkins, Stennis, Spriggs, Kwegyir-Afful, & Prather, 2014). Knowledge about the etiology of HIV/AIDS is targeted on distributing information about modes of transmission, prevention methods, and sexual behaviors that heighten risk (Newman, Williams, Massaquoi, Brown & Logie, 2008; Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, & Jones, 2011). It is undeniably necessary to have knowledge, particularly accurate knowledge, in order to make informed health decisions. Many sex education and risk-reduction interventions initiated at the middle, secondary and collegiate education levels have increasingly focused on HIV and STI knowledge, and the promotion of condom use (Adefuye, Abiona, Balogun & Lukobo-Durrell, 2009; avert.org, n.d.; DiClemente & Wingood, 1995; Sutton,

Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, & Jones, 2011). Granting such policies have effectively decreased sexual risk-taking behaviors and unintended pregnancies, overall, conservatives; however, have often opposed programs such as condom education and distribution, and discussion of sexual minorities in favor of abstinence-only education, heterosexual intercourse and limited HIV prevention discussions (Advocatesforyouth.org, 1998; Elia & Eliason, 2010; Kirby & Brown, 1996; Lisko, 1998; Malone & Rodriguez, 2011; Reif, Whetten, Wilson, & Gong, 2012; Sayegh, Rose & Schapiro, 2012).

Studies among African American women and college students demonstrate conflicting evidence that HIV knowledge is critical to reducing HIV risk behaviors (Ferguson, Quinn, Eng, & Sandelowski, 2006; O'Sullivan, Udell, Montrose, Antoniello, Hoffman, 2010; Perkins, Stennis, Spriggs, Kwegyir-Afful & Prather, 2014; Paxton, Villarreal, Hall, 2013; Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, & Jones, 2011; Tillerson, 2008). Some studies conducted at Historical Black Colleges and Universities (HBCUs) would agree that HIV knowledge is more likely associated with assessing potential sexual partner's risk (Sanders-Phillips, 2002; Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, & Jones, 2011). Assessing potential sexual partner risk includes asking about sexual history, past injection drug use, and past sexual activities and personal hygiene (Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, & Jones, 2011; Whyte IV, Whyte & Cormier, 2008). A study among a

sample of self-identified HIV positive (N=52) and negative (N=60) African American women between ages 25-54 demonstrated that there is no statically significant difference between HIV knowledge and status ($t = 95.645$, $df = -1.091$ and $P = 0.278$) (Perkins, Stennis, Spriggs, Kwegyir-Afful & Prather, 2014). This result indicates that the markedly high viral rate among African American women is not solely attributable to knowledge or practice of risky behaviors. Many approaches characteristically concern not only the overall attitude toward the disease that include stigma, myths, condom use, and HIV and STI testing in the African American community; but also embolden tolerance and compassion toward those that have been affected, thus marginalized by HIV (Carey & Schroder, 2002; Crepaz, Marshall, Aupont, Jacobs, Mizuno, Kay, Jones, Hubbard McCree & O'Leary, 2009; Paxton, Villarreal & Hall, 2013; Reif, Geonnotti & Whetten, 2006; Schwarzer, 1992). HIV knowledge (e.g. awareness, routes of transmission and screening education) are increasingly associated with early detection, HIV testing (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012). However, more than generating knowledge and understanding when crafting preventive awareness of the virus is necessary for combating the HIV epidemic (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Gerrard, Gibbons & Bushman, 1996; Paxton, Villarreal & Hall, 2013; Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, Jones, 2011).

Attitudes Toward Condom Use

Although African Americans represent the bulk of HIV/AIDS cases, the literature posits that they are no less sexually responsible than their white counterparts (Friedman, Cooper & Osborne, 2009; Whyte IV, Whyte & Cormier, 2008). Consistent condom use is the most important preventive method for HIV and STIs during a sexual encounter (Charnigo, Crosby, & Troutman, 2010). Safer-sex practices like condom use appear to be centered upon the level of intimacy of the relationship. Essentially, the emotional investment ascribed to longer relationships (i.e. long-term partners, spouses) serves as a barrier for safer practices for African American women, regardless of partner infidelity (Farmer & Meston, 2006; Macaluso, Demand, Artz, & Hook, 2000; Paxton, Villarreal & Hall, 2013). There are studies steadily suggesting that African American females may perceive that they lack condom negotiation skills or the ability to control condom use because they have inadequate power in their relationships (Crepaz, Marshall, Aupont, Jacobs, Mizuno, Kay, Jones, Hubbard McCree & O'Leary, 2009; Lollis, Johnson & Antoni, 1997; Rosenthal & Levy, 2010). Also, African American women often struggle with negotiating condom use with long-term partners; therefore, the male sexual partner's attitude towards condoms often determines whether condoms will be used during sexual encounters (Charnigo, Crosby, & Troutman, 2010; Foreman, 2003; Macaluso, Demand, Artz, & Hook,

2000; Maman, Campbell, Sweat & Gielen, 2000; Pomeroy, 2008; Tillerson, 2008; Whyte IV, Whyte & Cormier, 2008).

Self-Efficacy in Seeking HIV and STI Testing

Confidence in one's ability in carrying out sexual health practices may be fortified by their perceived risk for HIV (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Koch, Colaco & Porter, 2010). An example of self-efficacy is one's confidence and likelihood to get an HIV and STI test, a sexual health practice (Farmer & Meston, 2006). Moreover, recognizing self-efficacy in sexual health care seeking behavior for HIV and STI testing is a documented prerequisite for enabling an individual to disclose status.

Psychosocial properties such as self-efficacy, attitude, knowledge and perceived risk for HIV are related to the likelihood an individual will seek testing for HIV and STI (DiClemente, Crittenden, Rose, Sales, Wingood, Crosby & Salazar, 2008; Swenson, Rizzo, Brown, Payne, DiClemente, Salazar, Venable, Carey, Valois, Romer & Hennessy, 2009). Research infers that among adults in the African American community, increased HIV knowledge is associated with past history of testing (Swenson, Rizzo, Brown, Payne, DiClemente, Salazar, Venable, Carey, Valois, Romer & Hennessy, 2009). Conversely, having a lower perceived risk for HIV and STI is considered a barrier to seeking testing (Payne, Beckwith, Davis, Flanigan Simmons, Crockett, Ratcliff, Brown & Sly, 2006). Characteristically, those who perceive themselves as being at risk for HIV or STI

include those who have previously been tested, aware that STIs are an issue in their neighborhood, and engaged in high risk behaviors-usually a combination of multiple sex partners, alcohol and drug use.

Perceived Risk for HIV Transmission

For the purposes of this study, elements of perceived risk encompass both rudiments of susceptibility and severity of HIV/AIDS (Napper, Fisher & Reynolds, 2012; Rosenstock, Stretcher & Becker, 1994). Perceived risk is considered the most powerful construct to prompt action to adopt health promoting behaviors. The greater one perceives them self as being at risk for HIV, the greater likelihood they would engage in behaviors to decrease risk (Rosenstock, Stretcher & Becker, 1994). Examples of decreasing risk are consistent condom use, limited sexual partners, and getting tested and treated for STIs. Past studies have revealed that African Americans have a propensity to misjudge their individual risks or susceptibility to HIV/AIDS transmission as compared with other ethnicities (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Gilbert & Wright, 2003; Hirsch, Smith, Parikh, Phinney & Wardlow, 2010; Litwak & Messeri, 1989; Newsome & Airhihenbuwa, 2013; Tolan, 2005).

Conspiracy Theories Influencing Perceptions of HIV Risk

Deliberation surrounding the origin of AIDS has sparked substantial attention and controversy since the beginning of the epidemic (Parker, 2015). In attempt to uncover the source of AIDS, there is a considerable hazard that people

may attribute blame for the disease to particular groups of individuals or particular lifestyles. The first known cases of AIDS occurred in the United States in 1981, though HIV is thought to have been present in prior decades (AIDS.gov, n.d.). Some U.S. researchers have argued that the origins of AIDS occurred in monkeys, specifically chimpanzees, before the epidemic was recognized as HIV in the human population in the early 1980s (Horowitz, Strecker, Cantwell, Vid, & Grossman, 1996; Sharp & Hahn, 2011). These researchers conspire that HIV made a successful zoonotic switch from chimpanzees to human hosts. However, this transference of HIV remains an unproven theory.

Another popular, yet widely refuted theory of the origins of HIV is that the U.S. Government manufactured the virus as a weapon of genocide of homosexuals and African Americans in the population (Advocates for Youth.org, 2008). HIV/AIDS was first realized in humans when young white gay men were increasingly dying from opportunistic infections and certain cancers (e.g. Kaposi's sarcoma) primarily in New York and California. The health phenomenon was first referred to as Gay-related Immune Deficiency (GRID). GRID socially stigmatized individuals who identified as homosexual or gay as victim-blaming for the epidemic, essentially considered a slow painful death sentence (AIDS.gov, n.d.). In 1982, the Centers for Disease Control and Prevention (CDC) defined the health phenomenon as AIDS, "a disease at least moderately predictive of a defect in cell-mediated immunity, occurring in a

person with no known case for diminished resistance to that disease” (AIDS.gov, n.d.).

African American Women’s Risk Perceptions

For a reason that HIV/AIDS was seen as a “white gay disease” during the early period of the epidemic, African American women tend to have mistaken beliefs of their risk for HIV and STIs, owing to a low perception of risk (Adefuye, Abiona, Balogun & Lukobo-Durrell, 2009; Charnigo, Crosby, & Troutman, 2010; Feguson, Quinn, Eng, & Sandelowski, 2006; Gerrard, Gibbons & Bushman, 1996; Goparaju & Warren-Jeanpeirre, 2012; Kalichman et al., 1992; Mays & Cochran, 1988; Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, Jones, 2011). Many African Americans presently do not perceive heterosexuals as at risk, especially those who assume they are in a monogamous relationship (Charnigo, Crosby, & Troutman, 2010; Mays & Cochran, 1987; Perkins, Stennis, Spriggs, Kwegyir-Afful & Prather, 2014). Understanding the African American woman’s beliefs of her perceived risk for HIV infection is crucial to recognizing elements of motivation to engaging in sexual health promoting or sexual risk taking behaviors (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Gerrard, Gibbons & Bushman, 1996). Perceived risk is considered as a fundamental predictor of sexual health practices (Lollis, Johnson & Antoni, 1997; Perkins, Stennis, Spriggs, Kwegyir-Afful, & Prather, 2014; Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, Jones, 2011). However, knowledge alone does

not necessarily impact perception, which ultimately informs behavior (Adame et al., 1991; Bazargan et al., 2000; Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Goparaju & Warren-Jeanpeirre, 2012; Hollar & Snizek, 1996; Jarama et al., 2007; Perkins, Stennis, Spriggs, Kwegyir-Afful & Prather, 2014). Research suggests that knowing a partner's concurrency status could be protective since it impacts their perceived level of risk for STIs (Goparaju & Warren-Jeanpierre, 2012; Newsome, 2013; Stewart, 2014). Perceived risk for HIV may be a strong motivating factor for behavioral change, particularly if the individual perceives control over the risk behavior (Sutton, Hardnett, Wright, Wahi, Pathak, Warren-Jeanpierre, Jones, 2011). Studies confer that risk control may include condom negotiation, a monogamous relationship, and economic stability, so that sexual concurrency would not be a preference over being single (Lorvick, 2013; Macaluso, Demand, Artz, & Hook, 2000).

African American women experience several risk factors for HIV infection and transmission that influence their perception for HIV infection. Interventions to reduce the engagement in HIV sexual risk behaviors fall short in addressing the social and contextual factors that influence sexual decision making (Berkley-Patton, Moore, Hawes, Thompson & Bohn, 2012; Perkins, Stennis, Spriggs, Kwegyir-Afful, & Prather, 2014; Pomeroy, 2008). The likelihood of HIV transmission, degree of perceived risk and frequency of perceived risk might influence the occurrence of sexual risk behavior. Importantly, knowledge of

perceived risk is expanding in the body of HIV/AIDS literature (Mays & Cochran, 1987; Perkins, Stennis, Spriggs, Kwegyir-Afful, & Prather, 2014). This study aims to shed light on the nature of social and contextual aspects and perception of risk (Akwara, Madise & Hinde, 2003).

HIV in the South

There are 17 states that comprise of the southern region of the U.S. or the “South” are (1) Alabama; (2) Arkansas; (3) Delaware; (4) District of Columbia (5) Florida; (6) Georgia; (7) Kentucky; (8) Louisiana; (9) Maryland; (10) Mississippi; (11) North Carolina; (12) Oklahoma; (13) South Carolina; (14) Tennessee; (15) Texas; (16) Virginia and (17) West Virginia. The South represents slightly more than one-third of the U.S. population and nearly half of new HIV Infections in the U.S. The Southern region accounts for more than (40%) of people living with HIV/AIDS of which (55%) are African American. In 2010, the southern region of the United States had the highest incidence of AIDS diagnoses among women (4,100) than all the other regions combined (Midwest at 853, North at 2,221, and West at 748 (Southern States Manifesto, 2012).

HIV/AIDS and Socioeconomic Status

The South has the most people living with HIV/AIDS, widespread poverty, the highest rates of some sexually transmitted infections (STIs), the largest uninsured population, limited access to equitable health care, lack of

knowledge and awareness of HIV and status, and the fastest growing epidemic in the country (Avert.org, 2014; Tillerson, 2008).

The characteristics of African American women most at risk are of lower socioeconomic status (SES) living in urban neighborhoods in metropolitan cities across the south (Avert.org; 2014; Southern States Manifesto, 2012). Lower SES negatively affects women's access to fundamental basic necessities, including health care, adequate housing, equitable employment opportunities, and social support (Pomeroy, 2008; Tillerson, 2008). Impoverished communities that lack sufficient employment and educational opportunities, access to medical providers and health services, and overall social dissolution are associated with higher sexual risk behaviors. The consensus emerging from the field of public health is evident. Given the intersection of social and contextual factors that may facilitate the epidemic, HIV/AIDS prevention efforts must include a response that improves the status and economic conditions for African American women (Pomeroy, 2008; Tillerson, 2008).

Intimate Partner Violence and HIV Vulnerability

In addition to poverty, intimate partner violence is a systemic problem that is an established risk factor for HIV infection among women. The complex interaction of poverty and violence creates immense obstacles to stability, good health, and upward life trajectory. Intimate partner violence can lead to increased risk of HIV infection, especially in unwanted and unprotected sexual

encounters. First, women who are in violent or coercive relationships are less likely to be able to negotiate safe sex practices or encourage a sexual partner to be tested for HIV (Pomeroy, 2008; Shisana, Zungu-Dirwayi, Toefy, Simbayi, Malik, & Zuma, 2004; Tillerson, 2008). Secondly, some abusive men may refuse to wear condoms at all, while women who are victims may fear the violence will increase if they ask their partner to use a condom.

The dynamics that interact to increase HIV risk for low-income women are complex, but clearly driven by systemic factors, which may be explained by the combination of cultural beliefs and perceptions, sexual practices, politics and pervasive residential segregation in African American communities (Biello, Nicolai, Kershaw, Lin & Ickovics, 2013; Bogart, Landrine, Galvan, Wagner & Klein, 2013; Buot, Docena, Ratemo, Bittner, Burlew, Nuritdinov, *et al*, 2014; Ward, 2005). These interacting elements may perpetuate and facilitate continued racial disparities in HIV transmission and other health inequalities among African Americans (Ford, Daniel, Earp, Kaufman, Golin & Miller, 2009; Pomeroy, 2008; Tillerson, 2008). As a result, HIV prevention for women at risk must take into account the social, economic, and legal forces (e.g. disproportionate incarceration of African American males) that shape the lives of African American women in the South (Duncan, Miller & Borskey, 2002; Fullilove, 2012; Mays & Cochran, 1987; Newman, Williams, Brown & Logie, 2008).

HIV in Other Regions

In 2009, the South accounted for more than a third (40%) of the estimated 476,732 persons living with AIDS in the U.S. and the District of Columbia, followed by the Northeast (29%), the West (20%), and the Midwest (11%) (CDC, 2015b). According to the CDC, the Northeast region of the U.S. reported the highest rate of new AIDS cases (14.2/100,000), closely followed by the South (13.0/100,000), the West (8.8/100,000), and the Midwest (6.3/100,000) in 2010 (CDC, 2015b). High rates in the Northeast region are expected primarily due to high HIV prevalence rates. Two states accounting for the bulk of the Northeast epidemic are New York and New Jersey, where the origins of the HIV/AIDS epidemic were first acknowledged in the U.S. (Reif, Whetten, Wilson & Gong, 2012). African Americans diagnosed with AIDS were overrepresented in nearly all regions in 2010. African Americans represented in the South (62%), Midwest (51%), Northeast (48%), and West (19%) of new AIDS cases (CDC, 2015b).

Political Climate

While HIV/AIDS is clearly a public health concern that requires a contemporary public health response, it is also a problem driven by structural and systemic forces and thus by political clout (Gilbert & Wright, 2003; Newman, Williams, Brown & Logie, 2008; Quinn, 1993; Scott, 2009). HIV/AIDS is a malady that has its most devastating impact on and creates the highest risk to the least politically and economically powerful groups in the U.S. HIV is a virus

perpetuated by dire circumstances- poverty and inequality and consequently mandates systemic responses that demand state action and locally tailored intercession (Friedman, Cooper & Osborne, 2009; Pomeroy, 2008).

The HIV epidemic is far-reaching and has well-defined political dimensions in that the greatest impact of the virus is felt among segments of the population who have the least and most diffuse political influence. The disagreement on the appropriate policy provisions for sexual health education in primary and secondary education impacts the nature and extent of health information, material and access to services (e.g., emergency contraceptives, HIV and STI testing, condoms) available to youth and adolescence entering adulthood (Beatty, Wheeler & Gaiter, 2004; CDC, 2005; DiClemente, Wingood, Rose et al., 2009; Macintyre, Rutenberg, Brown & Karim, 2004). African American women at risk for HIV represent one of the most disparaged sectors of society in terms of economic fortitude, political power, social class/status, and access to the legal system (Adimora, Schoenbach, & Floris-Moore, 2009; Fullilove, 2012; Higgins, Hoffman & Dworkin, 2010; McNair & Prather, 2004).

By expanding the frame of HIV/AIDS to also discuss the structural factors that contribute to the high rates among African Americans, we can shift the stigma away from individuals and extend the burden of responsibility for addressing the crisis to the systems and communities themselves (Higgins,

Hoffman & Dworkin, 2010; Parker, 2015; Pomeroy, 2008; Rosenthal & Levy, 2010).

Theoretical Foundations

Health Belief Model

The Health Belief Model (HBM), widely used in HIV/AIDS research, was developed to understand how an individual's health behavior is informed by personal beliefs or perceptions about a disease and available strategies that can mitigate the occurrence of illness (Rosenstock, Stretcher & Becker, 1994). HBM is instrumental in understanding the knowledge African American women have about HIV and attitudes towards condom use based on perceived risk for illness (a component of the HBM), in this case HIV (Lollis, Johnson & Antoni, 1997; Winfield & Whaley, 2002). Furthermore, this model sought to capture the assessment of cues to action (a component of the HBM), such that self-efficacy or a higher confidence level precedes seeking an HIV and STI test.

Cultural Ecology

The Cultural Ecology theory was birthed in the 1950s by Julian Steward to attempt to explain the interaction of people and their environments. Steward (1955) posited that cultural beliefs and practices help human beings adapt to their environments and live within the means of their ecosystem (Zimmerman, 2010). Cultural ecology devotes contextual forces to justify cultural change (Steward, 1990; Zimmerman, 2010). Further acknowledging styles in which various

societies adjust differently not owing to aptitude, but as a consequence of climate (Zimmerman, 2010). Recognizing the political history and historical trauma and oppression (e.g. slavery, Tuskegee Syphilis study, HIV conspiracy beliefs) that is often related through generations of African Americans living in the South may illuminate the etiology of the disparate burden of HIV in this region (Wyatt, 2009). African American women's knowledge of HIV in this region may influence their attitudes towards effectiveness of condoms as a preventive method and perceived risk for HIV. Rather than cultural representations intended to be generalized to all African American women, this framework serves to examine how the various facets of African American women's lives in this geographic region interact to additively impact their risk for HIV transmission.

When developing HIV prevention interventions, it is important to ensure that the programs resonate with the target audience (El-Bassel, Caldeira, Ruglass & Gilbert, 2009; Williams, Wyatt & Wingood, 2010). The southern U.S. has the most fatal cases of HIV (Reif, Whetten, Wilson, & Gong, 2012). This theory will be applied and expanded to address the comprehensive, interactional social and contextual risk determinants, which influence the HIV epidemic and delayed diagnosis of AIDS among African American women living in the Southern U.S.

Cultural beliefs and environment have distinct roles in influencing sexual behavior (Scott, 2010). Culture can provide both protection from HIV risks and act as a barrier to sexual health promoting behaviors. The belief and practice of

engaging in sexual intercourse only within the context of marriage has the advantage of limiting exposure to HIV through limited sexual partnerships and monogamy. The drawbacks of cultural influences include female condom negotiation, condom possession and taboo discussions of some aspects of women's sexuality and reproductive health (e.g., seeking HIV and STI testing) (American Psychological Association [APA], 2015). HIV/AIDS continues to be heavily stigmatized in the African American community, which can inhibit African American women from seeking testing because of fear of discrimination by family members and others in their social networks (APA, 2015; El-Bassel, Caldeira, Ruglass & Gilbert, 2009). Stigma exacerbates poor health outcomes, restrict education and economic opportunity for individuals concealing an HIV/AIDS diagnoses, and inhibit an individual's desire and confidence to seek testing and adhere to treatment.

Moreover, homosexuality continues to be greatly denounced among African Americans, which may lead women to be unaware of their partner's prior sexual behavior or sexual concurrency with other men (CDC, 2015b; Davis, 2012; Tolan, 2005; Wyatt, Williams & Myers, 2008). Realizing the aforementioned statement may perpetuate stigma on an already marginalized group, HIV/AIDS messages should desensitize such blame that may foster tension between African American males and possibly inhibit disclosure of status and/or sexual partner preference (Indiana University School of Medicine, 2010; Whyte IV, Whyte &

Cormier, 2008). A recent study conducted focus groups that examined 2705 African American women's knowledge, attitudes, beliefs and behaviors of men on the down-low between ages 18-29 attending seven Historical Black Colleges and Universities (HBCUs) (Goparju & Warren-Jeanpierre, 2012). Nearly 295, or (11%), of the women participating in the study expressed having had sexual intercourse with a bisexual man within the last year. An additional (23%) of the participants concurred that black men living on the down-low on campus are the largest contributing facilitator to the spread of HIV (Goparju & Warren-Jeanpierre, 2012). The "down-low" is a term that initiated in the 1990s in the African American community. Being on the down-low refers to an African American male, who has sex with men and women (MSMW), who does not disclose his behavior to female sexual partners (Goparju & Warren-Jeanpierre, 2012).

In spite of the increased awareness that has acknowledged the burden of HIV/AIDS in black communities and particularly African American men who engage in sex with both men and women, many African American women continue to have unprotected sex with men that may be considered risky for reasons akin to those conveyed in former studies (Adimora, Schoenbach, & Floris-Moore, 2009; Cornelius, Okundaye, & Manning, 2000; Sanders-Phillips, 2002). These reasons include having multiple casual sex partners, sex under the influence of substances or alcohol, and having male sex partners that are MSMW

while on the “down-low” which increases the African American woman’s risk for contracting HIV/AIDS. Additionally, the “down-low” lifestyle refers to an African American male who presents himself as heterosexual while in secret he has sexual intercourse with other men. Quite often, African American males will overcompensate by having high-risk sex with multiple women, in order to keep their masculinity or sexuality from being questioned by the community (Goparju & Warren-Jeanpierre, 2012; Pequegnat & Stover, 1999; Reid, Dovidio, Ballester & Johnson, 2014; Valleroy, MacKellar, Karon, Rosen, McFarland, Shehan et al., 2000). An additional study conducted in-depth interviews with 11 African American women ages 47-69, the participants revealed that they were more willing to acknowledge their male partner unfaithfulness with a female, but reported feeling more distressed when the infidelity was with a male (Whyte, Whyte & Cormier, 2008). These studies imply that there are a multitude of socio-cultural and community perceptions of HIV risk that are contributing to HIV/AIDS disparities among African Americans (Adimora, Schoenbach, & Floris-Moore, 2009; APA, 2015; Cornelius, Okundaye, & Manning, 2000; Reid, Dovidio, Ballester & Johnson, 2014; Wyatt, Williams & Myers, 2008). Augmenting the public’s awareness about the socio-political, and economic conditions that exacerbate HIV/AIDS may combat racial stereotypes that presume African Americans suffer from higher HIV/AIDS prevalence because of their irresponsible sexual practices and lack of tolerance or acknowledgement of

homosexuality (Pomeroy, 2008; Whyte IV, Whyte & Cormier, 2008). The depth and breadth of the literature insinuates that the perpetuation of the HIV epidemic among African American women is not guided exclusively by individual behaviors, but is subjective to an array of contextual factors, deeply rooted in cultural, historical, and political structures in the south.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the influence of four social and contextual risk factors on perceived risk for HIV transmission among African American women living in the South. The present chapter outlines the data collection instruments, participants, and procedures for the study. A substantial part of the chapter is devoted to an overview of the scales undergirding the variables of interest on the survey.

Population and Sample

The original study examined attitudes towards biomedical HIV prevention strategies and perceived risk for HIV transmission among Black women that reside in the southern region of the United States. The original study was a timely evaluation that coincided with the approval by the Food and Drug Administration (FDA) of a biomedical prevention drug, Truveda®, that is a prophylaxis designed to help prevent contracting HIV. The purpose of the original of study was to collect data that: 1) assessed knowledge about HIV/AIDS; 2) beliefs about biomedical prevention models for HIV; and 3) perceived risk for HIV transmission. A list of adult subjects (N=105) completed the original online survey between January 2015-June 2015. Eligibility included that potential participants 1) self-identified as Black or African American, 2) woman (female),

3) were between 18-65 years of age, and 4) currently lived in one of the 17 states that comprise the southern region of the United States or the “South” that are (1) Alabama; (2) Arkansas; (3) Delaware; (4) District of Columbia (5) Florida; (6) Georgia; (7) Kentucky; (8) Louisiana; (9) Maryland; (10) Mississippi; (11) North Carolina; (12) Oklahoma; (13) South Carolina; (14) Tennessee; (15) Texas; (16) Virginia and (17) West Virginia. There were 7 potential participants that did not meet the exclusion criteria (i.e. did not self-identify as Black or African American, not female, did not fit the age range or did not live in the South), consequently, reducing the sample size for this study to (N=98).

The methodology in this study assumed that the participants received a waiver of informed consent that addressed the original purpose of the study, as well as their rights. This study assumed that every possible effort was taken to maintain the study participants’ confidentiality. Only de-identified data was provided for the purposes of the conduct of this study.

Protection of Human Participants

The Institutional Review Board at the Texas Woman’s University, Denton, Texas Campus expedited the review of the protocol for secondary data analysis on July 7, 2015 (Appendix A).

Data Collection Procedures

The original study titled, “Attitudes Towards Biomedical Prevention Strategies and Perceptions of Risk Factors Associated with HIV”, was conducted by Dr. Kimberly Parker (2015), Principal Investigator, at the Texas Woman’s University. The initial study used snowball sampling to recruit participants through electronic distribution of the survey from January 2015 through June 2015. Dr. Parker (2015) examined 1) demographics, 2) knowledge about HIV/AIDS, 3) condom use, self-efficacy in following sexual health practices, 4) biomedical prevention strategies, 5) and perceived risk for HIV transmission. Five data variables were abstracted from the original study that are demographics, HIV knowledge, attitudes towards condoms use, self-efficacy in seeking HIV and STI testing and perceived risk for HIV transmission for the intent of this research. Thereafter, no further data was gathered for secondary analysis.

Instrumentation

In an attempt to accurately portray the participant population, demographic information was obtained by 6 survey items: age, current state, relationship status and socioeconomic position (i.e. highest level of completed education, annual income and source of healthcare). No other personal information of the participants was provided.

HIV Knowledge Questionnaire

Participant HIV knowledge is captured using 18 items from the HIV Knowledge Questionnaire developed by Carey and Schroeder (2002) to assess knowledge about HIV or the virus that causes AIDS and routes of viral transmission using discrete “True, False or Don’t Know” statements.

UCLA Multidimensional Condom Attitudes Scale

Five items were retrieved from the UCLA Multidimensional Condom Attitudes Scale (Helweg-Larsen & Collins, 1994) to portray participants’ attitudes toward the effectiveness of condoms, as a reliable protection and preventive method of contraception, HIV and STIs. Response options were rated using a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

Sexual Health Practices Self-Efficacy Scale

An individual’s past HIV testing behavior and confidence to seek HIV and STI testing consisted of 2 items retrieved from the Sexual Health Practices Self-Efficacy Scale (SHPSSES) and 1 item, “Have you received an HIV test in the past 6 months?” (Koch, Colaco & Porter, 2009). Self-Efficacy is inherent to produce action and behavior (Bandura, 1986). Self-Efficacy is an individual’s confidence in carrying out certain tasks effectively based on their knowledge, skills and available resources. In this case, an individual’s self-efficacy in seeking HIV and STI testing is relevant. The degree of confidence is rated on a 5-point scale from 1 (*not at all confident*) to 5 (*extremely confident*) in seeking testing.

Perceived Risk of HIV Scale

Perceived risk for HIV transmission is depicted by 3 items adapted from the Perceived Risk of HIV Scale designed by Napper, Fisher and Reynolds (2012). Respondents indicated their level of agreeableness using a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Perception of risk is represented by an individual's risk compared to community, close others (i.e. friends, peers) and gender (i.e. other Black women).

Data Analysis

The Statistical Package for the Social Sciences (SPSS) (version 22.0) for Windows was used for all statistical analyses. SPSS was used to conduct frequency analyses and reliability analyses. The data obtained from the original study conducted by Dr. Kimberly Parker (2015) were used to create variables that were then revised to test the hypotheses in relation to the research questions.

This study strived to answer one central question: Does relationship status, HIV knowledge, attitudes toward condom use, and self-efficacy in seeking HIV and STI testing influence perceived risk for HIV transmission among African American women living in the south?

The association between relationship status, an IV, and perceived risk for HIV, a DV, is measured by 1 item on the survey. The IV is a multi-level

categorical response and DV is ordinal, which was sufficient for running the Independent-Samples Kruskal-Wallis test.

Knowledge about HIV or the virus that causes AIDS was assessed by 18 survey items, “True, False, or Don’t Know” response categories. HIV Knowledge is a continuous independent variable and perceived risk is an ordinal dependent variable. A Spearman Rank correlation analyzed the association between HIV knowledge and perceived risk for HIV infection. HIV Knowledge was computed as a composite score. The decision to use a composite score for knowledge was important to the study rather than individual item response accuracy.

Attitudes toward condom use are independent variables that are comprised of 5 survey items on how an individual feels about condoms. These attitude items are on a 7-point Likert scale of agreeableness, with 1 representing (*Strongly disagree*) to 7 representing (*Strongly agree*). The association between attitudes towards condoms and perceived risk for HIV transmission (DV) were computed using Spearman Rank Order correlation as both the IV and DV are ordinal variables.

The survey item, “Have you received an HIV test in the past 6 months?” is an independent dichotomous variable with “Yes, No or Don’t Know” response categories. The Independent-Sample Kruskal-Wallis Test was suitable for determining the relationship between past HIV test and perceived risk. Two self-efficacy items assessed confidence on a 5-point scale, with 1 representing (*Not at*

all) and 5 representing (*Extremely confident*) in getting an HIV and STI test. The two self-efficacy items are separate IVs. A Spearman Rank Order correlation was used to gauge the association between self-efficacy in seeking HIV and STI testing and perceived risk (DV).

Perceived risk for HIV transmission served as the dependent variable for all four hypotheses. The DV was measured using three survey items to determine perception of risk an individual would have in comparison to 1) community, 2) close ones (i.e. friends, peers), and 3) other Black women. Perceived risk was coded using a 6-point scale, with 1 representing (*Strongly disagree*) to 6 representing (*Strongly agree*).

Summary

Through secondary data analysis this study sought to examine the relationship among four social and contextual dynamics on perceived risk for HIV transmission that may be perpetuating a disproportionate, elevated burden of new cases of HIV transmission among African American women living in the South. In summary, the underlying hypotheses are that the interconnectedness of the social and contextual (dis)advantages of interest impact the degree of perceived risk of HIV transmission among this population.

CHAPTER IV

RESULTS

The study reviewed demographic and socioeconomic variables to illuminate the background of the sample population. Primarily, this study pursued to assess four social and contextual (dis)advantages: 1) relationship status, 2) HIV knowledge, 3) attitudes towards condoms use, and 4) self-efficacy in seeking HIV and STI testing that may influence perceived risk for HIV transmission among African American women living in the southern region of the U.S. The chapter concludes with the results from statistical analyses used to answer the research question.

Demographics

Survey results from (n=105) subjects were retrieved for secondary data analysis. The inclusion criteria were that 1) participants self-identified as a Black or African American woman, 2) between the ages of 18-65, 3) and currently living in one of the 17 states that comprise the south (*Table 1*). Data from seven of the intended survey participants were excluded as they did not meet the gender, race/ethnicity, or state requirement. Participants from Texas were overrepresented encompassing (79.6%) of the study population. For analysis, age data was collapsed into six categories: 18-25, 26-33, 34-41, 42-49, 50-57, and 58-65. The

most frequent age range was 18-25 years, representing (62.24%) of the participants.

A majority of the participants had obtained a high school education or GED, (45.9%) and reported an annual household income of less than \$20,000 (39.8%) (*Table 2*). The most common source of healthcare (61%) was through a healthcare provider office.

Table 1

Demographic Variables

	n	%
State		
Georgia	7	7.1
Kentucky	1	1.0
Louisiana	6	6.1
Maryland	1	1.0
Oklahoma	1	1.0
Tennessee	1	1.0
Texas	78	79.6
Virginia	1	1.0
None of the Above	2	2.0
Age		
18-25 years	61	62.24
26-33 years	13	13.26
34-41 years	11	11.22
42-49 years	8	8.16
50-57 years	3	3.06
58-65 years	2	2.04

Table 2

Socioeconomic Variables

	n	%
Income (USD)		
< 20k	39	39.8
20-40k	19	19.4
40-60k	12	12.2
60-80k	8	8.2
80-100k	8	8.2
> 100k	9	9.2
Missing System	3	3.1
Education		
High school graduate/ GED	45	45.9
Technical/ Vocational or Associates	21	21.4
Bachelor degree	16	16.3
Master's degree	11	11.2
Doctorate/Medical/Professional degree	2	2.0
Missing System	3	3.1
Healthcare Provider		
Healthcare provider office	61	62.2
Community clinic or health center	22	22.4
Hospital	8	8.2
Other (please specify)*	4	4.1
Missing System	3	3.1

Note:* Participants that reported "other" were not insured

Descriptive Statistics

Participants were asked to identify current relationship status. A majority of African American women indicated that their relationship status was in a relationship/dating (40.8%) followed by single/never married (36.7%) (Table 3).

Among 95 out of 98 participants, 41.8% (n=41) of the sample had received an HIV test in the last 6 months. Three subjects (3.1%) did not know whether they had received an HIV test during this time frame. Data was not available for an additional 3 subjects for this question. The distribution of HIV test history is shown below (Table 4).

Table 3

What is Your Relationship Status?

	n	%
Status		
Single/Never Married	36	36.7
Married/ Domestic Partner	16	16.3
Divorced/ Separated	3	3.1
In a Relationship/Dating	40	40.8
Missing System	3	3.1

Table 4

Have You Received an HIV Test in the Past 6 Months?

	n	%
Tested		
Yes	41	41.8
No	51	52.0
I don't know	3	3.1
Missing System	3	3.1

Sample Statistics

Descriptive statistics using frequencies and percentages provided an in depth overview of the sociodemographic make-up of this sample of African American women residing in the south. The preceding results strived to explain the characteristics of the target population for generalization purposes. These subsequent sample statistics facilitated to determine the relationship of the variables of the null hypotheses to the central research question.

Hypotheses Testing

The hypotheses pursued to address four elements of the research question: Do relationship status, HIV knowledge, attitudes toward condom use, self-efficacy in seeking HIV and STI testing influence perceived risk of HIV transmission among African American women living in the south?

H₁: Relationship Status and Perceived Risk

The first hypothesis declared that there is no association between relationship status and perceived risk for HIV transmission among African American women was tested using an Independent-Samples Kruskal-Wallis test. Distributions for relationship status (1=single/never married; 2=married/domestic partner; 3=divorced/separated; 4=widowed; 5=other; 6=in a relationship/dating) were not similar for all categories of perceptions of risk (1=Strongly disagree, 2=Disagree, 3=Slightly disagree, 4=Slightly agree, 5=Agree, 6=Strongly agree), as assessed by visual inspection of a boxplot (*Figures 1,2,3*). The relationship status and my risk for getting infected with HIV is lower than

other Black women were statistically significantly, $H(3)=8.523$, $p=.036$. The results also indicated statistical significance for relationship status and my risk for getting infected with HIV is lower than those that are close to me, $H(3)=7.821$, $p=.050$. Yet, relationship status and my risk for getting infected with HIV is lower than those in my community retained the null hypothesis ($p=0.77$), there is no association between relationship status and perceived risk for HIV transmission (*Table 5*).

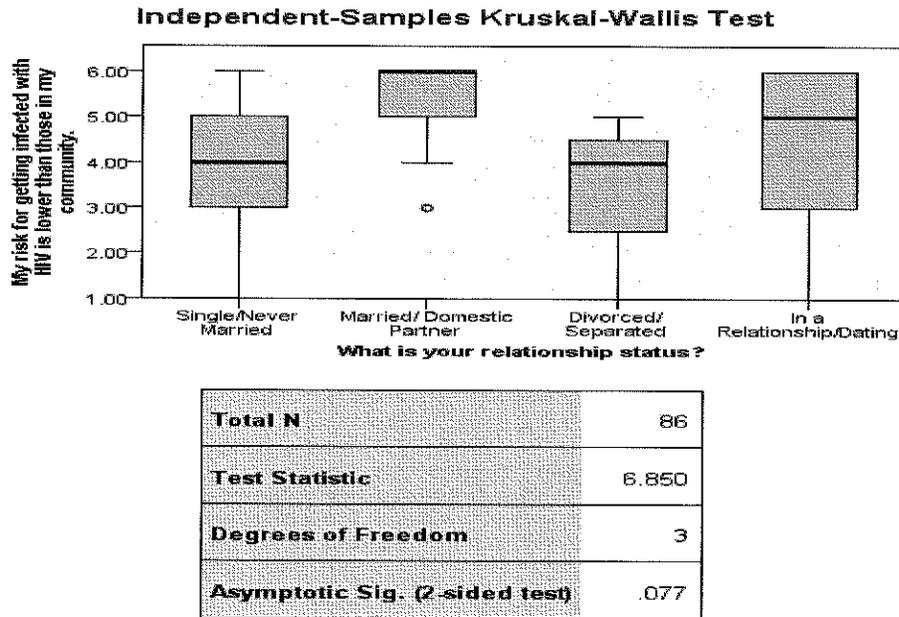
The Independent-Samples Kruskal-Wallis Test determined that the variable relationship status and my risk for HIV transmission is lower than those close to me (i.e. friends, peers) ($p=.050$) and lower than other Black women ($p=.036$). African American women that classified themselves as single/never married, married/domestic partner, and in a relationship/dating slightly agreed or agreed that their risk for HIV transmission is lower than those in their social network (i.e., friends, peers) and other Black women. Women that reported their status as married/domestic partner ($n=16$) were more likely to 4=*Slightly agree* to 6=*Strongly agree* that they were at lower risk for getting HIV across all degrees of perceived risk. Accordingly, these results rejected the null hypothesis that there is no association between relationship status and perceived risk for HIV transmission.

Table 5

Independent-Samples Kruskal-Wallis Test: Relationship Status and Perceived Risk

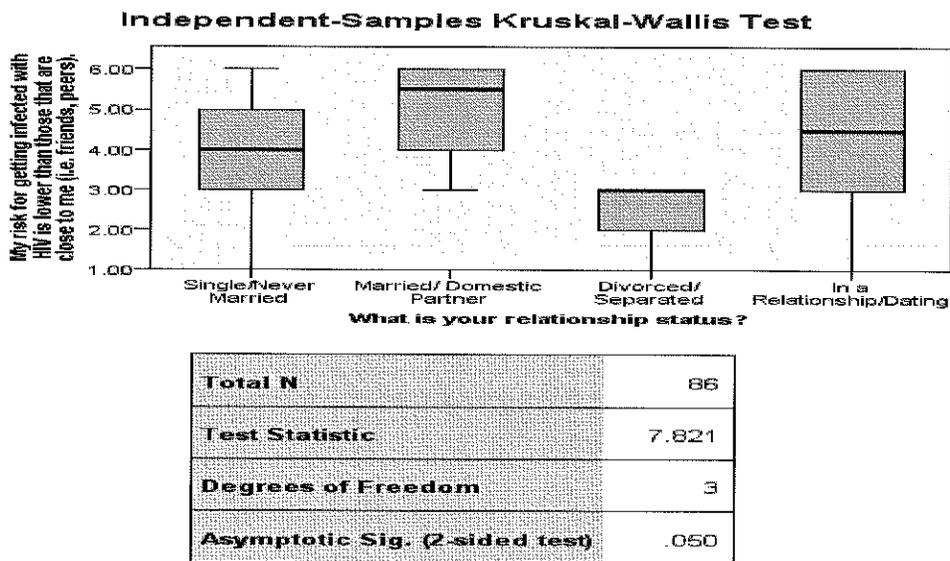
	My risk for getting infected with HIV is lower than those in my community.	My risk for getting infected with HIV is lower than those that are close to me (i.e. friends, peers).	My risk for getting infected with HIV is lower than other Black women.
Relationship Status			
Sig.	.077	.050	.036
Decision	Retain the null hypothesis	Reject the null hypothesis	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05.



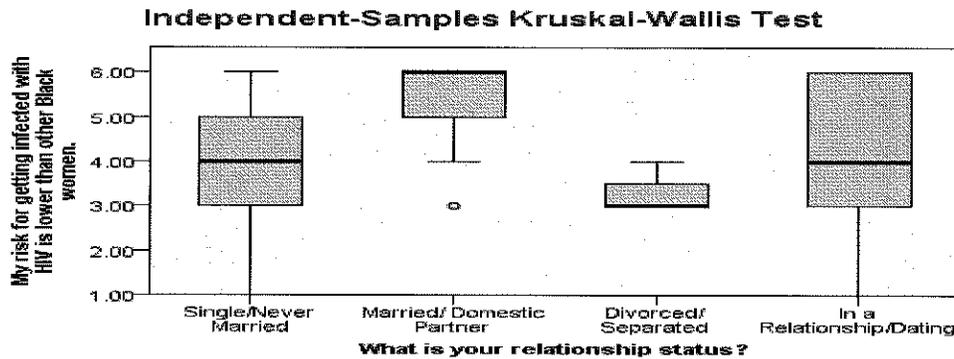
1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

Figure 1. Distribution of relationship status and perceived risk vs. those in my community



1. The test statistic is adjusted for ties.

Figure 2. Distribution of relationship status and perceived risk vs. those close to me



Total N	86
Test Statistic	8.523
Degrees of Freedom	3
Asymptotic Sig. (2-sided test)	.036

1. The test statistic is adjusted for ties.

Figure 3. Distribution of relationship status and perceived risk vs. other black women

H₂: HIV Knowledge and Perceived Risk

The second null hypothesis stated that there is no association between knowledge about HIV and perceived risk for HIV transmission among African American women was tested using Spearman Rank Order analysis. HIV knowledge questions asked about the characteristics of HIV/AIDS transmission which participants responded “True, False or Don’t know”. The items were coded as ‘1’ for correct or given a ‘0’ for wrong or ‘don’t know’ responses. The HIV knowledge responses were computed as a composite score with 18 being the maximum. For (n=98) respondents frequency statistics were run to determine the mean knowledge score was ($\mu=13.04$, $SD=5.18$) (*Table 6*). The decision to compute a composite knowledge score was essential opposed to correctness of

individual knowledge about HIV/AIDS survey items. A Spearman Rank Order correlation was run to evaluate the relationship between HIV knowledge and the dependent, ordinal variable, perceived risk for HIV transmission is lower than those in my community ($p=.796$), close ones (e.g. friends, peers) ($p=.486$), and other Black women ($p=.991$) (Table 7). There was a very weak positive correlation between HIV knowledge for my risk of getting infected with HIV is lower than those in my community ($r_s=.028$) and lower than those close to me ($r_s=.076$). The results specified a weak negative correlation between HIV knowledge and my risk for getting infected with HIV is lower than other Black women ($r_s=-.001$). There was not a statistically significant relationship between HIV knowledge and perceived risk; therefore the null hypothesis must be retained.

Table 6

<i>Average HIV Knowledge Score</i>	
N	98
Mean	13.04
Std. Deviation	5.187

Table 7

Spearman RhO Correlation: HIV Knowledge and Perceived Risk for HIV Transmission

		Correlations		
		My risk for getting infected with HIV is lower than those in my community.	My risk for getting infected with HIV is lower than those that are close to me (i.e. friends, peers).	My risk for getting infected with HIV is lower than other Black women.
Spearman's rho	Correlation Coefficient	.076	.028	-.001
	Sig. (2-tailed)	.486	.796	.991
	N	86	86	86

H₃: Attitudes Towards Condom Use and Perceived Risk

The third hypothesis affirmed that there is no association between attitudes towards the effectiveness of condoms and perceived risk for HIV transmission among African American women. A Spearman Rank Order correlation assessed the association between 5 items that comprised attitudes towards condoms and three dependent ordinal variables that encompassed perceived risk. The relationship amongst condoms are an effective method of HIV prevention, I think condoms are an excellent means of contraception, condoms do not offer reliable protection, condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases, and condoms are unreliable and perceived risk is lower than those in my community, lower than those

that are close to me (i.e. friends, peers), and is lower than other Black women is shown in (Table 8).

Further, results revealed a weak negative relationship between condoms are unreliable ($r_s (79) = -.054, p=.639$) and condoms are an effective method of HIV prevention ($r_s (79) = -.108, p=.345$) and my risk for getting infected with HIV is lower than those in my community. There was a weak positive relationship between condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases ($r_s (81)=.032, p=.776$), I think condoms are an excellent means of contraception ($r_s (80)=.005, p=.964$), and condoms do not offer reliable protection ($r_s (79)=.064, p=.577$) and my risk for getting infected with HIV is lower than those in my community.

The Spearman correlation determined that there is a weak negative relationship between condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases ($r_s (81)= -.091, p=.420$), condoms are unreliable ($r_s (79)= -.060, p=.597$), and condoms are an effective method of HIV prevention

($r_s (79) = -.199, p=.079$) and my risk for getting infected with HIV is lower than those close to me. There was a weak positive correlation identified between I think condoms are an excellent means of contraception ($r_s (80) =.037, p=.744$) and condoms do not offer reliable protection ($r_s (79) =.041, p=.721$) and my risk for getting infected with HIV is lower than those close to me. The test discovered that there is a weak negative relationship between condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases ($r_s (81)=-.037, p=.743$), condoms are unreliable

($r_s (79) = -.072, p = .529$), condoms do not offer reliable protection ($r_s (79) = -.036, p = .751$) and condoms are an effective method of HIV prevention ($r_s (79) = -.153, p = .177$) and my risk for getting infected with HIV is lower than other Black women. I think condoms are an excellent means of contraception ($r_s (80) = .063, p = .576$) and my risk for getting infected with HIV is lower than other Black women demonstrated a weak positive relationship.

A Spearman Rank Order correlation was executed to ascertain the relationship between condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases, condoms are unreliable, I think condoms are an excellent means of contraception, condoms do not offer reliable protection, condoms are an effective method of HIV prevention and perceived risk for HIV transmission. Based on the results of the study, there was no statistically significant relationship found between attitudes towards condom use and perceived risk for HIV transmission, therefore, the null hypothesis is retained.

Table 8

Spearman RhO: Attitudes Towards Condom Use and Perceived Risk for HIV Transmission

Correlations

			My risk for getting infected with HIV is lower than those in my community.	My risk for getting infected with HIV is lower than those that are close to me (i.e. friends, peers).	My risk for getting infected with HIV is lower than other Black women.
Spearman's rho	Condoms are an effective method of preventing the spread of AIDS and other sexual transmitted diseases.	Correlation Coefficient	.032	-.091	-.037
		Sig. (2-tailed)	.776	.420	.743
		N	81	81	81
	Condoms are unreliable.	Correlation Coefficient	.054	-.060	-.072
		Sig. (2-tailed)	.639	.597	.529
		N	79	79	79
I think condoms are an excellent means of contraception.	Correlation Coefficient	.005	.037	.063	
	Sig. (2-tailed)	.964	.744	.576	
	N	80	80	80	
Condoms do not offer reliable protection.	Correlation Coefficient	.064	.041	-.036	
	Sig. (2-tailed)	.577	.721	.751	
	N	79	79	79	
Condoms are an effective method of HIV prevention.	Correlation Coefficient	-.108	-.199	-.153	
	Sig. (2-tailed)	.345	.079	.177	
	N	79	79	79	

H₄: Self-Efficacy in Seeking HIV and STI Testing and Perceived Risk

The fourth hypothesis stated that there is no association between self-efficacy in seeking HIV and STI testing and perceived risk for HIV transmission among African American women was computed using Spearman Rank Order correlation. HIV and STI testing are two separate independent variables. Self-efficacy in seeking an HIV and STI test was complimented by an item assessing past HIV testing behavior.

The results indicated that there was a weak positive correlation between getting an HIV test and my risk for getting infected with HIV is lower than those in my community ($r_s(86)=.191, p=.077$), close to me ($r_s(86)=.243, p=.024$), and other Black women ($r_s(86)=.205, p=.059$). One outcome suggests that there is a statistically significant relationship between getting an HIV test and my risk for getting infected with HIV is lower than those close to me (i.e., friends, peers) ($p=.024$) (*Table 9*).

There is a weak positive correlation between getting tested for an STI and my risk for getting infected with HIV is lower than those in my community ($r_s(86)=.189, p=.081$), close to me, ($r_s(86) = .247, p=.022$), and other Black women ($r_s(86) = .144, p=.187$) . The result of this test shows only a statistically significant relationship between getting tested for an STI and my risk for getting infected with HIV is lower than those that are close to me ($p= .022$) (*Table 10*).

A Spearman Rank Order test was run to assess the relationship between getting an HIV and STI test and perceived risk for HIV transmission. The variables getting tested for HIV and an STI test and perception of risk in comparison to those close to me (i.e.,

friends, peers), other Black women and community each demonstrated weak positive correlations. The results further revealed that there is a statistically significant relationship between getting an HIV (p=.024) and STI test (p=.022) and my risk for getting infected with HIV is lower than those close to me. This relationship indicates that African American women have increased confidence in seeking an HIV and STI test if they perceive themselves most at risk in comparison to the behaviors of those that are closest to them. For all of these reasons, the null hypotheses can be rejected and the alternative accepted.

Table 9

Spearman RhO Correlation: Getting an HIV Test and Perceived Risk

	My risk for getting infected with HIV is lower than those in my community.	My risk for getting infected with HIV is lower than those that are close to me (i.e. friends, peers).	My risk for getting infected with HIV is lower than other Black women.
Getting an HIV test			
Correlation Coefficient	.191	.243*	.205
Sig. (2-tailed)	.077	.024	.059
N	86	86	86

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10

Spearman RhO Correlation: Getting an STI Test and Perceived Risk

	My risk for getting infected with HIV is lower than those in my community.	My risk for getting infected with HIV is lower than those that are close to me (i.e. friends, peers).	My risk for getting infected with HIV is lower than other Black women.
Getting tested for a sexually transmitted infection (STI)			
Correlation Coefficient	.189	.247*	.144
Sig. (2-tailed)	.081	.022	.187
N	86	86	86

*. Correlation is significant at the 0.05 level (2-tailed).

The “Have you received an HIV test in the past 6 months” was used to compliment the two self-efficacy in seeking an HIV and STI test and perceived risk (Table 11). An Independent-Samples Kruskal-Wallis Test was run to determine if there were differences in “Have you received an HIV test in the past 6 months” and perceived risk for HIV transmission between my risk for getting infected with HIV is lower than those in my community, lower than those close to me (i.e., friends, peers) and lower than other Black women. The response categories for “Have you received an HIV test in the past 6 months” were “Yes, No, or I Don’t Know or I do not wish to answer.” Any response items that were I don’t know, I do not wish to answer or left blank, were excluded from this analysis. The “Have you received an HIV test in the past 6 months”

was distributed the same for both categories across levels of perception of risk: community ($p=.921$), close ones ($p=.200$), and other Black women ($p=.825$). “Have you received an HIV test in the 6 months” was not an indicator that African American women perceived themselves to be at risk for HIV transmission in comparison to their community, close ones or other Black women. This result supports the null hypothesis that there is no relationship between past HIV test history and perceived risk for HIV.

Table 11

Independent-Samples Kruskal-Wallis Test: HIV Test in Past 6 months and Perceived Risk

	My risk for getting infected with HIV is lower than those in my community.	My risk for getting infected with HIV is lower than those that are close to me (i.e. friends, peers).	My risk for getting infected with HIV is lower than other Black women.
Have you received an HIV test in the past 6 months			
Sig.	.921	.200	.825
Decision	Retain the null hypothesis	Retain the null hypothesis	Retain the null hypothesis

Asymptotic significances are displayed. The significance level is .05.

Summary

Secondary data analysis was conducted using an anonymous survey that provided demographic, socioeconomic and descriptive statistics to bring in to perspective the social make-up of African American women living in the southern United States. These data revealed a fairly uniform study sample of African American women. This sample majorly comprised of African American women 1) between ages 18-25, 2) residing in Texas, 3) with an income of approximately \$20,000, 4) and primary source of health services received from a healthcare provider office. The data also divulged that the distribution of relationship status exhibited statistically significant differences for perceived risk. Being knowledgeable about HIV and attitudes toward condom effectiveness were weakly correlated with risk perceptions of HIV. More than a third (n=41) of the participants had received an HIV test in the past 6 months. The analysis expressed that there was not a relationship between having received a test in the past and perceived risk for HIV transmission in African American women. The Spearman correlation test did determine that there is a statistically significant relationship between seeking an HIV and STI test and perceived risk in comparison to close ones. The implications of these findings from the angle of social and contextual influences will be presented with recommendations for further examination in the proceeding chapter.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Contemporary HIV/AIDS research argues the notion that African American MSMW are contributing to the increasing rates of HIV/AIDS among African American women in the U.S. (Durant, McDavid, Hu, Sullivan, Janssen & Fenton, 2007; Goparaju & Warren-Jeanpierre, 2012). In 2015, there is no evidence to support that notion. Since African American women are more likely to prefer a sexual partner that is racially congruent, an African American male, whom are automatically considered a high-risk partner regardless of sexual history (e.g. history of incarceration, past drug abuse, high HIV prevalence in neighborhood), they are more susceptible to HIV (Durant, McDavid, Hu, Sullivan, Janssen & Fenton, 2007; Macaluso, Demand, Artz, & Hook, 2000; Tillerson, 2008; Whyte IV, Whyte & Cormier, 2008). To further express the impact of HIV/AIDS among African American women in the south this discussion theorizes how health beliefs and culture contribute to the HIV epidemic and how these variables are shaped by environment, social justice and policy. The chapter closes by offering policy recommendations that might help to mitigate HIV transmission among this population.

Summary

The purpose of this research was to determine the association between 1) relationship status, 2) HIV knowledge, 3) attitudes toward condom use, 4) and self-

efficacy in seeking HIV and STI testing and 5) perceived risk for HIV transmission among African American women living in the south.

To fulfill this purpose, data was withdrawn from a larger study entitled, “Attitudes Towards Biomedical Prevention Strategies and Perceptions of Risk Factors Associated with HIV”, conducted by Dr. Kimberly Parker (2015) for secondary analysis. Dr. Parker gathered data using an online survey that was distributed electronically by utilizing the snowball sampling technique to reach African American women between ages 18-65 that were living in the south. The variables of interest that were withdrawn from this data set of (n=98) were: 1) demographics, 2) HIV knowledge 3) attitudes toward condom use, 4) self-efficacy in seeking HIV and STI testing, 5) and perceived risk for HIV transmission.

Conclusion

The results of this study claims that African American women (n=98) that were single, married/domestic partner, or in a relationship/dating perceived themselves to be at lower risk for acquiring HIV than those in their social network and other Black women. Consistent with prior research among African American women, those that are married/domestic partner perceived themselves to be at lower risk for HIV transmission than their community, social networks and other Black women (McNair & Prather, 2004; Paxton, Williams, Bolden, Guzman & Harawa, 2013; Perkins, Stennis, Spriggs, Kwegyir-Afful & Prather, 2014; Rosenthal & Levy, 2010). Though the average knowledge score was ($\mu=13.04$, $SD=5.18$), this did not correlate with an accurate perception of the degree of risk for HIV transmission. Moreover, attitudes towards the effectiveness of condoms

as contraception and in the prevention of HIV and other STIs were not connected with perceived risk. Yet, over a third (n=41) of women received HIV testing in the last 6 months, there was no connection to discernment of risk for the virus. The women had more confidence in seeking testing for HIV and STIs if they perceived themselves to be at increased risk in comparison to those closest to them, social networks. A majority of the participants in this study were relatively young, between ages 18-25 (n=61), completed high school/GED (n=45) and lived in Texas (n=78). Thus, the results of this study are not representative of HIV perceptions among African American women that live in the southern region as a whole. However, these results do provide meaningful knowledge of risk perceptions for which further research can bridge the gaps. The hypotheses results are presented below (*Table 11*).

Table 12

Hypotheses Results

H ₁	There is no association between relationship status and perceived risk for HIV transmission among African American women.	Reject the null
H ₂	There is no association between knowledge about HIV and perceived risk for HIV transmission among African American women.	Retain the null
H ₃	There is no association between attitudes toward the effectiveness of condoms and perceived risk for HIV transmission among African American women.	Retain the null
H ₄	There is no association between self-efficacy in seeking HIV and STI testing and perceived risk for HIV transmission among African American women.	Reject the null

Discussion and Implications

African American women living in the south are disproportionately affected by the HIV/AIDS epidemic and are often oblivious of their individual risk for acquiring HIV. HIV continues to be transmitted at far too high rates among African American women, and most preventive interventions for HIV and other STIs have majorly focused on individual behavioral change to reduce risk. The results of this study propose that there are other influences for elevated risk for HIV among this population that warrant expanding prevention agendas to comprehend the health beliefs and culture of the population that may be perpetuating viral rates, opposed to merely sexual behavior.

Health Belief Model

The Health Belief Model (HBM) was developed in the 1950's to explain the limited medical adherence to screening recommendations for the detection of tuberculosis (TB) (Rosenstock, Stretcher & Becker, 1994). The HBM takes an individual's past experiences and characteristics into account as a pre-existing element of the model (Rosenstock, Stretcher & Becker, 1994). The pre-existing characteristics of the participants in this study are that they 1) identify as a Black or African American woman, 2) majority between ages 18-25, 3) high school/GED is the most common level of completed education, 4) have an annual household income of \$20,000 or less, 5) who primarily receive medical services from a healthcare provider office, 6) and live in the South. All of these features influence their perceptions about HIV/AIDS and personal susceptibility.

HBM postulates that when perceived severity is low, then assessing personal predisposition for HIV would by no means be considered. However, if perceived severity of HIV is high, then personal susceptibility is assessed and the decision to practice self-protective behaviors, such as confidence to use condoms, get an HIV or STI test is considered (Rosenstock, Stretcher & Becker, 1994). Specifically, African American women must feel that there is a realistic, not just statistical probability of acquiring HIV infection, as a result of their background and current sexual behavior (Rosenstock, Stretcher & Becker, 1994).

Widely held African American cultural beliefs, values and practices help to shape attitudes toward condom use (Charnigo, Crosby & Troutman, 2010; El-Bassel, Caldiera, Rugless, & Gilbert, 2009). This study exposed that the beliefs African American women have toward the reliability and effectiveness of condoms to act as a barrier to pregnancy, HIV and STIs were not associated with perceived risk for HIV transmission. This implies that though attitudes toward condom use is a critical view of a behavior to protect from HIV and STIs it is not enough to determine who will use condoms consistently (Charnigo, Crosby & Troutman, 2010).

What was determined by the results was that internal, contextual aspects that are relationship histories and HIV knowledge did not provide an advantage to accurately assessing risk for getting HIV infection. Having knowledge of HIV/AIDS is not enough to appraise the probability of becoming infected with HIV for this population. Cues to self-efficacy in seeking HIV and STI testing were that African American women

perceived themselves to be at lower risk based upon their evaluation of the behavior of their social networks and other Black women. Lastly, self-efficacy refers to the confidence the women possessed regarding their ability to successfully get an HIV and STI test from a healthcare provider's office.

Cultural Ecology

Cultural ecology set out to fortify the interaction among social and contextual factors that African American women encounter that form their environment, consequently perception of risk for HIV transmission (McNair & Prather, 2009). For the reasons duly noted, the behavioral domain of HIV/AIDS, includes sexual health practices that are condom use, HIV and STI testing; sexual concurrency, and MSM/W are not adequate to explain the racial disparity and disproportionate burden among African American women (DiClemente, Wingood, Rose, Sales, Lang, Caliendo, et al., 2009; Durant, McDavid, Hu, Sullivan, Janssen & Fenton, 2007; Ford, Daniel, Earp, Kaufman, Golin, & Miller, 2009; Goparaju & Warren-Jeanpierre, 2012; Perez, 2014). Other variables, not revealed by the hypotheses, must be identified as contributors to stimulating the HIV epidemic in African American women. When developing HIV prevention interventions, it is important to ensure that programs are culturally-sensitive to the challenges African American women contend with in the south (El-Bassel, Caldeira, Ruglass & Gilbert, 2009; Williams, Wyatt & Wingood, 2010).

Nevertheless, cultural relativity should not be used as an excuse to condone behaviors that place women at risk for acquiring HIV (Perez, 2014). Providing girls and

women with the education and support they need to obtain economic power and social skills will enable them to take a more active role in defining sexual relationships and gender roles (El-Bassel, Caldeira, Ruglass & Gilbert, 2009; Pomeroy, 2008). Lastly, the interconnectedness of the social and contextual (dis)advantages and perceptions of risk are an important component for HIV risk reduction models within a cultural framework.

Recommendations

Structural conditions that impact HIV rates are wide-ranging and often similar to those that create health inequities in general for communities of color (Avert.org, 2014; Williams, 1998). These similar conditions are lingering racial/ethnic oppression post-slavery in the south, discriminatory incarceration rates, residential segregation, inadequate access to quality healthcare, and substantially less social resources in African American communities (Friedman, Cooper & Osborne, 2009; LaVeist & Isaac, 2013). Accordingly, decision-makers should be mindful of integrating health in all policies focusing particularly on how those that are at highest risk for HIV acquisition are affected by social policy (Blankenship, Bray, & Merson, 2000; Friedman, Cooper & Osborne, 2009; Reid, Dovidio, Ballester, & Johnson, 2014).

Creating meaningful structural change would necessitate the integration of a framework of social and economic rights into existing efforts to have the hope of reducing and ultimately, eliminating the HIV/AIDS epidemic in the U.S. After all, some of the most influential strategies in remedying disparities in health faced by African Americans come from multilevel upstream measures, including voting rights, education,

employment opportunity, quality housing and increased wages (Beatty, Wheeler & Gaiter, 2004; Fullilove, 2012; Reid, Dovidio, Ballester, & Johnson, 2014; Williams, 1998).

The findings from this research study adds original knowledge and pragmatic recommendations to the existing body of HIV/AIDS literature that verify social and contextual (dis)advantages that enfold the encumbrance of HIV/AIDS cases in African American women. Conversely, the results indicate that there is a gap in the literature and that additional research and policy recommendations are warranted to reduce HIV transmission among African American women.

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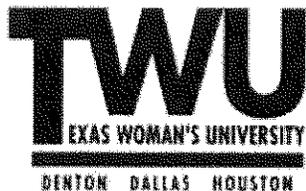
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APPENDIX



Institutional Review Board
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378
email: IRB@twu.edu
<http://www.twu.edu/irb.html>

DATE: July 7, 2015

TO: Ms. Jameisha Brown
Health Studies

FROM: Institutional Review Board - Denton

Re: *Exemption for Social and Contextual (Dis)advantages: The Intersection of Four Risk Factors on Perceived Risk for HIV Transmission among African American Women Living in the Southern United States (Protocol #: 18381)*

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. Because a signed consent form is not required for exempt studies, the filing of signatures of participants with the TWU IRB is not necessary.

Although your protocol has been exempted from further IRB review and your protocol file has been closed, any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any adverse events or unanticipated problems. All forms are located on the IRB website. If you have any questions, please contact the TWU IRB.

cc. Dr. Roger Shipley, Health Studies
Dr. Kimberly Parker, Health Studies
Graduate School