"TOO BLUE TO TALK ABOUT SEX": EXPLORING THE RELATIONSHIP BETWEEN DEPRESSION AND SEXUAL BEHAVIOR AMONG BLACK WOMEN – A STUDY FOR HIV PREVENTION

Estella Corinne Williamson

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Aileen B. Rothbard, ScD
Dissertation Chair

John L. Jackson, Jr., PhD
Dean, School of Social Policy and Practice

Dissertation Committee
Lani V. Jones, PhD

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DEDICATION

I dedicate this work to my son, **Changa.** From the moment you entered the world and my loving embrace, with each day I have been striving to be a better me…

for you.

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ABSTRACT

"TOO BLUE TO TALK ABOUT SEX": EXPLORING THE RELATIONSHIP BETWEEN DEPRESSION AND SEXUAL BEHAVIOR AMONG BLACK WOMEN – A STUDY FOR HIV PREVENTION

Author: Estella Corinne Williamson

Dissertation Chair: Aileen B. Rothbard, ScD

Compared to women of all racial categories within the United States, Black women continue to have higher incidence rates for contracting HIV/AIDS. Black women contract HIV at more than 10x the rate of their White and minority counterparts (CDC, 2014). Among Black women diagnosed with HIV, over 80% reported contracting it through unprotected heterosexual intercourse (Institute, 2012). Research on sexual behavioral risks for contracting HIV/AIDS has contributed to targeted racial and gender-based HIV prevention programs that provide education and skills training in utilizing risk-reduction methods during heterosexual intercourse (CDC, 2015). However, the continued disproportionality of HIV incidence among Black women necessitates further examination of why this difference persists. Although research has shown the impact of depression on various health outcomes, understanding depression symptomatology relationally with high risk sexual behaviors, and the underlying reasons behind those behaviors, has been an underexplored area within HIV prevention research of Black women. To increase knowledge of the lived experiences of Black women, this quantitative research study explored the following question: Is there a relationship between risky sexual behaviors and depression symptomatology among adult Black women who engage in heterosexual intercourse? The aims of the study were to better understand: 1) the sexual behavioral practices of Black women; 2) depression experiences among Black women; and 3) the relationship between depression symptomatology and sexual behavioral practices as an indicator of HIV risk. To achieve these aims, the study tested the following hypothesis: Adult Black women who report depressive

symptoms will be more likely to engage in high risk sexual behaviors than Black women who are not depressed. A non-probability convenience sample of 48 Black women (*n*=48) from urban communities in the northeast completed two questionnaires measuring depressive symptoms and sexual behaviors. Findings revealed that the presence of depression symptomatology was positively associated with high-risk sexual behaviors among Black women in the sample. Additionally, age was found to be a factor in both depression and sexual risk behavior. This study is recognized as a beginning towards understanding how mental health impacts sexual risk for Black women. To address the disproportionately higher rate of HIV infections among Black women, it may be prudent to apply culturally-relevant mental health interventions that consider the psychological experiences of Black women at all stages of their emotional and sexual development. While not commonly implemented in existing HIV prevention programs, identifying strategies for integrating mental health interventions may have significance towards eliminating the disproportionately high HIV incidence rate among Black women in the United States.

Keywords: *Black women, depression, sexual behavior, HIV prevention*

Subject Categories: *Social and Behavioral Sciences, Social Work*

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DISSERTATION OVERVIEW

This paper is a traditional five-chapter dissertation. Chapter I, the Introduction, explains the purpose and significance of studying Black women's life experiences as correlates for HIV risk. This section highlights gains in HIV prevention, which have contributed to decreased HIV incidence rates for Black women. Documenting the ongoing disproportionate impact of HIV incidence, prevalence and mortality on Black women's health provides the rationale for examining other factors that engender persistent behavioral risks for contracting HIV among this population. Chapter I also outlines the theoretical framework that guides the research design and critical analysis of findings. This theoretical framework provides the rationale for the focus on depression and its relationship to sexual behavioral practices, a relationship that is currently an underexplored area of HIV prevention research of Black women. More specifically, the theoretical and conceptual frameworks provide the rationale for the exploration of the relationship between depression and sexual behavior as risk factors for HIV among Black women. Chapter II is a full literature review that provides the background for the conceptual framework outlined in Chapter I. Chapter III outlines the research design, methods and plan for the data analysis. Results of the study are explained in Chapter IV. Finally, Chapter V provides an interpretation and discussion of the research findings, limitations of the study and suggestions for social work practice and research in HIV prevention for Black women.

CHAPTER I: INTRODUCTION

Statement of the Problem

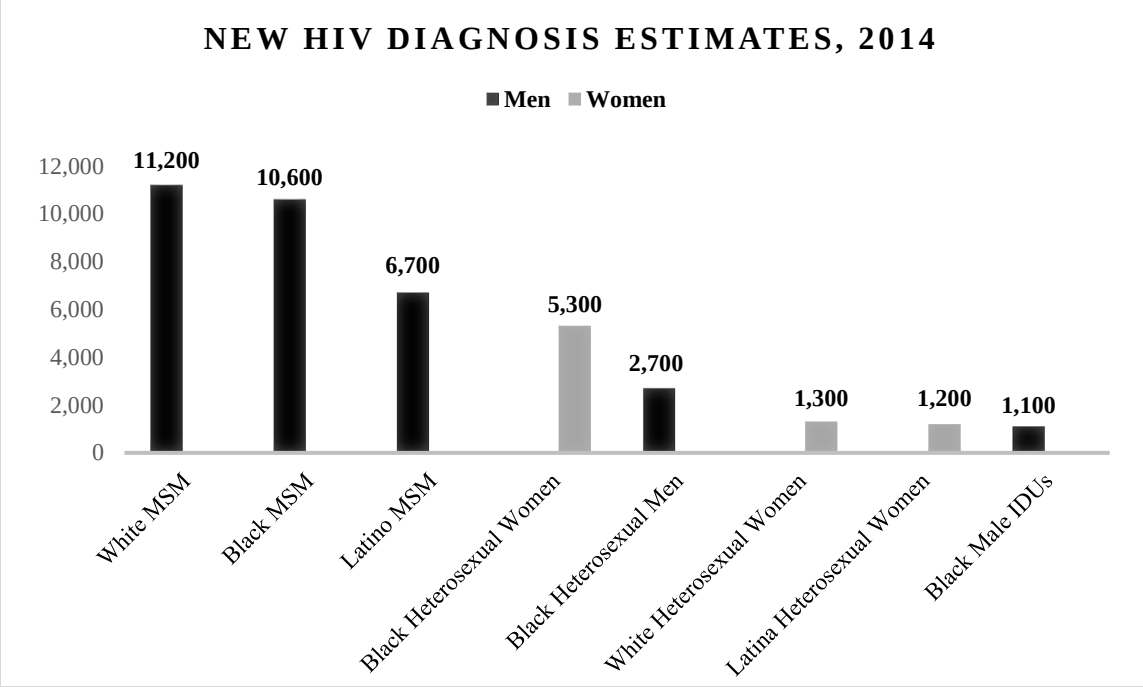
HIV and Black Women

Among women of all racial categories in the United States, Black women have a higher risk for contracting HIV/AIDS (CDC, 2014). The primary mode of HIV transmission for Black women is through heterosexual intercourse (Institute, 2014). Black women tend to be racially homogenous in their heterosexual partner choices, resulting in more heterosexual contact with Black men, who are have disproportionately higher rates of contracting HIV than White men and men from other minority populations (CDC, 2014). The sexual experiences of Black men and how their sexual behaviors engender risk for Black women has been explored in the literature (Alleyne & Gaston, 2010; Bontempi, Eng, & Crouse, 2008; Gurung, Taylor, Kemeny, & Myers, 2004), and sexual stigma in African American communities continues to create ongoing impediments to healthy discourses that facilitate open communication between Black men and women about sexuality.

In some parts of the country, there is an epidemic of new HIV cases among Black women (Prevention, 2015). While African Americans represent 13% of the population in the United States, over 30% of African Americans live in the southeast (Bureau, 2015). This geographic catchment area has the largest concentration of African Americans residing in the Unites States. African Americans living in the southeast experience disproportionately higher health risks, including HIV. For example, in 2010, there were over 37,000 new cases of HIV in the United States (Prejean, Tang, & Hall, 2013). Of the total cases, nearly 16,500 new cases were in southern states. While 24% of those cases were among women, more than half of those women (57%) were Black (Prejean et al., 2013). Rates of HIV incidence continue to be highest in the

Southeast portion of the United States (Prevention, 2015), making southern states the "epicenter" of HIV/AIDS within the United States (Wiltz, 2014). This data highlights the disproportionate impact of HIV infections on Black women. Figure 1.2 illustrates HIV incidence estimates highlighting the higher rate of HIV transmission for Black women.

Figure 1.1 Estimates of new HIV diagnoses in the U.S. by most affected subpopulations

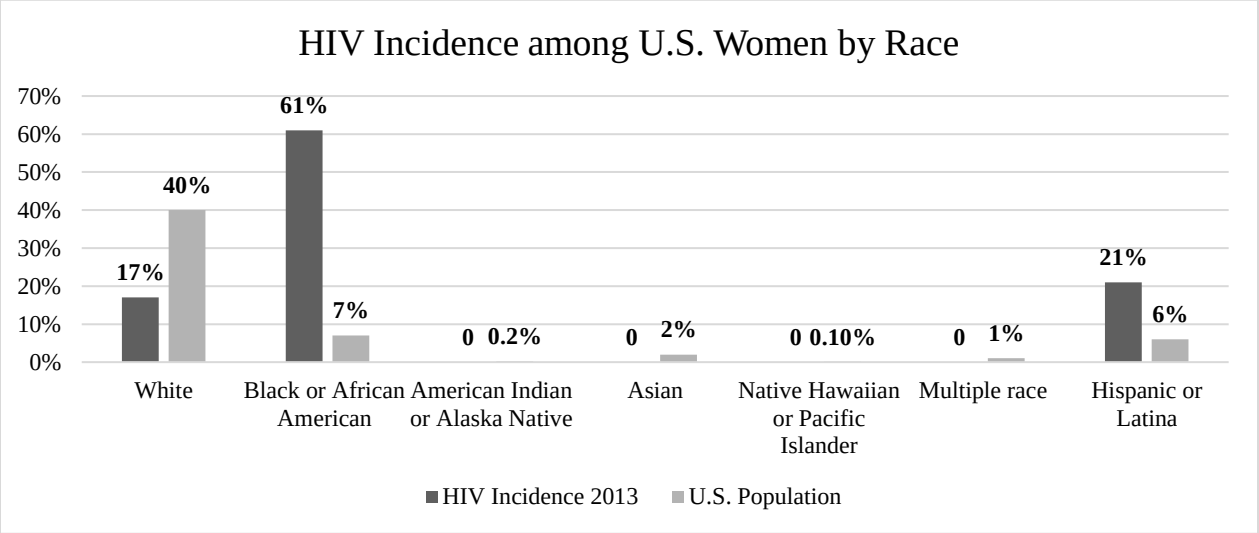


CDC (2014). *HIV Surveillance Report.* Diagnosis of HIV Infection in the United States and Dependent Areas.

While new HIV diagnoses among Black women have declined in recent years (CDC, 2015), among women of all racial categories, Black women continue to have higher incidence rates for HIV/AIDS. In the United States, women made up 19% of newly infected individuals in 2013 (CDC, 2014). Figure 1.2 shows the new HIV diagnosis rates among women in the United States by racial category. Black women, who represented 7% of the population in the United States, comprised 61% of new HIV infections. Latina women represented 6% of the U.S. population, but had an HIV incidence rate of 21%. Comparatively, White women, who

represented 40% of the U.S. population, had an HIV incidence rate of 17%. These data illustrate the disproportionately higher rate of new HIV infections among Black women.

Figure 1.2 HIV incidence among U.S. women by race



CDC. (2014). *HIV Surveillance Supplemental Report 2014.* Atlanta, GA: Centers for Disease Control and Prevention.

In NYS, Black women represent the second highest risk group for new HIV cases, second only to men who have sex with men (MSM) in all racial categories (Institute, 2012). In 2010, White women, who represented 40% of the population in NYS, had an incidence rate of 17%. Hispanic/Latina women, who represented 7% of the population, had an HIV incidence rate of 21%. Comparatively, Black women, who represented 6% of the population, had an HIV incidence rate of 64%. The data revealed the disproportionate impact of new HIV infections on Black and Latina women in NYS. However, when examining the racial and gender distribution of new infections, Black women are contracting HIV ten times more than their minority counterparts.

The racial and gender disproportionality of HIV risk can be observed even at local catchment areas within upstate New York. A newly identified risk category, "female presumed heterosexual contact" tracked women who had contracted HIV/AIDS through heterosexual

contact. Among women of all races, Black women had the highest rate of transmission in this HIV risk category (Institute, 2014).

HIV Prevention with Black Women

HIV prevention programs that target Black women at risk for contracting HIV/AIDS exist and have been efficacious at increasing safe-sex practices by providing individuals with the necessary tools to reduce their HIV risk (Lennon, Huedo-Medina, Gerwien, & Johnson, 2012). Individual and group level interventions have resulted in decreases in HIV incidence among Black women between 2006 and 2013 (Hawk, 2013; CDC, 2014). However, retention in HIV prevention programs has been low, impacting the number of women utilizing learned skills for sexual risk reduction. Despite a modest decrease in HIV transmission among Black women between 2008 and 2010 (22% and 21% respectively), HIV has remained the leading cause of death among Black women between the ages of 25 to 34 years of age (Wingood, Dunkle et al., 2013). The persistently high rate of HIV transmission among this population underscores the ongoing challenge of eliminating HIV risk through prevention for Black women in the United States.

Although prevention programs have been effective through demonstrated decreased HIV incidence rates, engaging and retaining Black women in HIV prevention services has historically been challenging (Crepaz et al., 2009). Addressing the unique needs of African Americans in HIV prevention is challenged by existing cultural frameworks that do not fully recognize or understand the depth of the lived experiences of Black women within the United States. For example, within African American cultures, the needs of the family have historically taken precedence over the needs of the individual (Myers, 1988). Black women have been culturally conditioned to prioritize the needs of the family, which has contributed to decisions to maintain

heterosexual relationships that have not always met their physical and emotional needs. The mental and emotional strain resulting from experiences of high psychosocial stress is given less attention by Black women, and is over-ridden by the needs of children, intimate partners, extended family and community (Alston, 2012). This is encountered by Black women across all socioeconomic strata and generational experiences (Williams, 2008); it necessitates a deeper understanding of how culturally-normative practices heighten stress levels for women and of how these stress levels interact with behaviors related to health risk.

Thus, high psychosocial stress often supersedes health concerns, including concerns regarding the risks of contracting HIV (Choi, Bowleg, & Neilands, 2011). Although there are theories aimed at explaining the cultural and value implications of high psychosocial stress for women, there exists a void in applying theoretical frameworks that explain the intersections of high psychosocial stress, mental health and motivation to reduce high risk sexual practices among Black women. Additionally, while there is a body of research about the mental health of HIV *positive* women, there is less known about the mental health of HIV *negative* Black women, *pre-exposure*. The ability to make sexual risk-reduction decisions is predicated on one's level of mental wellness and the degree of psychosocial stress impacting attention to one's primary health care needs. Women who experience depression or other mood disorders report significant impairment in their ability to make decisions regarding health, and there exists empirical evidence that shows correlations between depression and high psychosocial stress as predictors for high risk sexual practices (Lennon et al., 2012). For example, when considering HIV risk among Black women, depression has been shown to impact women's motivation to negotiate condom use (Lennon et al., 2012).

HIV transmission is highest for Black women in their adult years, particularly between the ages of 19-39 (CDC, 2015). These years represent the highest rate of heterosexual activity among adults of all races (Chandra, Mosher, Copen, & Sionean, 2011). Because this age range for sexual activity is so broad, it is incumbent that HIV prevention programs consider the inclusion of interventions that also integrate age-related sexual developmental stages that adults experience during these high-risk years.

Psychosocial Stress, Depression and HIV Prevention

Psychosocial stress as a predictor of sexual risk behaviors requires further exploration. There has been research examining the ways in which psychological distress, resulting from high psychosocial stress, predicts the onset of depression in women of color identified as having HIV infection or of being at high risk of contracting HIV (Gurung et al., 2004). In defining stress, Gurung et al. (2004) turned to the cognitive appraisal theory, which posits that people's perceptions of stress depends on their primary appraisals of situations encountered and their secondary appraisals of available resources to cope. When the secondary appraisals are perceived as deficient, psychological distress results (Lazarus & Folkman, 1984). Access to social support has been identified as a key coping mechanism against the experiences of high psychosocial stress. Social support is defined as the provision of emotional or social support provided by trusted individuals within a person's social network (Dunkel-Schetter & Bennett, 1990). For Black women, the normative self-isolating practice to not utilize social supports influences the appraisal of available resources to cope.

A key factor in the experience of psychological distress is the experience of *chronic burden,* which is defined as extended difficulty managing multiple social roles (i.e. spouse, parental caregiver, employee, head of household) (Pearline & Schooler, 1978). Chronic burden

has been determined to be a correlating factor in poor health outcomes for individuals experiencing the phenomenon (Gurung et al., 2004). It also increases the risk for depression. The subsequent risk of depression is increased for Black women who are socialized to cope with high levels of psychosocial stress without asking for support (Watson & Hunter, 2015). This has implications for understanding the lived experiences of Black women, who are more likely to experience chronic burden than their White counterparts (Watson & Hunter, 2015), yet do not seek support for its deleterious psychological effects. Further, these psychological effects may contribute to decreased attention to health concerns, which may include the engagement in health prevention strategies, such as sexual risk-reduction practices.

Adults between the ages of 18-25 and 26-49 had higher rates of depression in the United States (NIMH, 2015). However, when examining rates of reported depression by race, Whites (7.5%) reported higher rates than Blacks (4.9%) or Hispanics (4.8%) (NIMH, 2015). Because of mental health stigma in African American communities, current depression data may be under-reporting the mental health experiences of African Americans, and more specifically Black women. Exploring depression experiences among adult Black women in these age cohorts may contribute to a better understanding of the experiences of Black women within the context of age and depression symptomatology.

Addressing Mental Health Needs of Black Women in HIV Prevention

The methodology used to address HIV risk for Black women is consistent with Westernized medical models that perpetuate, and subsequently resource, disease management health care frameworks. Social work interventions are often implemented for this purpose, with less emphasis on ecological frameworks that place more emphasis on disease management over disease prevention. Because the mental health of the individual is not incorporated into many

HIV prevention services (i.e. screenings and assessments), existing HIV interventions do not screen high risk individuals for depression and other mood disorders as a part of the prevention process (CDC, 2015). Providing education about mental health and asking a set of mood-related questions may identify sexual behavioral risk factors early enough to intervene. Stabilizing mental health may enable Black women to accept and utilize protective sexual risk behaviors that reduce their exposure to HIV/AIDS within their heterosexual relationships. Social workers can be instrumental in helping women recognize proactively the effects of depression and other mood disorders on their sexual practices, which may increase access to the necessary supports that promote engagement in sexual risk-reduction practices.

In sum, Black women are disproportionately represented for HIV/AIDS incidence, which has implications for the health and well-being of the entire African American community (Johnson, Cunningham-Williams, & Cottler, 2003). While HIV prevention strategies have been effective at reducing HIV risk among Black women, the persistently high HIV incidence rates, both nationally and in NYS, underscores a critical need to examine more effective approaches to reducing risk. HIV prevention for Black women may have a greater impact if efforts are made to understand depression relationally with sexual behavioral practices, while also examining the degree to which demographic factors, like age and income, engender HIV risk for both indicators. Considering direct practice and social policy implications, social workers can be instrumental in improving the overall health outcomes of Black women by intervening at the time of mental health risk. Because Black women are relied upon to support others, preserving the health and well-being of Black women subsequently improves outcomes for Black families and communities. Health care costs used toward the management of chronic illness, like HIV,

have the potential of being reallocated to prevention services that could serve to build and sustain marginalized families and communities in the U.S.

Purpose of the Study

The purpose of this study is to explore the potential impact of mood dysregulation (depression) on the sexual behavioral practices of Black women who engage in sexual intercourse with men. While the literature shows the ways in which one's mental health intersects with chronic disease progression, less has been explored regarding the potential impact on HIV disease prevention strategies. Further, there is more to be learned about Black women's sexual experiences, and an examination of the sexual practices of Black women and possible contributors to sexual risk behaviors will provide new knowledge of those experiences. To effectively address the unique sexual needs of Black women in social work practice, the profession must engage in further exploration of their relational experiences, while also expanding its understanding of the sexual behavioral implications for HIV risk among Black women. This study intends to contribute epistemological insight into these underexplored areas of Black women's lived experiences.

Key objectives of this work will aim to better understand:

- the sexual behavioral practices of Black women.
- the experiences of depression among Black women in heterosexual relationships.
- the relationship between depression symptomatology and sexual behavioral practices as an indicator of HIV risk.

Significance of the Study

The empirical research on HIV prevention for Black women reveals a significant gap in examining the application and effect of social work practice interventions as mechanisms for

preventing HIV sexual risk. Social work interventions are often incorporated after women contract HIV and initiate treatment. Social workers are at the forefront of mental health treatment interventions, which have been useful for HIV positive women who present with mental health needs. Treatment often focuses on reducing depressive symptoms that prove to be impediments to HIV treatment adherence. Managing a chronic illness warrants practitioners considering the psychological impact of trying to control disease progression. Social work practice interventions may also be instrumental in preventing exposure to HIV disease, while also helping women address mental health challenges that affect the ways in which they operate within their intimate relationships.

HIV prevention programs targeting Black women have been developed primarily under theoretical frameworks that examine gender and power in safe-sex negotiation, as well as social and cultural normative factors that influence knowledge of HIV and sexual practices within African American communities. For example, a popular HIV intervention that provides social skills training for sexual negotiation among African American women, called SISTA (Sisters Informing Sisters about Topics on AIDS) is grounded in the Theory of Gender and Power (TGP) and Social Learning Theory (CDC, 2015). Interventions like SISTA provide education about HIV risk, while also equipping Black women with the tools to negotiate safe-sex practices with their heterosexual partners. It considers the cultural norms that engender risk and seeks to empower Black women to be knowledgeable about HIV and consider their sexual health when making decisions to engage in sex with their heterosexual partners.

A key assumption of these interventions is that Black women possess the mental and emotional reserves to integrate self-care conceptualizations into their sexual behavioral practices. Under emotionally self-regulated coping and stable mental health circumstances, these practices

would readily serve to reduce HIV and STD risks for women engaging in heterosexual intercourse. However, if mental health is compromised by depression, efficacy in exercising sexual risk-reduction skills may be impaired. Considering the mental health of the individual as a barrier to sexual risk-reduction skill-building and utilization may be key to addressing the stubbornly high rates of HIV incidence among Black women. Research in this area may generate new knowledge about the potential relationship between depression and sexual behavioral practices. Results may inform the field of HIV prevention of the importance of including mental health interventions in existing prevention programs to achieve the goal of eliminating the disproportionately high rate of HIV among Black women.

Theoretical Frameworks

For this study, the theoretical frameworks through which HIV prevention programs for Black women are critically reviewed, and to better articulate the lived experiences of Black women, include: Theory of Gender and Power, Appraisal Theory, and Feminism/Black Feminist Thought. The **Theory of Gender and Power** examines gender-based power dynamics in heterosexual relationships, presently serving as the theoretical framework of existing HIV group-level interventions targeting heterosexual Black women. **Appraisal Theory** conceptualizes depression as emerging from appraisals of the psychosocial functional impact of disproportionately high levels of environmental stressors experienced by Black women. It explains the challenge that Black women experience in their appraisals of health risks due to high psychological stress resulting from racial and gender-based stressors. **Black Feminist Thought** provides further context for understanding the impact of structural forms of oppression by gender, race and social status as indictors of depression and sexual behavioral risk for Black women. The integration of Appraisal Theory and Black Feminist Thought with the Theory of

Gender and Power serve to invite researchers examine sexual and mental health risks within the context of Black women's experiences with sociopolitical and cultural oppressive systems that provide degrees of complexity at the interpersonal, familial, communal and societal levels.

Theory of Gender and Power

The Theory of Gender and Power (TGP) was developed by Dr. Raewyn Connell (nee Robert Connell in 1944), an Australian trans-woman and sociologist whose theoretical work examines social inequities through the intersection of gender and power (Connell, 1987). Dr. Connell's theoretical framework emerged from social structural theory (emerging out of Marxist theory), dual systems theory (emerging out of feminist theories that address how multiple systems in society serve to stratify by gender) and psychoanalytic theories (specifically related to Sartre's humanism – i.e., we are responsible for our choices and decisions or, put another way, we are active participants in our own experiences and thus responsible for the consequences of our actions). Dr. Connell's critical reflections on the intersection of gender and power being exercised across systems of power and privilege influenced her own sexual transformation later in life.

Dr. Connell examined the ways in which gender inequality has historically been maintained under economic, cultural and social norms and affective attachments. She also conceptualized the ways in which gender relations in society emerge from mutually-accepted (by both men and women) gender-based norms and values that get exercised through social interactions that perpetuate binary constructions of gender (Connell, 1987, p. Chap 5). From this analysis, it is understandable how TGP became applied as a theoretical framework for HIV interventions for Black women. The theory explains the power dynamics that exist in intimate relationships, recognizes the impact of social structures in political discourses about gender

inequality, and highlights the influence of culture and social norms as determinants of human agency (notably operant in decisions that jeopardize personal biological interest). What requires further understanding is the social and emotional impact of these oppressive systems on Black women's ability to effectively apply skills for safe-sex negotiation.

In keeping with the Theory of Gender and Power, researchers have posited that risks of contracting HIV among Black women have been impacted by the experiences of gender-based oppression within the structures of African American heterosexual relationships (Wingood, Camp, Dunkle, Cooper, & DiClemente, 2009). TGP contends that there are three primary risk factors that influence Black women's motivation to engage in safe-sex practices: 1) the sexual division of labor; 2) the sexual division of power and 3) affective attachments and social norms (Lennon et al., 2012).

The sexual division of labor brings attention to social problems experienced by Black women, like lower paid wages, high rates of unemployment and high numbers of single-parent households. Researchers (Wingood et al., 2009) contend that this sexual division places Black women at an economic disadvantage that may influence sexual behaviors. For example, Black women may choose to remain in relationships with male partners who have sex with other women to maintain financial support provided by that partner. The financial strain of supporting children and maintaining a household can influence a woman's decision to remain in a polygamous relationship. This was supported by qualitative data collected during the study of Black women's sexual practices (Wingood et al., 2009). Several Black women reported that they lacked trust in their partners due to experiences of sexual infidelity by their men. However, these women chose to remain in the relationships to continue receiving financial support vital to meeting the subsistent needs of their families.

Power in heterosexual relationships also has economic origins. Income inequality has been historically observed through the lens of gender. For every dollar that men make for compensation, women earn only 82 cents for the same work (Statistics, 2017). The economic divide is greater when seen through an intersection of race. Black and Latino Americans had lower median earnings than their White and Asian counterparts. For example, White and Asian men have observed wage growth since the 2000s, yet Black men have experienced a downward trend in wage growth during that same period. Furthermore, Black women earned only 89% of Black men's wages. Among women of all races, Black women had the lowest wage growth in 2016 (Statistics, 2017).

Income inequality, which impacts the socioeconomic status of Black women, has been hypothesized to be an indicator of high risk sexual behavior. Decisions to remain in relationships for economic preservation have been shown to expose women to sexual risks for contracting STDS. In a study that examined correlates between socioeconomic status and health disparities of people living in the northeast section of the United States, researchers examined poverty levels by race and compared data with incidences of cancer mortality rates, premature births and sexually-transmitted infections (Krieger, Chen, Waterman, Rehkopf, & Subramanian, 2003). Results showed positive relationships between low socioeconomic status and these health disparities. Incidences of sexually-transmitted infections (for syphilis, gonorrhea and chlamydia) were higher for lower-income Black men and women than for men and women of higher incomes. While the study showed a positive association between socioeconomic status (SES) and STD rates, it did not explain SES alone as an indicator of sexual risk. There may have been other factors that explained the high STD rate, such as low SES contributing to higher levels of psychosocial stress that may compromise decisions to employ safe-sex behavioral practices.

There are several ways in which the sexual division of power is exerted in Black heterosexual relationships. When compared to White and Latina women, Black women are more likely to experience intimate partner violence when in a relationship (Johnson, Cunningham-Williams, & Cottler, 2003). Coercive power exercised through involuntary sexual intercourse in heterosexual relationships not only removes choice to engage in sex, but also takes away a woman's option to engage in *protected* sexual intercourse. Fear of physical harm and financial loss are primary reasons for remaining in abusive relationships (Johnson et al. 2003).

Among women of all races within the United States, Black women are more likely to be single. Over 40% of Black women over the age of 40 have never been married (Watson & Hunter, 2015). Within the United States, there are 1.8 million more Black women than Black men (Watson & Hunter, 2015; Bureau 2015). Comparatively, only 16% of White women in that category reported not being married by age 40 (Bureau, 2013). Because Black women are more likely to partner with men of the same race, the sex ratio imbalance among African Americans often renders Black women powerless to demand better treatment in their relationships (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). This may contribute to a sexual division of power, whereby the surplus of available Black women enables Black men to have more options in the selection of a partner(s). In many African American communities, Black women are expected to remain with the same partner, and they are defamed and stigmatized if they have multiple sexual partners (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). This expectation is further proselytized in the Black church, where Black women are overwhelmingly represented (Williams, 2008). The Black church is often a place where dicta on the role of women, their sexuality and social subservience are espoused weekly under the male-interpreted pronouncements of a higher power.

Affective attachments and social norms influence levels of equity in heterosexual relationships. Social norms that undergird dysfunctional interpersonal connections between men and women often result in uneven power differentials within relationships (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). For example, condom use is often discouraged by Black men, and women who try to negotiate the use of condoms may be viewed as promiscuous or of trying to shift the power dynamic in the relationship (Wingood, DiClemente et al., 2013). Because there are more available women from whom to choose, Black men have the option of declining a request to engage in protected sex. Additionally, there is still a great deal of misinformation about HIV/AIDS in African American communities, and many Black women lack awareness of their true risk (Lennon et al., 2012).

When applied to HIV prevention programming for Black women, the Theory of Gender and Power (TGP) identifies the social and structural factors, referenced above, as contributors to risk. However, there is an underlying assumption that Black women are psychologically prepared to recognize these stratified structures, and that they can adapt or modify their sexual behavioral practices through learned skills. Some studies have revealed socioeconomic status as an indicator of health risk (Bratter & Gorman, 2011). However, sociocultural norms and values that compromise the balance of power and control in heterosexual relationships, have been identified as stronger correlators of increased sexual risk (Billings et al., 2015). The emotional impact of these overarching oppressive symptoms has been shown to create emotional burdens that compromise a woman's decision to protect her physical health (Gurung et al., 2004).

The application of TGP to understanding Black women's sexual behavioral practices does not completely address the unique dynamics of Black relationships. Dr. Robert Staples, a sociologist from the University of California San Francisco, has done extensive research on

Black families. Staples has explored distinctions between Black and White families when seeking to understand the social structures that undergird gender inequality in relationships (Staples, 1981). While patriarchy was sustained under an economic dependence of women in White families during America's early industrial period, Black families had been characterized by more "egalitarian roles and economic parity in North America" (Staples, 2007). The social construction of the traditional family as a two-parent unit with a working father and stay-at-home mother did not always reflect the lived experiences of Black families. The institution of slavery stripped African American men of their economic power and patriarchal roles, causing many Black families to be structured under female-headed households that became more defined by a mother-child dyad, than a mother-father relationship (Hill, 2001).

The system of slavery disempowered both Black men and women (Staples, 2007). Black women have historically assumed dual roles as workers and caregivers. After slavery, Black men were continually marginalized through institutional practices that barred them from gainful employment (Du Bois, 1903). This contributed to more Black women entering the workforce after the Reconstruction period at higher rates than White women in order support their families. Thus, within African American families, women have historically been more economically independent than their White counterparts (Staples, 1981).

This reality challenges TGP's position that a sexual division of labor places Black women at HIV risk due to an economic dependence on men. Black women have traditionally served as the economic power within their families; therefore, other factors must be explored in understanding the lack of sexual independence exercised among Black women in heterosexual relationships. For example, Black women who report being the economic heads of their households will still identify a need to maintain relationships with their male partners for support

(Jarama, Belgrave, Bradford, Young, & Honnold, 2007). This requires further study to better understand the economic realities of Black female-headed households, while also exploring the roles that cultural norms and values play in Black women's relationship decisions.

In Becker's *One Nation Under Stress: The Trouble with Stress as an Idea*, (2013) the experience of balancing career and family caregiving is described as standard practice for many African American women. There is no choice to opt out of the workforce or negotiate with male partners about the division of labor. Many Black women hold these dual roles, whether there is male partner in the home or not (Becker, 2013). Although Black women are more likely than White women to manage these multiple roles in the absence of a male partner, the fact that American women of all races experience these stressful situations warrants attending to other factors that influence Black women's sexual practices with men at higher rates than their White counterparts.

Appraisal Theory

Appraisal theorists believe that thoughts and emotions emerge from one's perception or appraisal of environmental stimuli that affect one's survival (Ellsworth, 2013). Ellsworth posits that appraisals and emotions act interchangeably. Appraisals of our environment, and their subsequent impact on our emotions, have origins in our physiology, culture, personal temperament and life experiences (Ellsworth, 2013, p. 126). As we encounter various environmental experiences, emotions can have physiological impact, which can vary in intensity based on cultural influences and personal coping skills (Arnold, 1960; Nesse & Ellsworth, 2009). Ellsworth posits that appraisal experiences function in the same way. Appraisals do not cause emotions; instead the two operate in tandem, influencing and impacting the other (Ellsworth, 2013).

Appraisals are now being applied to understanding risk behaviors and depression. An underlying assumption is that, when people perceive health risk threats, they will act to reduce these risks (Newby, French, Brown, & Wallace, 2013). This articulation of appraisals originates from risk appraisal theories, like the protection motivation theory (Rogers & Prentice-Dunn, 1997).

Protection Motivation Theory explains how cognitive appraisals of threat assessment lead to motivation to engage in protective behavior (Rogers, 1983). The theory posits that there are two cognitive processes that work in tandem to influence self-promoting protective mechanisms: *threat appraisal* and *coping appraisal* (Kaspar, 2015). Threat appraisal is used to explain maladaptive behavior that is not self-protective (i.e. engagement in unprotected sexual intercourse). Through threat appraisal, a person's protective motivation is influenced by the perceived severity of the maladaptive behavior (i.e. *I use condoms during sex some of the time*) and by one's perceived vulnerability to negative consequences (i.e. *I am not at risk of contracting HIV*). A person's decision to continue the maladaptive behavior is influenced by an assessment of the potential "rewards" that will be gained (i.e. *I will keep my man*; *My man will not leave me*; *I have connection through relationship*) (Kaspar, 2015, p. 303). Coping appraisal involves the exercise of self-efficacy when making protective decisions (i.e. having the confidence to say no to having unprotected sexual intercourse). Kaspar (2015) postulates that the application of self-efficacy is influenced by an assessment of "response cost" (i.e. *Will my refusal of unprotected sex result in my being alone*? or *I don't want to face the stigma of not having a man in my life.*).

One study of Appraisal Theory explored adolescents' beliefs about their risk of contracting Chlamydia. The study, which included over 900 youth from secondary schools and

college institutions, revealed an increased desire to use condoms when the perceived risk of contraction was high. Appraisal of risk was influenced by youth's knowledge about the disease and the contraction risk. The study revealed the importance of education about sexually transmitted diseases (Newby, French, Brown, & Wallace, 2013) .

Appraisal theories subsequently can provide insight into understanding factors that influence decisions to engage in high risk sexual behaviors. Because Black women experience higher levels of psychosocial stress, which itself is defined as a psychological response to perceived threat, appraisals of risk/threats are likely to be more severe for this population than that of their White counterparts (Lennon et al., 2012). Additionally, risk appraisals may be influenced by social and cultural norms that both, impact accurate dissemination of information about HIV and culturally frame messages about the value of Black women's health. The intensive and recursive experiences of maladaptive appraisals may compromise the ability to consistently apply risk-reduction skills, which may impact Black women's ability to make health appraisals towards reducing HIV risk.

Studies have revealed high stress levels as contributory to the onset of depression, and Black women are disproportionately impacted by both (Carrington, 2006). Defining stress, as experienced by Black women, involves an appraisal of high environmental demands (rooted in racial and gender oppression) and the perception of having an inadequate amount of biological, psychological or social resources (Dohrenwend & Dohrenwend, 1974). Distress, an outcome of stress, is defined as a prolonged state of suffering that manifests through physiological symptoms such as worry, tension and/or headaches, and can lead to depression (Woods-Giscombe & Lobel, 2008). Examining the experience of stress and distress in Black women from the lens of racial and gender oppression has been a source of exploration. For example, research has found that

appraisals of having limited resources to cope with gender and racial-based stress contribute to poorer health outcomes among African American women (Szymanski & Stewart, 2010). Therefore, appraisals and emotions are influenced by cultural and social norms that are rooted in historic gender and racial oppression. Applying an appraisal lens to understanding psychological distress for Black women may provide new knowledge about mental health as a risk factor in their health risk appraisals.

Feminism and Black Feminist Thought

How do social and cultural constructs affect the mental health of Black women, and which is more salient in understanding a woman's motivation to protect against HIV risk? These questions may be answered by examining mental health, specifically depression, from a feminist lens. Feminist theorists explain the lived experiences of women within the context of social and cultural norms conceived out of systems and structures that promote gender-based oppression (MacKay & Rutherford, 2012). Traditional medical models of mental health are challenged by second wave feminist theorists who have argued that the experience of depression must be understood beyond binary constructions that examine depression solely from a mind and body experience. Feminist theorists expand the conceptualization of depression as being attributable to social and environmental experiences rooted in structural forms of oppression against women (Annandale & Clark, 1996).

Feminist theorists have also posited that viewing mental health treatment within a feminist framework reduces depression incidence and improves treatment outcomes for women diagnosed with depression (MacKay & Rutherford, 2012). Mental health interventions that incorporate a feminist lens address causal issues to depression onset more comprehensively.

Additionally, therapeutic interventions grounded in feminist ideologies may contribute to greater efficacy in treating depression in Black women, which may improve their health outcomes.

To test these hypotheses, MacKay and Rutherford (2012) conducted a qualitative study of nine self-identified feminists who were diagnosed with depression. One of the women was Black and the rest were White, with a majority being Canadian born. All participants were under the care of a medical provider for the treatment of depression. Most of the sample accepted the medical model of treatment, but participants provided feminist justifications for accepting the medication treatment. For example, one woman acknowledged the impact of social and structural forms of oppression as an emotional burden, but she supported a medical construct that attributed depression to hormonal changes that women experience at different stages of life (MacKay & Rutherford, 2012). While these women considered themselves informed consumers and progressive feminists, the influence and acceptance of a biological pathology to mental health disease progression was particularly salient and revealed the strong influence of a Westernized disease conceptualization of mental illness.

If the dominant feminist culture can be persuaded to accept such conceptualizations, it is incumbent that Westernized cultural viewpoints about mental health be critically examined for their application to diagnosing and treating the mental health of Black women. These viewpoints may be key contributors to the under-utilization of mental health services by Black women, who may perceive services as not being conducive to addressing the underlying social and cultural issues that contribute to their psychological distress.

Black Feminist Thought examines the social, political and legal constructions of inequalities experienced by Black women (Collins P. , 1996). Black Feminism closely explains the realities of Black women having to navigate oppressive systems that subjugate them based on

both gender and race. Furthermore, these experiences operate both within the larger society and within African American communities, giving recognition to the inescapable experiences of oppression by Black women (Collins P. , 2000).

Black Feminist Thought has six characteristics (Collins, 2000): 1) a perspective that is grounded in a unique historic and contemporary experience of enslavement and oppression; 2) awareness that Black women maintain a simultaneous existence in a White-privileged world that is exploitive and oppressive and a Black world that is exploited and oppressed (Collins P. , 1998); 3) a value for community-based activism and commitment to social justice for African American women; 4) a recognition of the contributions of Black women who operate beyond the academy to advance social justice for Black women; 5) a dedicated responsiveness to challenging oppressive practices at all systems, and; 6) providing a humanist vision for society (Tyson, 2011). Hill Collins's themes derived from the works of leading Black feminists, which were used to better understand the lives of Black women and have relevance for enhancing HIV prevention services for Black women.

For example, a Black Feminist theoretical perspective was applied to an ethnographic study of Black women, deemed to be at high risk for contracting HIV, residing in a large impoverished metropolitan community in the United States (Gentry, Elifson, & Sterk, 2005). This qualitative study of 45 women used Black Feminist frameworks in the development of the sampling frame, construction of questions, and collection and analysis of the data. Participants were women whose lives were impacted by oppressive social structures and institutions that influenced their access to opportunities for employment, education, healthcare and housing. The authors hypothesized that social and economic factors, entrenched in structural forms of racial

and gender oppression, would impact low-income Black women differently than other high-risk groups.

The results revealed how the development of self-identity for participants necessitated Black women being able to define their own realities (Gentry et al., 2005). Several themes emerged from their observations of these women. These overarching themes provide important context for understanding the unique experiences of Black women and are recommended for integration into HIV prevention services. They include: 1) identity formation is developed from a woman's articulated self-definition and self-valuation *(i.e. demonstrated by a constructed self-concept that emerges from a sense of personal worth and value)*; 2) psychological distress in Black women can be explained through an interconnection of race, class and gender-based oppressive systems *(i.e. demonstrated by perceptions about relational values, educational attainment and personal worth and how these impact appraisals of a woman's ability to resolve financial stressors that influence heterosexual relationship decisions)*; and 3) controlling images as constructed for poor Black women influence the degree of self-efficacy and sense of agency *(i.e. demonstrated through a recognition of the impact of traumatic childhood experiences on the development of a woman's belief in her abilities and right to make choices that serve in her best interest)* (Gentry et al., 2005). The researchers concluded that applying a Black feminist theoretical framework to the development and implementation of an HIV intervention enhanced its effectiveness in empowering high-risk Black women to utilize safer-sex negotiation skills.

By history, theorizing the lived experiences of Black women from a Black Feminist theoretical framework has been grounded in social and political collective action (Alina, 2015). Through Black Feminism, systems of oppression have been examined inter-sectionally as consisting of racial, gender-based, classist and sexual forms of marginalization (Collins P. ,

2009, pp. 24-48). As a result, social activism against oppressive systems through the lens of both race and gender distinguishes Black feminism from other second wave feminist paradigms. There have been key figures in the movement who have used social activism in the fight against racial and gender oppression (i.e. Sojourner Truth, Fannie Lou Hamer, Ella Baker and Angela Davis), and Black women have been at the forefront of collective social and political activism (Brown, Ray, Summers, & Fraisat, 2017). However, in her book, *Further to Fly: Black Women and the Politics of Empowerment,* Radford-Hill (2000) contends that decreased empowerment through engaged social activism has led to a regression in advancing racial and gender equality for Black women (Radford-Hill, 2000).

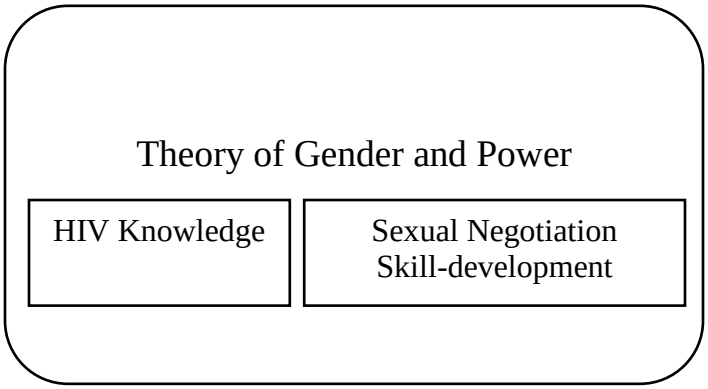
Radford-Hill's claim may be salient for understanding Black women's social response to the sexual dynamics that engender HIV risk for this population. For example, it may be prudent to examine the level of collective social activism among Black women toward the gender-based oppression experienced in Black heterosexual relationships. While the deleterious effects of intracultural forms of oppression (experiences of subjugation on Black women by Black men) are well documented regarding issues of intimate partner violence (Alston, 2012; McNair & Prather, 2004), less is understood about its impact relationally on the voluntary sexual behavioral practices of Black women. To bring attention to their over-representation of HIV incidence and prevalence rates, Black women may have to be the voices for themselves individually, and for the disproportionately-impacted population. A collective pronouncement of relational inequities in heterosexual relationships must address the intracultural oppressive systems that relegate Black women to a subjugated status. Black feminism has focused primarily on oppressive systems constructed by the majority population, and it is well-positioned to address intracultural systems within Black communities that have historically subjugated Black women within their

families and intimate heterosexual relationships. Patriarchal social norms have accorded Black men a privileged status within African American communities, and this has engendered a sexual hierarchy from which Black men have benefited within their heterosexual relationships (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009) . It would be important to examine how the experiences of subjugation serve as causal or correlating factors in the exercise of human agency in the promotion of mental and sexual health for Black women.

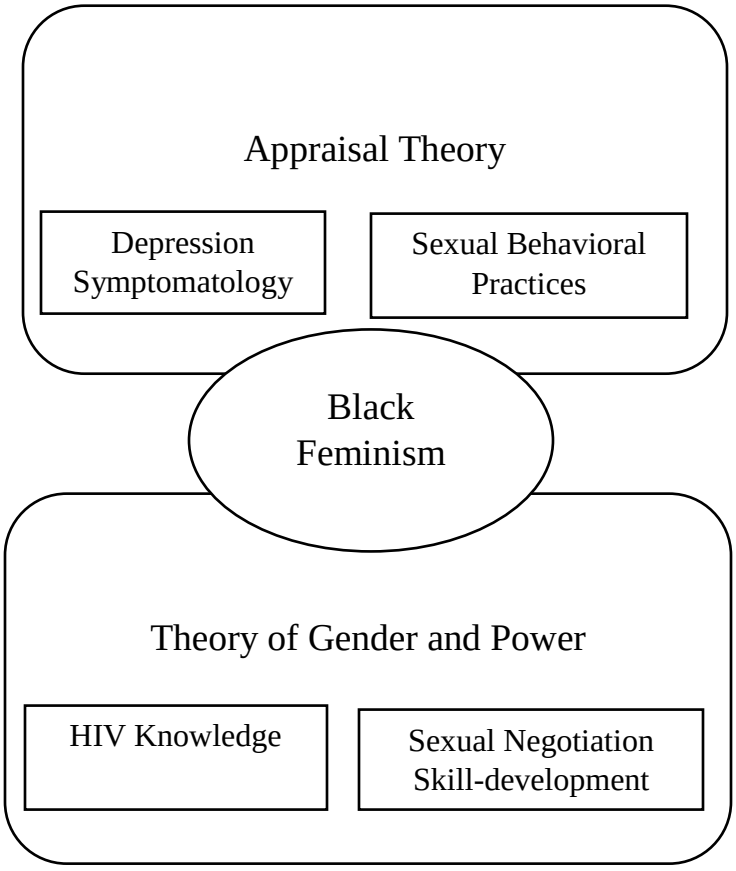
HIV prevention programs developed for Black women have provided significant context for understanding the sexual experiences of this population (Beadnell et al., 2003; Crepaz et al., 2009). The theoretical frameworks that have guided interventions have created strategies that have resulted in reduced rates of HIV for Black women in recent years (CDC, 2015). The integration of theories that examine sexual behavioral practices and psychological distress as indicators of HIV risk may add further context for understanding the unique sexual experiences of Black women. Figure 1.2 outlines the existing theoretical framework for conceptualizing HIV risk for Black women and provides a new theoretical construction for consideration of HIV risk for Black women.

Figure 1.3 Theoretical framework of HIV prevention for Black women

Existing Theoretical Framework of HIV Prevention for Black Women



New Theoretical Framework of HIV Prevention for Black Women



CHAPTER II: REVIEW OF THE LITERATURE

Since the introduction of HIV/AIDS antiretroviral treatment (HAART) in 1996, HIV has become a chronic illness instead of a death sentence in the United States. While other demographic groups have seen declines in rates of HIV, African Americans continue to experience disproportionately higher rates of HIV incidence (initial diagnosis), prevalence (living with HIV/AIDS) and mortality (dying from HIV/AIDS-related complications). This chapter provides a critical review of HIV disease in the United States, as it has impacted communities of color, particularly African Americans. The literature included in the review provides context for this impact through the lens of race and gender, explaining how and why Black women have been disproportionately represented across all courses of the HIV/AIDS disease spectrum. The literature review provides a conceptual framework that supports the rationale for exploring the relationship between mental health and sexual decision-making as potential risks for contracting HIV/AIDS among this population. This conceptual framework was used to guide the development of research questions and subsequent aims for studying this phenomenon among Black women.

Literature Review Search Process

To understand the prevalence of HIV risk for Black women and the efficacy of HIV prevention services targeting this population, a critical literature review of peer-reviewed articles, published dissertations and scholarly writings was conducted to explore theoretical frameworks that influence the design and implementation of HIV prevention programs; appraisals of sexual risk by Black women; incidence and prevalence rates for HIV contraction among this population; and empirical studies analyzing the efficacy of existing HIV prevention programs. Key search terms included: *HIV prevention, HIV intervention, group-level*

intervention, PrEP, attrition, retention, retention in care, African American (Black) women, African American (Black) heterosexual relationships, depression, mental health, health, sexual risk, sexual practices, meta-analysis and qualitative studies, social theories, behavioral theories and feminist theory. To conduct a critical review of the relationship between mental health and sexual risk decisions as indicators of HIV risk among Black women, a review of correlational studies examining relationships between depression and other chronic illnesses resulting from maladaptive coping behaviors was conducted using the following search terms: *diabetes, obesity, depression, psychological stress, emotional eating, health disparities, mental health, African Americans, African American women, primary care and prevention.* The search also included statistical data from the U.S. Census Bureau and national and statewide incidence and prevalence rates of HIV by gender, race and other HIV contractual risks; U.S labor statistics and health statistics for other chronic illnesses.

Review of the writings of prominent authors about the current and historical life experiences of African Americans in the United States served to provide added context for understanding the psychological stressors carried by a population of people who have experienced generations of oppression. Finally, the lived experiences and subsequent psychological impact discussed in these writings were explored for themes related to the exercise of agency in decision-making practices regarding the personal health of Black women, a vital topic for researchers to consider in HIV prevention research.

An Overview of the HIV/AIDS Epidemic

HIV, which stands for *H*uman *I*mmunodeficiency *V*irus, is a virus acquired through four primary modes of transmission (blood, seminal fluid, vaginal secretions and breast milk). HIV attacks the immune system by destroying human T-cells, which are white blood cells that protect

the body from disease and infection. The lower a person's T-cell count, the greater the risk for contracting various infections. A normal T-cell count is between 500-1600 per cubic milliliter of blood (DHHS, 2016). When a person with HIV has a low T-cell count, there is a greater chance for the progression of the disease. When an HIV-infected person's T-cell count falls below 200, the disease progresses to stage 3 AIDS, which stands for *A*cquired *I*mmuno*d*eficiency *S*yndrome (DHHS, 2016). There is currently no cure for HIV/AIDS, so individuals diagnosed with HIV will have to manage the illness for the remainder of their lives.

The first reported cases of AIDS in the United States were in 1981. However, surveillance data revealed reports of symptoms as early as 1976 in the United States (DHHS, 2016). The progression of the disease in the early 1980s was followed by thousands of deaths and high transmission rates, creating an epidemic that largely affected minority populations (CDC, 1986). However, presumptions of risk led to an assumption that White gay men were most affected (Hall, An, Hutchinson, & Sansom, 2008). Awareness of the disproportionate impact of AIDS on ethnic minority groups would not be revealed until years later.

Behavioral modes of transmission for HIV are intravenous drug use, male-to-male sexual contact and heterosexual contact (CDC, 2014). Men who have sex with men (MSM) of all races represent the highest risk group, primarily through male-to-male sexual contact. Women's primary transmission risk has been through heterosexual contact (Johnson, Cunningham-Williams, & Cottler, 2003). Even when women report a history of intravenous drug use (IDU), the likelihood of contracting HIV through heterosexual sex is greater than the risk from IDU. For example, in 2010, among Black women who were infected, 87% contracted HIV through heterosexual sex (CDC, 2012).

HIV and Race

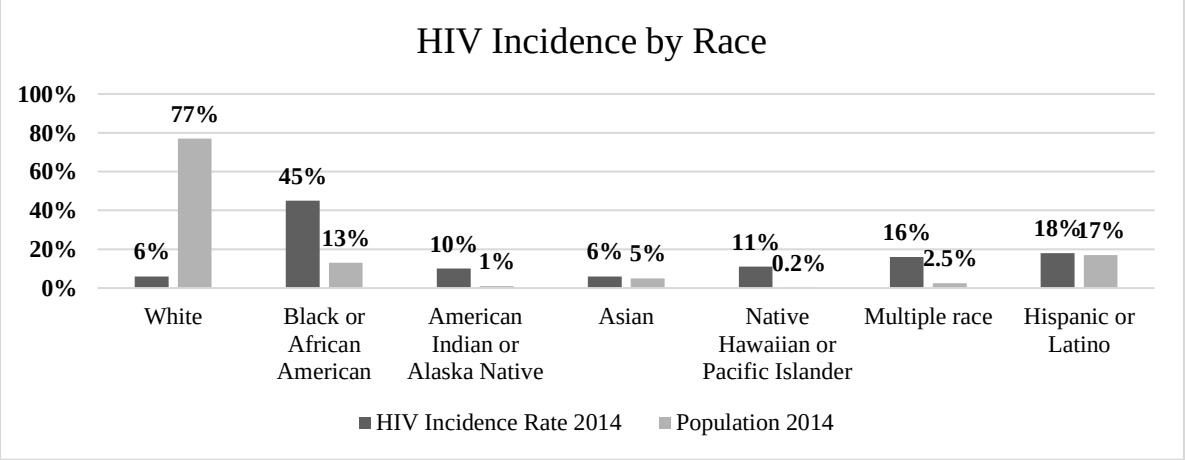
Over 45 million people have contracted HIV/AIDS worldwide, with more than half (24 million) being of African descent (Okigbo, Hall, & Ziegler, 2002). The HIV/AIDS pandemic has had deleterious effects on people of African descent at the individual, familial and communal levels (Hall, An, Hutchinson, & Sansom, 2008). These effects have been observed and continue to engender risks for contracting HIV/AIDS among Black people, both on the continent of Africa and in the United States (CDC, 2017).

Since the early years of the HIV/AIDS epidemic, African Americans and Latinos have been the most affected populations. HIV/AIDS is a chronic illness that impacts African Americans at higher rates than Whites and other minority groups in the United States (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). The CDC has reported that, as early as 1986, there was a disproportionate impact of AIDS on racial and ethnic minority groups in the United States (Laurencin, Christensen, & Taylor, 2008). By 1998, although African Americans represented 12% of the U.S. population, they accounted for 26% of AIDS cases (Okigbo, Hall, & Ziegler, 2002). In 2010, African Americans represented 49% of all deaths from HIV/AIDS, compared to only 3% of White Americans (CDC, 2012). From the beginning of the AIDS epidemic, HIV/AIDS incidence, prevalence and death rates have disproportionately impacted African Americans, and researchers have explored multiple factors resulting in the deleterious effects of the disease on this population (Sutton, Jones, Wolitski, Cleveland, & Dean, 2009). A key indicator of risk for this population has been knowledge of the disease and behavioral factors for transmission. Multiple qualitative studies reveal, through interviews and focus groups, the limited knowledge that Black men and women still have about HIV/AIDS (Billings et al., 2015).

Lack of knowledge and misinformation resulting from social and cultural stigma contribute to the ongoing higher rates of HIV incidence within African American communities.

There are over 1.2 million Americans living with HIV/AIDS in the United States (CDC, 2012). Within the United States, African Americans represent the highest risk group for HIV/AIDS transmission (CDC, 2012). Nationally, racial disproportionalities are observed in HIV incidence and prevalence rates, and they have significantly increased since the start of the epidemic over three decades ago. Over 44% of all new HIV infections in 2014 were among African Americans (CDC, 2014). Comparatively that year, 6% of new HIV infections were among White Americans, 18% were Hispanic and less than 10% were Asian. Among people living with HIV/AIDS, 41% were African American. Among those infected, 14% were unaware of their HIV status (CDC, 2014). Figure 1.1 illustrates the HIV incidence rates by racial comparisons within the United States.

Figure 2.1 HIV incidence data by race



CDC. (2014). *HIV Surveillance Supplemental Report 2014.* Atlanta, GA: Centers for Disease Control and Prevention

Disproportionalities by race are also observed at the state levels. New York State (NYS) has the fourth highest HIV incidence rate in the United States. Per capita, New York had 22.8

new HIV infections per 100,000 people in 2014 (CDC, 2014). Only Washington, D.C., Louisiana and Florida (states along the southeastern parts of the United States and with larger percentages of African American residents) had higher HIV infection rates.

The racial and gender disproportionality of HIV risk can be observed even at local catchment areas within upstate New York. Between the years of 2012-2014, the NYS Department of Health collected aggregate data of HIV/STD (sexually transmitted disease) rates at the county level and local municipalities. The tracking of Chlamydia infections in school-district geographic areas within upstate New York showed higher rates of infection in larger cities that also had larger minority populations. Within the Capital District, the cities of Albany, Schenectady and Troy had between 120% and 200% more reported Chlamydia infections than expected, and African Americans represented the largest minority group for infections within these cities (Epidemiology, 2015).

Albany and Troy are two of three major urban centers in New York's Capital Region. African Americans represent 13% of the population in Albany County and 6% in Rensselaer County, where Troy is located (Bureau, 2014). According to the 2010 U.S. Census, almost 98,000 people resided within the City of Albany. More than 30% of the population was African American, 5% Asian and 4% reported two or more racial identities. Approximately 9% of the population was Hispanic or Latino. The City of Troy is the largest city in Rensselaer County, with a population of 50,000. Over 16% of the population in Troy was African American, 3% Asian and 4% identify with two or more races (Bureau, 2010). There are five geographic neighborhoods that are primarily comprised of low-income housing within the City of Albany, four within the City of Troy. Over 65% of African Americans in Albany County live within

these geographic catchment areas, along with 68% of African Americans living in Rensselaer County's low-income areas (Bureau, 2010).

HIV comparison data for the Albany Ryan White Region (which is comprised of Albany and Rensselaer counties) showed that from 2008-2010, there was an almost 50% increase in new HIV cases over the previous three-year period (2005-2007). Although all racial/ethnic groups observed increases in new diagnoses, African Americans had the highest increase, almost 40% (Institute, 2010). Within the Albany Ryan White Region, over 60% of people living with HIV/AIDS were representative of an ethnic/minority group.

HIV, Race and Gender

When considering HIV's national impact through the intersection of race and gender, men who have sex with men (MSM) of color have higher HIV incidence and prevalence rates than their White counterparts (CDC, 2012). One sub-group of the MSM population includes men who have sex with men and women (MSMW). Black MSMW (BMSMW) experience higher rates of psychological stress than their White counterparts due to the combination of both racial and heterosexual-based oppressions (Dyer, et al., 2013). The stress of living as a dual minority that stigmatizes along racial and sexual margins contributes to higher rates of substance abuse and mental health pathology among BMSMW, including increased depression symptomatology and engagement in sexually risky behaviors (Dyer, et al., 2013). Pitonak (2017) argues that multi-layered social conditions, not just personal events, contribute to stress that may result in psychopathology for Black men who have sex with men and women. When left untreated, this mental health pathology can contribute to increased risky sexual practices among Black men. This increases the risk for contracting HIV or an STD, which in turn

collaterally increases risk for the Black women with whom these men engage in unprotected sexual intercourse (Pitonak, 2017).

Impact of Current Strategies in HIV Prevention

In 2010, the White House developed a strategic plan to combat the progression of HIV/AIDS in the United States (CDC, 2015). The plan became known as the National HIV/AIDS Strategy. There were four primary goals: 1) reduce new HIV infections; 2) increase access to care and improving health outcomes for people living with HIV; 3) reduce HIV-related disparities and health inequities; and 4) achieve a more coordinated national response to the HIV epidemic. Under the National HIV/AIDS Strategy, the CDC provided over $216 million in 2010 to 90 community-based organizations to implement prevention programs to high risk populations. Prevention programs have been effective at reducing new HIV infections for some populations. For example, prevention strategies were effective in reducing transmission rates among White MSM during the 1990s (McNair & Prather, 2004).

Social and behavioral factors that place Black women at risk for contracting HIV/AIDS include: 1) unprotected heterosexual contact; 2) injection drug use (IDU) and; 3) high psychosocial stress (CDC, 1986; McNair & Prather, 2004). HIV prevention programs for Black women have primarily focused on reducing unprotected heterosexual risk behavior, which is the primary behavioral mode of transmission of HIV among Black women (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). The research on sexual risk behaviors has examined mediating factors that impact women's decisions to engage in unprotected sex with their male partners. It was determined that decisions by Black women to engage in unprotected sex are influenced by social, cultural and economic factors (MacMaster, Rasch, Kinzly, Cooper, & Adams, 2009). While these factors engender some understanding of the lived experiences of Black women, the

field of social work practice has not been included in discourses about mental health risk in assessment and treatment frameworks for HIV prevention.

PrEP: Pre-exposure prophylaxis (or PrEP) is a form of treatment for individuals at high risk for contracting HIV. PrEP was approved by the CDC for use as an HIV prevention treatment option in 2013 (CDC, 2015). PrEP is a combination of two antiretroviral drugs sold under the name Truvada, which can be taken daily by HIV-negative individuals who are at high risk for contracting HIV. Target populations for PrEP include individuals who are IDU, MSMs and individuals in HIV sero-discordant relationships (i.e. HIV negative individual in a relationship with an HIV positive partner). When consistently adherent, individuals taking PrEP have more than a 90% chance of avoiding transmission of HIV during sexual intercourse (CDC, 2015).

PrEP has been effective in reducing HIV risk among heterosexual HIV sero-discordant couples (i.e. relationship between an HIV-negative partner and an HIV-positive partner) participating in clinical control trials and high-risk men who have sex with men (Curran & Crosby, 2013). In 2012, a study of African American women's receptivity to PrEP treatment was conducted (Flash, et al., 2014). Participants were assigned to focus groups to discuss their knowledge and understanding of PrEP as an HIV prevention method. They were then asked their motivation to utilize PrEP as an HIV risk-reduction treatment. Findings from the study revealed participants' acceptance of PrEP for prevention treatment (Flash, et al., 2014). However, preliminary studies of PrEP utilization by Black women have shown marginal results in reducing HIV incidence rates due to inconsistent use and follow up (Flash, et al., 2014).

Current prevention strategies targeting Black women involve culturally-relevant messages and behavioral interventions that attempt to reduce stigma, empower women and

increase knowledge of HIV risks (Flash, et al., 2014). In 2013, a nationwide study was conducted to examine psychosocial factors, sexual behaviors and social phenomena on the acceptance of PrEP among Black and White women (Wingood et al., 2013). Results found that women at increased risk of contracting HIV were receptive to using PrEP as a prevention method, but there were real social and political barriers that impacted adherence (i.e. access to care, availability of meds). Specifically, women who reported challenges with getting to medical appointments were less likely to consistently adhere to treatment. There were also reports of perceived difficulty getting medication when women lacked medical insurance. More Black women reported these barriers than White women.

Since the approval of PrEP as a prevention method, there have been a few exploratory studies with Black women that have examined sociodemographic and other factors that impact their receptivity to using PrEP as prevention treatment (Wingood et al., 2013). Insights gained from studies of this kind can inform medical providers, educators and HIV advocates of best practices in engaging Black women in PrEP prevention.

Nationally, over 80% of Black women diagnosed with HIV reported contracting the disease through unprotected heterosexual contact with a male partner (CDC, 2014). In 2015, one study examined the sexual behavioral practices of older adult women in the greater Los Angeles area. Many women reported decisions to engage in unprotected sex with a male partner due to perceived low risk (Altshuler & Rhee, 2015). Another factor contributing to engagement in unprotected sex included decreased concerns about unplanned pregnancy due to menopause. Participants considered condom use primarily as protection against pregnancy. However, it was found that many women lacked knowledge of HIV risk, along with knowledge of ways to negotiate condom use with their partners (Neundorfer, Harris, Britton, & Lynch, 2005). Despite

investment in and the subsequent gains from targeted HIV prevention services, the sexual behaviors of Black women continue to be complex and multivariate.

Compared to women of other racial categories, Black women experience more psychosocial stress, have greater health disparities and poorer health outcomes (MacKay & Rutherford, 2012). There is a dearth of research examining the deleterious effects of the relationship between these disparate outcomes and mental health. Furthermore, few HIV prevention programs have addressed the mental health of Black women, which may be a causal factor for the sexual behavioral risk factors McNair and Prather examined (McNair & Prather, 2004).

Social and Cultural Contexts of HIV Risk among Black Women

Cultural Norms and Values: Social and cultural values are vitally important to African Americans, which have served to restore a sense of identity robbed from them by a systemic and coordinated removal of Africa's historical contribution to the world's anthropological narrative. African American descendants, whose lineage can be traced to the African slave trade, lost many of the African traditions that were practiced for centuries in their homeland (Myers 1988). As a result, people of African descent living in Western civilizations have struggled to overcome "an obstructive view of the self", that has been strategically infiltrated by a Eurocentric conceptualization of American history (Robinson, 2000). This obstruction is articulated in Du Bois's description of a "double-consciousness" experienced by African Americans, whereby the view of self (and subsequent sense of value and worth) is interpreted through the "eyes of others"; the "other" representing a people who interpret the African descendent with "contempt and pity" (Du Bois, 1903). People of African descent have consequently integrated flawed and inaccurate interpretations of their historic contributions to civilization, knowledge and global

scholarship. It has subsequently been the burden of Blacks to embrace this double consciousness in identity formation by expanding their knowledge of Africa's cultural influence on the civilized world. The recovery from having to rewrite a historically-flawed narrative of history has placed a psychological burden on the African descendant to take control of his/her own healing process, while conjointly integrating a renewed sense of self (Myers, 1988).

Strategic efforts by African descendants to unlearn and restore a sense of identity, rooted in African traditions, gained prominence within the last 100 years (Robinson, 2000). However, the Eurocentric patriarchal family system and Puritan-based sexual values and customs continue to be exercised in African American family structures, resulting in practices of oppression and marginalization along gender lines (Collins, 2000).

Historically, African cultures had more egalitarian gender roles that recognized the contributions of both men and women (McLoyd, Hill, & Dodge, 2005). Women shared prominent positions with men through institutional assignment to roles, governance positions and familial leadership (Robinson, 2000). This egalitarian structure was lost when people of African descent were forced, through the institution of slavery, to adopt Eurocentric male/female relational structures that were stratified by new gender norms that disempowered women (Staples, 1981). This historical review of the systemic disenfranchisement of traditional African cultures and norms has implications for understanding current relational challenges inherent in African American heterosexual relationships. These challenges highlight ecological phenomena within heterosexual relationships that help explain sexual behavioral factors that increase HIV risk among Black women.

High incidence and prevalence rates for HIV/AIDS among African Americans are impacted by social and cultural norms that influence sexual behaviors within African American

communities. It is believed that social and cultural experiences influence behavior. Through his Interpersonal Theory of Psychiatry, Sullivan (1953) posited that people are social and cultural beings who require interaction with one another, and that psychological distress is "acquired through an empathic linkage…" with a significant other in a person's life (Sullivan, 1953). Sullivan believed that these linkages were established in early childhood and subsequently provided a framework for the development and navigation of human relationships throughout life. Fundamental to these relational linkages are constructions that Sullivan believed to be grounded in social and cultural norms and values.

This conceptualization of human behavior is particularly salient for understanding the sexual behavior of Black women. The literature shows that safe-sex practices by Black women are often predicated on a woman's relationship goals (Zawacki, et al., 2009). In a study of women's relationship motivation, partner familiarity and alcohol use on sexual behavior, researchers learned that women with strong relationship goals were more likely to decline the option of negotiating condom use if there was a perceived threat to the relationship. Research has also shown that Black women are more likely to partner with Black men than with men from other races (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009).

Additionally, the sexual practices of Black men have been examined in the literature (Jarama, et al., 2007; Chandra, et al., 2011). Within African American communities, cultural norms permit men to have more sexual freedom than women. This sexual freedom, which consents sex with multiple partners, is not accorded to women (Lorde, 2015). The sexual freedom accorded Black men is further supported by a recognizable sex-ratio imbalance within African American communities. Due to the larger population of Black women (compared to available Black men), Black men have more relational options among Black women (Bureau

2015). Moreover, Black men and women have traditionally struggled to engage in healthy sexual communication (Jarama et al., 2007). These multilateral levels of risk render Black women vulnerable to HIV/AIDS by compromising their ability to make protective sexual decisions for their personal health.

Among men who have sex with men (MSM) of all races, HIV/AIDS rates are disproportionately higher among Black MSM. Nearly one in two Black MSM is at risk of contracting HIV in his lifetime (CDC, 2014). Black MSM are more likely to have sex with multiple partners and engage in intravenous drug use (Sedlacek, 2006). Subsequently, the risk to Black women who engage in unprotected sex is especially significant, as the bisexual contacts between Black men who have multiple unprotected sexual encounters and Black women is a leading cause of the high rate of HIV transmission among Black women (McNair & Prather, 2004). The data reflecting high transmissions rates among Black women indicate reduced or inconsistent application of risk-reduction methods when making sexual decisions (Harvey, Bird, Galavotti, Duncan, & Greenberg, 2002).

Despite Black women traditionally managing dual roles within their families, culturally they tend to be more relational in their sexual orientation (Myers, 1988). This is most demonstrative in women's consideration of the needs of others over their own needs as they strive to preserve key social relationships. This is consistent with core values traditionally held among African Americans. Myers posits that these core values prioritize the needs of the family over the needs of the individual (Myers, 1988). The history of slavery in the United States, which systematically disenfranchised and marginalized slaves by fracturing family and communal systems, created a culture among African Americans that prioritized the family unit over any individual. However, the burden of preserving the family unit was disproportionately

weighted on Black women (Collins, 2000). By history, Black women have shouldered this burden in isolation, adapting learned behaviors for ignoring their own self-care needs (Black & Peacock, 2011). This cultural perspective was indicative of the central beliefs that Black women held about their perceived HIV risk in the Jarama et al. study (2007). Participants reported that their sexual knowledge came directly from parental figures who defined gender roles by degree of importance to the family system (Jarama, Belgrave, Bradford, Young, & Honnold, 2007). The study concluded that family and cultural norms influenced both, sexual behaviors and perception of sexual risk. Traditional sexual roles among African Americans are structured under power differentials between men and women, and role definitions that are unevenly stratified along gender lines (consistent with the tenets of the Theory Gender and Power). These traditions have implications for HIV risk for Black women.

The women in the Jarama et al. study also reported low perceived HIV risk, despite not always being aware of the sexual behaviors of their male partners. If the family was intact (representative of being in a committed relationship), women considered their HIV risk to be low to non-existent. Research findings support perceptions of HIV risk being predicated on the existence or perception of a monogamous relationship (Hobfall, Jackson, Lavin, Britton, & Shepherd, 1993). Some women perceived their HIV risk levels to be low despite their knowledge of the modes of transmission for HIV (Jarama et al., 2007). It was the existence of a perceived monogamous relationship that engendered more feelings of safety against contracting HIV.

Social Norms and Values: Values, norms and beliefs are often disseminated through parental communication in early childhood, and communication occurs through verbal discussions and observed behaviors (Moore, 1986). Parental communication of values around

sex is a critical component of a child's sexual development (Somers & Anagurthi, 2014). Furthermore, clear and consistent parental communication about sexual values has been shown to influence: 1) the timing of sexual initiation; 2) the number of sexual partners and; 3) the use of contraception (Aspy, 2007). It has been found that inconsistent and inaccurate communication about sexual values results in earlier initiation of sexual intercourse, sex with multiple partners and decreased use of sexual protective devices when engaging in heterosexual intercourse. Misinformation and inconsistent communication about sex have been observed in families of low socioeconomic status and families from diverse cultures (Santelli, Lowry, Brener, & Robin, 2000). Attitudes toward sex and subsequent sexual behavioral practices are often predicated on traditional values, norms and beliefs, which have been known to be inconsistently conveyed to children in Black families (Aspy, 2007). Inconsistent communication about sexual attitudes may contribute to under-developed sexual values, which may influence individuals' sexual practices.

Social and Cultural Stigma: Other qualitative studies have sought to understand the phenomenon of engagement in high-risk sexual behaviors among Black women (Wingood et al., 2013). In a qualitative study examining sexual risk behaviors among a group of Black women living in a low-income housing development in rural North Carolina, twenty-four women were recruited to participate in five focus groups to respond to semi-structured interview questions. Researchers sought to test the hypothesis that gender and power dynamics, combined with poverty and low employment, would serve as mediating risk factors in decisions to engage in high-risk sexual behaviors among low-income Black women (Bontempi et al., 2008). The sex-ratio imbalance in Black relationships was a contributing factor in decisions to remain in relationships. The lack of available men influenced decisions to remain in relationships even when respondents expressed dissatisfaction over unmet needs. Although participants of the

study acknowledged the men in their community as not being worthy of them, some maintained their relationships for perceived economic benefit (Bontempi et al., 2008).

Some participants of the Bontempi et al. study sought to take their power back in their heterosexual relationships. Despite the cultural stigma associated with singlehood in African American communities (Choi et al., 2011), Black women have been known to choose singlehood over unhealthy heterosexual relationships. In the Bontempi et al. (Bontempi et al., 2008) study, some of the women were empowered enough to accept the risk of taking care of their children alone and enduring poverty rather than remain in relationships that could potentially place them at risk of contracting HIV. Some participants received regular HIV tests, and others felt comfortable exercising safe-sex practices by using condoms or insisting that their partners get tested. Findings from the study showed Black women able to assert their health care needs, despite living under stratified social conditions and cultural norms that marginalized them. The study revealed the strength of Black women who were motivated to reduce their risk despite the impact of cultural stigma associated with singlehood. The study also found a motivated population of women who used strength and resilience to try to move their families out of poverty. While the selection of available men was a factor in many women's decisions to remain in relationships, findings also revealed a population that exercised self-protective sexual behaviors, while also considering family needs (Bontempi et al., 2008).

A key limitation of this study, as revealed by the researchers, was the small sample size (n=24) that came from a small rural community in the South. Concerns about confidentiality may have contributed to response bias to the sexual risk behavior questions for this small homogenous community. There was also the risk of social desirability bias, whereby respondents may have been less than truthful about reporting their beliefs and practices before

their peers. While a study of this kind generated knowledge about HIV risk among Black women in the south, it is difficult to generalize findings to a broader range of Black women in the United States. Because Black women continue be at higher risk for contracting HIV than women of other races, further study of sexual risk behaviors for this population is needed. Due to the persistent stigma of HIV/AIDS (McNair & Prather, 2004), future studies must consider the impact of social desirability as a potential threat to the internal validity of sampling data collected on HIV sexual risk among Black women.

Gender-based Norms: In other studies, Black women perceived themselves as being primarily viewed as sexual objects (Jarama, Belgrave, Bradford, Young, & Honnold, 2007). Historically, the sexual objectification of Black women emerged during the slavery experience in America, whereby female slaves were denied ownership of their own bodies and overly sexualized, often as a means for white slave owners to justify their acts of persistent sexual assaults on female slaves (Collins, 2009). Women are objectified through descriptions of their physical appearance, specifically their body measurements, and sexual descriptors are ascribed to Black women more often than to White women (Jarama, Belgrave, Bradford, Young, & Honnold, 2007). Because Black women are more likely than women of other races to be sexually objectified, any understanding of the sexual practices within African American relationships must also be examined within the context of historical gender-based cultural norms.

Depression and Black Women

Depression Prevalence: Women have higher rates of depression in the United States than men. Over 12 million women suffer with depression within any one-year period, compared to 6 million men during the same period (NIMH, 2011). Among African Americans, women also have twice the rate of depression than men (13% and 7% reported respectively in 2011) (Ward,

Wiltshire, Dedtry, & Brown, 2013). The 2014 National Institute of Mental Health statistics revealed that women had nearly double the rate of experiences of major depressive episodes within a 12-month period than men (8.2% of women compared to 4.8% of men). Among all women in the United States, Black women represented 5.8% of reported depressive episodes. (NIMH, 2014). There are disparate findings from studies examining correlations between race and gender for depression. Some studies have shown little variability of depression prevalence among Black and White women (Jones, 2008). Comparatively, there is research that shows higher rates of depression among African American women than exists for White women (Ward & Heidrich, 2009). In a study of Black women's beliefs about mental illness, stigma and preferred coping behaviors, researchers postulated that stratified sociopolitical experiences, combined with the burden of high psychosocial stress, place Black women at higher risk for depression (Ward & Heidrich, 2009). This is consistent with other studies that show correlations between depression prevalence and higher levels of psychosocial stress, both in chronicity and severity among Black women (Carrington, 2006).

In a longitudinal study examining the course of depression during an 11-year period among Black and White women, researchers tested the hypothesis that women would have similar traits of the illness over the course of their lifetimes, regardless of race (Brown, Bromberger, Schott, Crawford, & Matthews, 2014). Participants were middle age, with the average age being 46 years. Findings revealed no difference by race of reported depressive symptoms at baseline. However, over the course of the 11-year period, Black women reported more experiences of psychosocial stress and more depressive episodes than White women. Findings from this longitudinal study highlight differential interpretations of depression prevalence among Black and White women. Depression prevalence data can show little

variation when considering race and ethnicity. Concurrently, the recognition of higher levels of psychosocial stress experienced by Black women reveals higher rates of depressive episodes for this population over time. This new knowledge is particularly salient for assessing depression in Black women during the years when they are at the highest risk for contracting HIV/AIDS. HIV incidence is higher among Black women between the ages of 18-34 (CDC, 2014) and it would be important to screen women during these formative years of major psychological and social adjustments to adult stressors.

Depression among Black Women: Examining race and gender as co-variates in depression prevalence necessitates further critical review. This is largely due to our current understanding based on reported cases of depression by Black women willing to disclose (Watson & Hunter, 2015). Depression as experienced by Black women is rightfully framed within the context of structural and systemic forms of oppression (Carrington, 2006). However, this macro conceptualization of the impact of racial and gender-based oppression does not include the mezzo-level systems that cause psychological distress for Black women.

Intracultural norms within Black communities perpetuate relational imbalances that marginalize Black women within their own cultural networks (i.e. family, intimate relationships, residential and religious communities). The layers of structured oppressive systems within Black women's personal spheres are contributory to the reported severity and duration of depressive episodes experienced by this population (Carrington, 2006). From an appraisal theoretical framework, the experiences of cumulative psychosocial stressors without sufficient emotional resources that are traditionally provided within one's communal environment, can create unsustainable mechanisms for healthy coping. However, the field has not examined depression among Black women within this context. Understanding depression etiology and prevalence

rates among this population necessitates the inclusion of a Black feminist theoretical conceptualization of the emotional impact of both, structural oppressive systems and intracultural forms of gender-based oppression within Black communities.

Considering the intersection of psychological stress and income, research in this area has postulated that experiences of poverty increase psychological distress and that high levels of psychological distress compromises a woman's ability to concentrate on her health (Ickovics, et al., 2002). Some studies have explored the intersection of race, stress and income as indicators of higher psychological distress, which may impact motivation to utilize safe-sex practices among Black women (Beadnell et al., 2003; Braveman et al., 2005; Gurung et al., 2004; McNair & Prather, 2004). Because Black women are more likely to live in poverty than women of other races, it has been postulated that the stress and demands of meeting needs with limited financial resources may be correlated with increased sexual risk behaviors (McNair & Prather, 2004).

Depression Treatment and Utilization: Findings from another study (Brown, et al., 2014) revealed that Black women were less likely to seek treatment during a depressive episode than were White women. This is consistent with prior studies that showed racial disparities in mental health outcomes for Black women due to lower utilization of mental health services (Gonzalez, et al., 2010). A key factor in the under-utilization of mental health services by Black women is economic constriction (i.e. lack of insurance, inability to pay for supplemental medical costs, transportation) (Watson & Hunter, 2015). However, when controlling for income levels, Black women were still less likely to utilize mental health services, compared to women of other races within the United States (Padgett, Patrick, Burns, & Schlesinger, 1994).

A positive attitude toward mental health services has been shown to contribute to greater utilization. In African American communities, there is great stigma is associated with both the

concept of mental health and the need to seek mental health services (Padgett, Patrick, Burns, & Schlesinger, 1994). In some qualitative studies, Black women have reported perceptions that people with mental illness have a "weak mind…", and that being diagnosed with a mental illness evokes "shame" and embarrassment (Ward, Wiltshire, Dedtry, & Brown, 2013). Thus, fear of stigma has been deemed an additional barrier to utilizing mental health services among Black women.

Attitudes about mental health are also influenced by people's experiences with mental health systems. For Black women, barriers to seeking mental health have been identified and include limited availability, timely access to care and poor quality of care (Ward, Wiltshire, Dedtry, & Brown, 2013). African Americans who have had negative experiences with mental health services are less likely to seek services in the future when needed (Williams, 2008).

Additionally, a certain characterization of the "*strong black women"* has been identified as a barrier to Black women recognizing their mental health needs and accessing services for support (Watson & Hunter, 2015; Chatters, et al., 2008). The concept of the "strong black woman" represents a practice by Black women to exercise strength and resilience as a coping mechanism against racial and gender-based oppression. This is often executed in isolation, which ironically is perceived as a virtue within Black communities (Black & Peacock, 2011). Black women have reported being more likely to utilize other social supports during periods of psychological distress, and a key social support has been religion (Carrington, 2006). Religious practices such as praying and talking with a minister are central coping behaviors for many Black women, and they are more likely to seek religious support or support from family and friends over mental health services (Chatters, Taylor, Jackson, & Lincoln, 2008). However,

these religious supports may be complicit in perpetuating the "strong black women" schema by encouraging Black women to endure in the present, while waiting for liberation in an "afterlife".

HIV prevention services targeting Black women should consider incorporating cultural, social and psychological perspectives that impact utilization of prevention services for both HIV and mental health. To add breadth and depth to HIV prevention services for Black women, it is incumbent that HIV prevention considers the ways in which untreated mental health may conjointly impact utilization of HIV prevention services and treatment.

Depression and Maladaptive Coping Behaviors: Depression affects an individual's capacity to engage in self-care activities (APA, 2013). When trying to manage other stressors, attention to healthcare needs and risk-reduction practices become less of a priority when a person is depressed (Gurung et al., 2004). Chronic stress often correlates with incidences of depression. The combination of persistent and severe stress, along with inadequate coping resources, provides an incubator for major depressive episodes (Gurung et al., 2004). Depressed women are more likely than non-depressed women to experience a level of indifference to their healthcare needs (Klein, Elifson, & Sterk, 2008).

Considering the impact of psychosocial stressors on affective responses, Beck's theory of cognitive and behavioral intersectionality explains associations between depression, dysfunctional thinking and maladaptive coping responses (Beck, 1995). Beck postulated that negative affects influence feelings about one's self, but also frames cognitions and behaviors that influence the level of attention to a person's self-care needs. It is hypothesized that people with impaired cognitive processing abilities store negative automatic thoughts that lead to negative affective responses. These negative affective responses are believed to trigger maladaptive coping behaviors (Beck, 1995).

Individuals suffering with affective disorders, such as depression, are believed to be more likely to engage in risky behaviors that jeopardize their health. Negative emotions occur concurrently with impaired cognitions, which impacts decisions regarding one's health (Sales, Lang, Hardin, DiClemente, & Wingood, 2010). Sales et al. (2010) posit that this level of impaired cognition increases the risk of depression, which can increase the likelihood of affected individuals to engage in high-risk sexual behaviors. This was observed during a study of adolescent teens. Depression and the incidence of STD-associated risk behaviors were shown to be correlated (Sales, Land, Hardin, DiClemente, & Windood, 2010). Research has shown that African American adolescent girls have higher rates of depressive symptoms than girls of other races (Wight, Sepulveda, & Aneshensel, 2004). These studies suggest that depressed African American adolescent girls are more likely to engage in HIV/STD-related sexual risk behaviors than adolescent girls who are not depressed, and this finding may explain depression's impact on adult female sexual behavior.

Depression has been examined as a risk to other chronic health outcomes. Black women are overrepresented for several health disparities, (Haynes-Maslow, Allicock, & Johnson, 2016; Marrero et al., 2015) and findings can be juxtaposed with risks related to HIV/AIDS disease. Considering depression symptomatology as correlates for disease progression, the National Institute of Mental Health funded several research projects that examined relationships between depression and diabetes progression (Lin et al., 2010; Marrero et al., 2015; Schmitz et al., 2015). In a longitudinal cohort study of over 4000 primary care patients diagnosed with diabetes, major depression among participants was associated with a significantly higher risk of microvascular complications (e.g. blindness, renal failure and amputations) and macrovascular complications from diabetes (e.g. stroke and increased cardiovascular procedures) (Lin et al., 2010). Medical

providers in primary care settings have since integrated depression screens into their assessments of patients with diabetes. Treating depression symptoms early in diabetes care has resulted in decreases in complications from the disease (Marrero et al., 2015).

While the study reveals correlations between depression risk and diabetes incidence and progression, other studies have shown no relationship between depression and diabetes risk and progression. However, several of these studies were conducted in the UK and Australia with more homogenous populations that had lower risk for diabetes onset (de Groot, Anderson, Freedland, Clouse, & Lustman, 2001). The disproportionate rate of diabetes among African Americans in the United States, combined with the experience of high psychosocial stress, calls for an integration of depression in the treatment of diabetes among African Americans.

In other correlational studies, depression was also associated with rates of obesity (Kodjebacheva, Kruger, Rybarczyk, & Cupal, 2015). Obesity is defined as having excess body fat and is measured by a person's body mass index (BMI). Obesity increases the risk for other medical complications like cancer, diabetes, heart disease, arthritis and stroke. Anyone with a BMI of 30 or greater is considered obese and is at greater risk for these medical complications (CDC, 2010). Non-Hispanic African American women have the highest rates of obesity (42%) in the United States (CDC, 2010).

In a cross-sectional study of residents in Flint, Michigan, researchers investigated race and gender in association with correlating incidences of depression and obesity (Kodjebacheva, Druger, Rybarcyzk, & Cupal, 2014). Almost 3400 participants completed three waves of surveys that captured the multiple variables being analyzed. Most participants were White, but the mean BMI was highest among African Americans. Results showed a distinct relationship between depression and obesity among Black women. Findings supported other collateral

studies that revealed the deleterious effects of psychological distress on BMI and the disproportionate mediating impact when controlling for race and gender (Kodjebacheva, Druger, Rybarcyzk, & Cupal, 2014).

Several biological and behavioral factors were identified as contributing to the link between depression and obesity. For example, it has been suggested that psychological distress increases cortisol levels, which increase the body's fat storage (Marniemi, et al., 2002). There is also a contention that psychological distress may increase the consumption of high calorie foods or binge eating, while concurrently reducing the motivation to exercise (Canetti, Bachar, & Berry, 2002).

Among Black women, adverse stress experiences have been shown to impact emotional eating behavior that contributes to obesity (Sims et al., 2008; Adriaanse et al., 2009). From a cultural standpoint, racialized and gender-related stressors experienced by Black women correlate with maladaptive coping mechanisms that result in pathological responses to stress, such as emotional eating. Emotional eating is defined as the consumption of high fat/high caloric foods during periods of increased stress (Diggins, Woods-Giscombe, & Waters, 2015). The concept emerged out of psychodynamic theory, which explains the ways in which individuals adopt maladaptive behaviors that serve to numb distressful feelings associated with high psychosocial stressful situations. Emotional eaters are unable to differentiate between physiological hunger states and stress-related eating (Sims, et al., 2008).

In one study of emotional eating behaviors among Black women, researchers studied a sample of 104 female students at a predominately Black college in northeastern United States. The women were given questionnaires that measured various stressors, emotional eating behaviors and BMI (Adriaanse, de Ridder, & De Wit, 2009). While there was no relationship

found between emotional eating and BMI, there was a significance in relationship among the women's reports of emotional eating and their perceived and contextualized stress experiences.

Within African American communities, social and cultural norms influence behavioral responses. Food is an integral part of African American culture, and it has traditionally been central to bonding people in all forms of celebration and communal gatherings (McLoyd, Hill, & Dodge, 2005). Further, Black women have been the primary preparers of food for celebratory events. As a result, Black women have conceptualized food and eating as interpretative of experiences of joy and celebration (McLoyd, Hill, & Dodge, 2005). Therefore, it is understandable how Black women who engage in emotional-eating behavior develop appraisals of food as a stress-reducer.

Understanding the impact of psychosocial stress on sexual behavioral practices and emotional eating can be explained though the lens of appraisal theory. Appraisal theory posits that thoughts and emotions are inseparable and arise out of one's appraisal of environmental threats and available resources to cope. This perception of threat is highly subjective. Any imbalance between the perceived threat and available resources affects the degree of emotional distress, which influences one's choice of coping strategies (Ellsworth, 2013). We are organically-wired for emotional protection against psychological distress. Our protective responses may be influenced by social and culturally-influenced experiences within our environments.

Implications of these findings provide important information for prevention against persistent health disparities experienced by Black women. The research has shown the deleterious effects of the correlation between depression and various medical disorders (Marrero et al., 2015; Schmitz et al., 2016). Interventions that address mental health risk have been shown

to decrease disease incidence and progression. Findings show that decreasing depression, and the subsequent maladaptive coping behaviors that result, improve decision making in self-health promotion. This has significance for understanding sexual negotiations among Black women. The experience of high psychosocial stress may also engender maladaptive coping strategies for similar numb-seeking outcomes. These maladaptive coping strategies may compromise safe-sex behaviors for Black women. Providing HIV prevention services that address the co-occurrence of affective disorders and maladaptive coping responses may have a positive effect on the sexual behavior of Black women who engage in heterosexual intercourse.

Sexual Risk Behavior

Decision-making involves a cognitive process that weighs the risks and rewards of a behavioral choice. Decision making is influenced by a variety of environmental influences (Doya, 2008). The process occurs in four steps: 1) recognition of a present situation; 2) evaluation of risk and rewards among choice options; 3) selection of an option based on one's needs; and 4) re-evaluation of option choices based on outcomes (Doya, 2008, p. 411). In accordance with appraisal theory, individuals make self-preservation-guided decisions based on their appraisals of potential threats within their environments and available resources necessary to cope. Therefore, appraisals both engender and influence behavior.

Sexual behavior is related specifically to decisions regarding when and how to engage in sex with a partner. The sexual decision-making process involves exercising one's judgment when deciding to participate in sexual intercourse. The risk/reward assessment process is influenced by the level of psychosocial stress experienced, weighed against appraisals of available resources to cope with those stressors (Balleine, Delgado, & Hikosaka, 2007). If stress

progresses to psychological distress, appraisals of sexual risk may be compromised, impairing the ability to engage in self-protective sexual behavioral practices (Zawacki, et al., 2009).

HIV Prevention – An Analysis

Overview of Correlational Studies of Depression and Sexual Risk Behaviors: HIV prevention programs for Black women show retention rates as low as 44-54% for participants experiencing emotional distress or high psychosocial stress (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). This is consistent with observations in medical studies that examined associations between depression and treatment adherence for medical disorders. In the (Project Fast) Female Atlanta Study (Klein, Elifson, & Sterk, 2008), researchers examined psychosocial life challenges and HIV risk behaviors among adult Black women deemed to be at-risk for contracting HIV. The study tested the hypothesis that Black women who reported depression would be less motivated to protect themselves from health risks like contracting HIV (Klein, Elifson, & Sterk, 2008). Additionally, the researchers postulated that depressed women would also have more negative attitudes towards condom use. Results of the study supported the researchers' hypotheses. Although this was a small sample size of predominately Black women in the Atlanta, Georgia area, results provided some knowledge about the relationship between depression and motivation to reduce sexual risk behaviors among African American women in the south.

Results from a meta-analysis of several studies exploring the effects of HIV prevention programs on self-reported depression and engagement in high-risk sexual behaviors among women also showed the impact of programs on depression and women's motivation to engage in safe-sex practices (Lennon et al., 2012). The meta-analysis explored studies conducted between 1993 and 2010 that examined: 1) how sexual risk behavior and depression levels changed for

women who completed program; 2) correlations between the degree of change in sexual risk behavior and the severity of baseline depressive symptoms; and 3) the efficacy of components of HIV prevention programs in decreasing depression and sexual risk behavior (Lennon et al., 2012). Ten articles were reviewed. Overall, it was found that women who participated in and completed HIV prevention programs reported decreases in both depression symptoms and sexual risk behavior at follow-up appointments. Although the authors highlighted several limitations in some of the sample populations (i.e. small and homogenous population samples), the results revealed the positive association between depression and sexual risk behaviors in decreasing risk for women who completed programs. To improve retention rates among Black women participating in HIV prevention programs, these findings support the rationale for integrating mental health interventions into HIV prevention programs.

Wingood et al. (2013) conducted a randomized controlled trial of over 800 African American women from the Atlanta, Georgia area, who participated in a group-level HIV intervention designed to achieve reductions in HIV/STI/HPV transmissions. Results showed reductions in sexual encounters with multiple sexual partners at a scheduled six-month assessment, from 16.5% at baseline to 13.7% at the six-month follow-up (Wingood et al., 2013). A strength of the study was its random sample selection of a large sample that contained a wide range of participants by age and geographic areas.

The tracking of sexual risk behaviors among women who left program before completion was not captured in this study, and it is missing in other studies examining HIV risk behaviors among Black women. Studies of attrition in intervention programs have revealed that, individuals who leave program/treatment before completion receive less benefit and exercise

fewer risk-reduction behaviors than those who complete prevention programs/treatment (Beadnell et al., 2003).

Wingood and DiClemente (Lennon et al., 2012) have also done empirical studies examining depression as a mediating factor in engagement in sexual risk-reduction behaviors, and results have shown decreases in depression and sexual risk behaviors among African American women who complete HIV prevention programs. This indicates that HIV prevention programs are most beneficial to women who complete programs. Exploring factors that contribute to attrition is an understudied phenomenon in HIV prevention. Further, examining the possible correlation between retention in program and depression is an underexplored phenomenon in the literature and reflects a critical gap in HIV prevention research of Black women.

In another study, Choi et al. conducted research to test the hypothesis that the psychological effects of sexism would lead to difficult sexual situations, like engagement in unprotected sex (Choi et al., 2011). Over 750 ethnically diverse women from the San Francisco Bay area were recruited for a quantitative study that examined: 1) women's experiences of sexism; 2) the degree of existing psychological distress experienced by women; and 3) experiences of being in difficult sexual situations that made it difficult to practice safer sex. Results were in alignment with other studies that revealed that women with high levels of psychological distress were less motivated to engage in safer sex practices than women who experienced less or no psychological distress (Choi et al., 2011).

Studies like these suggest that HIV prevention programs, at a minimum, should consider psychological factors in interventions aimed at decreasing high risk sexual behaviors among Black women. Despite results from these studies, HIV prevention programs designed for Black

women continue to address behavioral risk factors without considering mental health (CDC, 2015). Because the mental health of the individual is not incorporated into HIV prevention programs, these interventions miss opportunities to screen high risk individuals for depression and other mood disorders. Providing education about mental health and asking a set of mood-related screening questions may identify psychosocial stressors early enough to improve outcomes, both for completion of HIV prevention programs and engagement in safer sex practices.

Theoretical Underpinnings of HIV Prevention: Researchers (Pearline & Schooler, 1978) defined the concept of chronic burden as an ongoing difficulty in managing social roles under organized and cultural systems of oppression. Repeated exposure to psychosocial stressors under structured systems of oppression can affect a woman's self-esteem, impeding her ability use agentic skills towards health promotion (Gurung et al., 2004). The Theory of Gender and Power is subsequently effective as a theoretical framework for HIV prevention when considering a population capable of exercising agency to enact positive change for health. If Black women have difficulty even showing up for HIV prevention programs, there is a need to explore theoretical paradigms that include the psychological impact of social and structural oppressive systems on HIV risk for Black women.

A *recognition* of the impact of oppressive systems does not equate to one's ability to *change* those systems. There is an assumption that when you know, you do. Ideas about human agency in this society emerge from a strong attachment to individualism and the idea that life satisfaction and personal choice is retained within the individual (Bratter & Gorman, 2011). Eurocentric cultures and capitalistic economic systems normalize ideas of individual prosperity and achievement. The belief is that achievement of one's goals and subsequent happiness is the

individual's responsibility (Becker & Marecek, 2008). Critical theories that frame HIV interventions can inadvertently uphold these ideologies, making Black women the owners and responsible agents of their HIV risk. This is consistent with the critiques of Herz and Johansson (2012), who postulate that social work has "psychologized" social problems, whereby the focus of change rests solely within the individual. Social problems are viewed primarily at the individual level. This detracts from the various systems, structures and philosophies that perpetuate the marginalization of certain populations. This is observed in HIV prevention, whereby risk is applied to the population. For example, Black women are described as "high risk". Risk-reduction strategies are focused on individual behavioral change, and power differentials are viewed at the interpersonal level. Without considering the psychological consequences that result from experiences of systemic oppression, interventions created solely within theoretical frameworks like the Theory of Gender and Power may limit the effectiveness of prevention programs aimed at reducing Black women's risk for contracting HIV.

Conceptual Framework for Study

Since the beginning of the HIV/AIDS epidemic, Black women have been disproportionately impacted by HIV incidence, prevalence and mortality rates in the Unites States (CDC, 2014; CDC, 1986). The deleterious effects of HIV/AIDS disease on Black women can be observed at the national, state and municipal levels. While rates of new infections have decreased for the general population and among all racial groups, Black women continue to be over-represented for these disparate health indices and outcomes. Black women are almost ten times more likely to contract HIV/AIDS than women of other races and ethnicities in the United States (CDC, 2014). Although HIV prevention programs have resulted in decreases in new infections among Black women, their continued disproportionate rate of new infections calls for

ongoing efforts to assess and address issues that place this population at higher risk than women of other races.

The literature explains how cultural and social norms influence sexual behaviors that contribute to ongoing risk for Black women, while also affecting the level of HIV knowledge and application of educational tools to reduce risk (Chandra, et al., 2011; Anderson & Hill Collins, 2015; Jarama, et al., 2007; McLoyd, Hill, & Dodge, 2005; Staples, 2007). For example, sexual stigma perpetuates the ongoing dissemination of misinformation about HIV, which results in Black women making sexual decisions with inaccurate information regarding risk (Billings, et al., 2015; Ward & Heidrich, 2009). The combination of social and cultural norms that influence sexual behavior and lack of knowledge about HIV/AIDS remain persistent barriers to controlling the progression of HIV disease among Black women.

Despite the experiences of structural and systemic forms of oppression, Black women have been known to exercise skills for managing their lives and sustaining their families and communities (Bontempi et al., 2008; Choi et al., 2011). However, Black women experience higher rates of psychosocial stress than women of other races, and there are correlations between high psychosocial stress and the severity and longevity of reported major depressive episodes by this population (Carrington, 2006). Research studies of depression among women reveal that, while women across all races show similar rates of depression, Black women are disproportionately represented among individuals experiencing more severe forms of depressive episodes, and for longer periods of time (Ward & Heidrich, 2009). Cultural stigma about mental health, poor experiences with mental health systems, and gender-based social conditioning that upholds a "strong Black woman" schema have contributed to an under-utilization of professional mental health services by Black women (Gurung, et al., 2004; Watson & Hunter, 2015). As the

field of HIV prevention wrestles with the persistently high rates of HIV infections among Black women, attending to the phenomenon of under-reported depression stimulates inquiry regarding the mental health experiences of Black women during their formative sexually-active years. Examining the impact of depression on social and emotional functioning, when observed through Black women's sexual behavioral practices, requires further examination and integration into existing conceptualizations of HIV risk for adult Black women.

Research of various health disparities experienced by Black women has revealed the ways in which psychological distress serves as a predictor of poor health outcomes for chronic illness. High psychosocial stress has been shown to correlate with mental health dysregulation (depression) among Black women (Hunn & Craig, 2009; Lanier & DeMarco, 2015). Furthermore, untreated depression among HIV positive women has been found to be positively associated with HIV disease progression. Studies have shown that HIV-positive women treated early for depression experience better health outcomes (Shim, Baltrus, Bradford, & Holden, 2013) through lower viral loads and higher T-cell counts that protect against illness. Treatment of depression improves Black women's behavioral practices and promotes higher levels of treatment adherence for various chronic illnesses (Marrero et al., 2015). Increased utilization of prevention methods that protect against disease progression has been observed when depression is identified and treated early (Hunn & Craig, 2009; Carrington, 2006). Since the primary mode of HIV transmission is through heterosexual intercourse, it is incumbent that medical and prevention care providers consider depression relationally with sexual behavioral practices among adult heterosexual Black women.

HIV prevention programs and services have been constructed under theoretical and medical models that examine biological and sociocultural indicators of HIV risk behaviors

(Lennon, Huedo-Medina, Gerwien, & Johnson, 2012). A key assumption in HIV prevention is that Black women are psychologically motivated and emotionally prepared to utilize learned skills to negotiate safe-sex practices. While prevention programs have proven effectiveness in reducing high risk sexual behavior among Black women who complete programs, the lack of exploration of the associations between depression, retention in program and utilization of self-protective skills brings attention to other important variables missing from HIV prevention research of sexual risk. HIV prevention programs for Black women has focused more on applying knowledge and skills for sexual negotiation, with less emphasis on a requisite precursor to this practice – the need to understand and address psychological factors that engender sexual risk. Further research is needed to better understand the ways in which intersecting racial and gender-based stressors experienced by Black women contribute to decisions to engage in risky sexual behaviors. Understanding the possible relationship between depression and sexual behavior also requires examination through the lens of theoretical frameworks that may better explain the mental health and sexual experiences of Black women.

This paper critiqued the Theory of Gender and Power, which has been used in HIV prevention with Black women by giving recognition to gender-based power and oppression serving as barriers to sexual negotiation in heterosexual relationships. However, Black women exercise power and independence in other areas of their lives (Collins P. , 1996). As heads of households, Black women have experienced more economic independence and caregiving leadership within the African American family structure (Staples, 2007). Black women subsequently enact agency in a variety of behavioral practices that promote the health and preservation of family and community. The critical review of the Theory of Gender and Power

subsequently challenges practitioners to better understand why Black women do not always exercise these skills towards their personal and sexual health promotion.

Appraisal theory was applied to evaluate factors that influence sexual risk behaviors and psychological distress. The theory explained the ways in which appraisals of risk and threats influence self-protecting health behaviors. To understand the experiences of Black women, appraisals of risk were examined within the context of racial and gender-based oppression. Self-protective responses to environmental stress are influenced by social and cultural values that undermine the personal health needs of Black women. These values are upheld by both Black women and men.

Black women have been culturally and socially conditioned to recognize the impact of racial oppression on Black men and assist in their healing (Lorde, 2015). This subsequently creates a hierarchy of racism's impact that gets stratified in heterosexual relationships by gender. What results is a willingness to ignore personal needs and, instead prioritize the relationship over personal physical and emotional health. Also notable is the lack of recognition and reciprocity of health promotion for Black women in heterosexual relationships. While both Black women and men suffer from the emotional burden of historical and structural forms of racism, social structures that prioritize the needs of men reduce attention to Black women's marginalized experiences (Collins P. , 2009). The phenomenon of ignoring the psychological distress experienced by Black women is upheld both by Black men *and* Black women (Collins P. , 1998). The burden of supporting others, while disregarding one's own emotional needs is often practiced by Black women and contributes to a higher level of psychological stress and distress (Gurung et al., 2004).

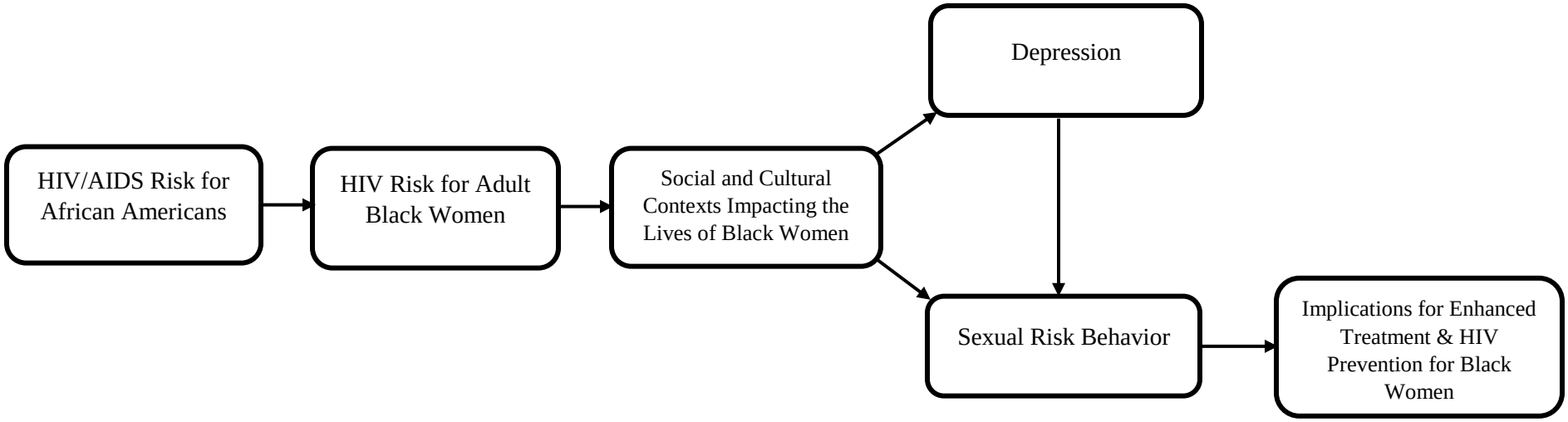
New constructs for examining HIV risk were introduced by integrating a Black feminist theoretical conceptualization to identifying the ways in which power and oppression are enacted intra-culturally within African American relationships. Sexual stigma in African American communities prevents Black men who have sex with men from communicating their sexual needs to women with whom they engage in heterosexual intercourse. Black men who have sex with men and women suffer an additional level of marginalization from heterosexual cultural norms that pathologize sexuality among individuals who have diverse sexual identities (Dyer, et al., 2013). The inability to communicate openly about sexual health needs and experiences prevents Black men and Black women from engaging in open sexual discourses within their heterosexual relationships.

The emergence of the research question, definition and operationalization of variables, data analysis and discussion points were defined by a more critical theoretical articulation of the lived experiences of Black women. The conceptualization of depression was explored as being directly impacted by intersecting racial and gender-based psychological stressors that contribute to persistent health disparities experienced by Black women within the United States. If a relationship between depression and sexual behavioral practices exists, it would be incumbent for HIV interventions to consider underlying depression symptomatology in conjunction with the application of behavioral risk-reduction prevention methods. Treating underlying mood lability may motivate more Black women participating in HIV prevention services to utilize learned skills for sexual risk-reduction practices.

As seen in Figure 2.2, the conceptual framework for this study illustrates the social and cultural contexts that garner risk for Black women. These contexts frame the conceptualizations of depression and sexual behavior, which show the impact of depression on sexual behavior that

engender risk for contracting HIV. Examining risk within these contexts has the potential of advancing knowledge about depression's effect on HIV sexual risk among Black women. This may subsequently contribute to greater efficacy of HIV prevention services aimed at reducing HIV incidence rates among Black women in the United States, while also highlighting the importance of incorporating culturally-relevant social work practice in the mental health treatment of depression.

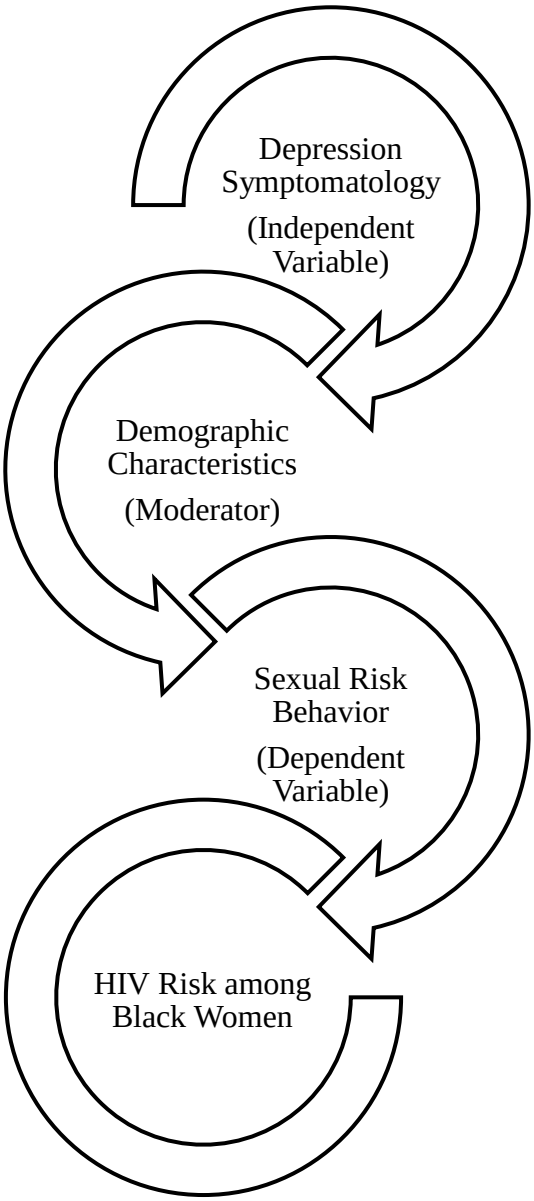
Figure 2.2 Diagram of Conceptual Framework



Research Question and Hypothesis

The research question for the study was as follows: Is there a relationship between sexual behavioral practices and depression symptomatology among adult Black women who engage in heterosexual intercourse? The study tested the hypothesis that Adult Black women who report depressive symptoms would be more likely to engage in high risk sexual behavior for contracting HIV than Black women who were not depressed. The independent variable was *depression,* which was measured, in two ways, by use of a depression symptom scale that scored, 1) the presence of depressive symptoms on a range of 0-27 and 2) the level of severity of psychosocial functional impact. The dependent variable was *sexual risk behavior*. There were several categorical variables used to measure sexual behavior. They included: Q1) the number of sexual partners; Q2) having been diagnosed with an STD; Q3) number of times diagnosed with an STD; Q4) sex while being treated for an STD; Q5) sex with a partner(s) with unknown STD/HIV status; Q6) sex with a partner(s) with known STD/HIV status; Q7) sex with a partner(s) who used drugs; Q8) condom use during high-risk sex; and Q9) sexual contact during any sexual encounter. Demographic characteristics served as moderating factors in understanding the relationship between depressive symptoms and the degree to which Black women engaged in high-risk sexual intercourse. HIV risk was measured by correlating the raw scores of reported depressive symptomatology and psychosocial function impact from depression with each of the sexual risk categorical variables. The total depression symptom score and function impact score were also correlated with a total score for risky sexual behavioral practices. Figure 2.3 shows an outline of the variable relationships from which the research question and hypothesis emerged.

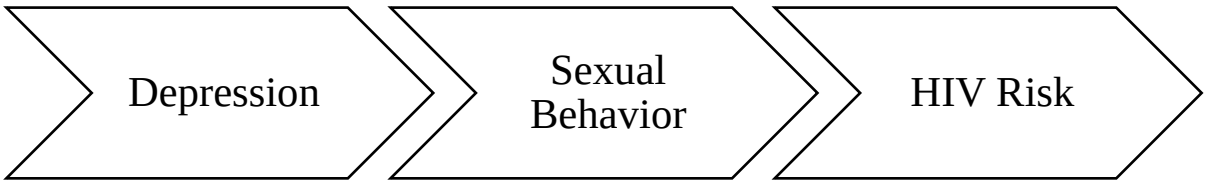
Figure 2.3 Diagram of variable relationships for research question and hypothesis



CHAPTER III: RESEARCH DESIGN AND METHODOLOGY

The study used a quantitative research design that explored the relationship between depression symptomatology and sexual behavioral practices among adult Black women who engaged in heterosexual intercourse.

Figure 3.1 Diagram of research design



Sample

Recruitment of participants was conducted using a non-probability convenience sampling method that took place over a three-month period. The target sample size was 50 participants. Participants were recruited from community-based organizations (CBO) that provided HIV prevention services to high-risk populations residing in upstate New York. Recruitment at CBOs included the use of staff members who had initial contacts with Black women coming in for HIV/STD testing and/or other health services (i.e. HIV counselors, medical providers, nursing staff). Staff members were asked to distribute a flyer explaining information about the study. The researcher scheduled times to be on-site during the provision of HIV prevention services and assisted in the distribution of flyers to women meeting the eligibility criteria. No confidential patient health information was accessed for participants recruited from the CBOs. Recruitment also occurred at local minority barber shops and beauty salons and community events congregated by Black women living in the area, and other social service organizations serving predominately minority populations in the community. The researcher relied upon key

stakeholders in the community who had inroads into venues utilized by Black women in the community. When informed of events and local venues, targeted recruitment was made regardless of time or day.

Some women declined (7 women), so no data was collected on them. Reasons given for refusal to participate included time constraints, not identifying as Black and not wanting to respond to questions about sexual experiences. This was anticipated because of feedback received from three test cases conducted prior to recruitment. Three adult Black women agreed to serve as "practice subjects" for the study by agreeing to go through the recruitment process and complete the questionnaires. The women identified clear understanding of the consent form and the content in each of the questionnaires. During the completion of the questionnaires, they acknowledged feeling uncomfortable answering some of the sexual behavior questions and surmised that some women may be reluctant to participate in the study for this reason.

The unit of analysis was adult Black women who reported engaging in sexual intercourse (vaginal or anal) with men. The racial category of African American has been classified by the U.S. Census Bureau as any individual who defines his/her lineage as originating from the continent of Africa (Bureau, 2015). However, this categorization has not been widely accepted by all Americans of African descent, and this has been debated since the early 1990s, when the term "African American" was popularized to define the population of Blacks as being connected to their continent of origin, Africa (Ghee, 1990). While the term has been embraced by many Americans of African descent, others have claimed that the classification does not adequately define their racial and cultural experiences. For example, forging an ancestral linkage to the Black experience in American history, some have argued against the relevance of a cultural or experiential connection to the continent of Africa (Settles et al., 2010). Others claim that they

are more closely connected to their Caribbean or Latin American roots and the "African American" classification omits the cultural contribution to the historical experiences of people whose lineage can be traced from Africa and other parts of the world (Washington, 2012; Brown, 2013). In consideration of the debates about the degree of inclusiveness that the term "African American" fully captures, the broader definition of "Black" has been operationalized to include the ethnic heritage and ancestry of all people who identifiably trace their lineage to the continent of Africa (Settles, Navarrete, Pagano, Abdou, & Sidanius, 2010). In the literature, the racial categorization, "Black" has been determined to be more comprehensive of the population of women who classify their racial identity as originating from Africa, but also includes other ancestral linkages (Jones, 2008), include African American, Caribbean (West Indian) or African/Latina.

Inclusion criteria for the target population consisted of women: 1) who identified as Black or of African descent; 2) 18 years of age or older; 3) who reported engagement in sex with men within the last three months; and 4) who reported unknown HIV status or HIV negative at the time of participation in the study. Although participants may have reported engagement in other risky behaviors, such as intravenous drug use, they had to also meet all the inclusion criteria for participation in the study.

Exclusion criteria included Black women who reported being exclusively homosexual in their sexual practices and reported no engagement in sexual contact with men within the past three months. The exclusion of Black women who have sex only with other women was determined based on incidence data that indicated low to no HIV risk among women who exclusively had sex with other women and reported no other behavioral risk factors (CDC, 2012). However, women who reported bisexual contact with woman and men were included in

the study. Women who reported being HIV-positive were also excluded. The purpose of the study was to understand the relationship between depression and sexual decision-making practices for *preventing* the transmission of HIV; therefore, women who were HIV-positive at the time of recruitment were not included in the study. The designated CBOs managed the prescreening of eligible women to ensure that they met the inclusion criteria. Eligibility criteria for participants recruited from other venues was determined by participant self-report.

Study Procedures

Following approval from the University of Pennsylvania IRB, the lead researcher met with administrative officials of several community-based organizations (CBO) to initiate the recruitment process and establish a plan for administering the measures to participants. Recruitment began in mid-July, a time when different cultural events occurred. Recruitment also occurred at local beauty salons and at community events during the summer months.

Each CBO targeted for recruitment was a 501(c) (3) nonprofit that provided HIV/AIDS prevention services. One organization offered HIV group-level interventions targeting LGBTQ* individuals of color. Another organization offered PrEP (pre-exposure prophylaxis) treatment and HIV group-level interventions to African American women, African American MSM (men who have sex with men) and men and women recovering from addictions. The third organization provided PrEP and gender-specific group-level interventions to individuals engaged in high risk sexual behaviors. The HIV prevention projects were funded by federal and state grants, and the organizations were responsible for the recruitment, delivery of services and the provision of incentives for participation in their interventions. Recruitment at cultural venues and independently-owned shops congregated by women meeting the inclusion criteria was handled by the lead researcher.

To request permission to recruit participants from the CBOs, the authorizing official (i.e. CEO, Executive Director) of each organization was contacted to obtain approval for: 1) use of organizational space; and 2) access to organizational staff to support recruitment efforts. When authorized, key personnel were contacted to coordinate the distribution of the study's flyer to Black women who came in for STD/HIV testing or other HIV prevention services. Space was provided for meetings with participants to explain the study's purpose and obtain consent for participation. The timing of recruitment aligned with times when women were on site for services provided by the CBOs.

The recruitment flyer explained the purpose of the study and that participation was strictly voluntary. Women recruited from CBOs were informed that refusal to participate would have no impact on the services received by the host agency. Participants who completed the two questionnaires and provided demographic information were given an incentive of a $25 cash card. Contact information was provided on the flyer, indicating that meetings would be scheduled at a mutually-agreeable and confidential location and time.

The two questionnaires were the Patient Health Questionnaire (PHQ-9), which screened for depression symptomatology, and a 9-question sexual risk behavior questionnaire. Participants who reported depressive symptoms were referred to staff at the respective CBOs for follow-up services. Participants recruited through external outreach were referred to local mental health practitioners (contact information was provided). The sexual risk behavior measure was administered jointly with the depression questionnaire. Demographic questions, which were part of the sexual risk behavior questionnaire, included information about gender, race and ethnicity, age, household size and income.

Participants recruited for the study were given an overview of the study's purpose before being asked to sign a University of Pennsylvania IRB-approved consent form. Eligible women were offered the option to have the consent form and questionnaires read to them to ensure understanding of its contents. After completing the two questionnaires, participants received the $25 cash card incentive and were asked if they had any questions or comments.

Figure 3.2 Proposed Timeline of Study

Timeline for Study

ACTIVITY	RESOURCE	MONTH											
		June	July	August	September	October	November	December	January	February	March	April	May
Letter of Inquiry to CBO CEOs	LI												
Meetings with Agency Team	LI												
Create Forms and Documents	LI												
Obtain IRB approval - Full Board Review	LI												
Coordinate timeline for administering measures	LI and CBO staff												
Address Structural Needs (i.e. space)	CBO staff												
Recruitment Process	LI and CBO staff												
Obtain Participants Consent	LI												
Data Collection	LI and CBO staff												
Data Analysis	LI												
Present Data to CBOs	LI												

LI-Lead Investigator (aka Lead Researcher)

Ethical Considerations

To protect *patient* confidentiality at CBOs, access to confidential patient health information was restricted. Protection of *participant* confidentiality was managed by issuing an anonymous code that consisted of the participant's birth month and day, and the first and last initials of their names. This code was used as a unique identifier on all paperwork related to the study (i.e. AB0123). Demographic information such as race, gender, age and socioeconomic status was also tracked using the unique code.

All study documents (i.e. consent forms, depression screening results, referral sources) were stored in a secure and locked space that was managed by the lead researcher of the study. Confidential HIV testing was conducted tangentially with participation in the study, and these services were discharged by program staff of the designated CBOs. No client identifying information was used in either the data collection or data analysis phases of the study.

This research project was approved by the University of Pennsylvania IRB on June 12, 2017. To ensure engagement in ethical research throughout the study, the author also completed the course, Collaborative Institutional Training Initiative (CITI). The report ID number is 17181775, and the course was completed on September 7, 2015.

Variables

Depression Symptomatology

In accordance with DSM-5 diagnostic criteria, depression involves a disruption in mood that impacts social and occupational functioning for a duration of two or more weeks (APA, 2013, p. 155). Symptoms can include decreased interest in pleasurable activities; feeling down and depressed; sleep and appetite disturbance; decreased energy; low self-efficacy; concentration impairment and thoughts of self-harm, regardless of plan or intent. Individuals who report

experiencing these symptoms more than half the time within a two-week period fit the diagnostic criteria of having a depressive disorder.

Sexual Risk Behavior

For this study, sexual risky behavior for contracting HIV was defined as engagement in unprotected sex between a participant and a male partner within the last three months. Unprotected sex included genital and/or anal intercourse and oral sex (female to male) between a man and a woman, which would involve the exchange of bodily fluids without the use of protective devices, such as condoms. The exchange of bodily fluids through acts of unprotected sexual intercourse is a primary mode of transmission of the HIV virus (CDC, 2014).

Measures

Data measures tracked: 1) the presence of depression at the time of recruitment; 2) sexual behaviors during a three-month period; and 3) demographic characteristics of the sample population. Participants were asked to recall symptoms of depression over a two-week period and sexually risky behaviors over a three-month period.

Patient Health Questionnaire

The **Patient Health Questionnaire (PHQ-9)** was used as the depression scale administered to Black women participating in this study. The instrument, developed in the 1990s, is used to screen for depression symptoms and psychosocial function severity among patients who commonly enter care in community-based health centers (Kroenke, Spitzer, & Williams, 2001). There were multiple benefits to using the PHQ-9 for this study. The instrument is half the size of other popular depression measures, such as the Beck Depression Inventory-II (BDI-II). Compared to the BDI-II's 21 question measure for depression, the PHQ-9

has nine questions that can both, establish preliminary diagnosis for a depressive disorder and indicate symptom severity impact on psychosocial functioning.

The PHQ-9 has a high level of validity in health care settings, which allow medical providers to readily integrate a patient's mental health condition into the primary medical concern(s) that bring patients into care (Gilbody, Richards, Brealey, & Hewitt, 2007). The PHQ-9 has been used in community health studies with multi-racial sample populations that have indicated high validity and reliability among minorities (Kroenke, Spitzer, & Williams, 2001). The questionnaire was tested in two large studies that enrolled 6000 patients, half from primary care medicine and half from obstetrics and gynecological (OB-Gyn) family practice clinics. The internal reliability of the PHQ-9 was found to be excellent, with a Cronbach's alpha of 0.89 in the PHQ primary care study and 0.86 in the OB-Gyn study (Kroenke, Spitzer, & Williams, 2001). Test re-test reliability was also very good. The measure was shown to have high validity and reliability scores among African Americans in clinical trials and population samples (Hankerson, et al., 2015). The BDI-II has been standardized primarily on a subset of White people, and it has been tested with African Americans only in recent years (Sashidharan, Pawlow, & Pettibone, 2012). Researchers have emphasized the importance of continuing to measure the validity of the BDI-II with larger samples of minorities within the context of understanding depression and its impact on various health disparities experienced among African American and other minority groups (Grothe, et al., 2005). Additionally, the PHQ-9 is cost-effective, as it is available to healthcare providers free of charge. Pfizer Inc., the copyright holder, states that no permission is required to "reproduce, translate, display or distribute the PHQ-9" (Fisher, 2010).

The PHQ-9 is a nine-item Likert-type scale that measures depressive symptoms by frequency (0-not at all; 1-several days; 2-more than half the days and 3-nearly every day). The total score is tallied and can range from 0-27 in measuring the presence of depressive symptoms. A depressive episode is assessed when five or more of the nine symptom criteria have been present for "more than half the days" over the last two weeks (Kroenke, Spitzer, & Williams, 2001). The higher the score, the greater the presence of depression symptomatology. At the end of the questionnaire, individuals are asked a question that helps to identify the severity of symptoms by measuring functional impairment on a person's quality of life and attention to personal health care needs (Kroenke, Spitzer, & Williams, 2003).

Depression scores of $\geq 5, \geq 10, \geq 15$ or greater, are labeled as mild, moderate and severe levels of depression severity respectively. The symptom severity ranges were determined by conducting a more comprehensive psychiatric assessment of 580 of the patients who participated in the two larger studies (Kroenke, Spitzer, & Williams, 2001). The results of the analyses revealed cohorts of patients with comparable symptom scores falling within ranges of major depression diagnoses categorized in the DSM as mild, moderate or severe (APA, 2013). These ranges have been used to alert medical providers of the degree of mental health intervention needed to address depression based on the designated "cut points" of symptom severity (Gilbody, Richards, Brealey, & Hewitt, 2007). This examination of depression scoring has been shown to provide more specificity of the different ranges of major depression symptomatology (Murphy, et al., 1987).

The PHQ-9 also asks a question that measures depression's impact on psychosocial functioning: "If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home or get along with other people"? Adding a

function impact question to the measure provided further context for understanding the severity of depressive symptoms (Kroenke, Spitzer, & Williams, 2003). The ratings were, "not difficult at all", "somewhat difficult", "very difficult" or "extremely difficult". The level of difficulty experienced from reported depression symptomatology was measured at the time that symptoms were being recorded. In determining risk for depression in population samples, symptom scores served as the primary measure of the presence of depression, and psychosocial functioning impact ratings underscored the severity of depressive symptoms (Kroenke, Spitzer, & Williams, 2001; Kroenke, Spitzer, & Williams, 2003).

Sexual Risk Behavior Questionnaire

Historically, administering sexual risk behavior questionnaires has been challenging (Mirzaei, Ahmadi, Saadat, & Ramezani, 2016). They have been used to inform the field of prevention on disease-control strategies (McLaws, Oldenburg, Ross, & Cooper, 1990). However, the sensitivity of questions, combined with social and cultural sexual stigma, has made collection of accurate data difficult (Siddiqui, 2005). Researchers have been challenged by various threats to internal consistency due to respondents either under-reporting their sexual experiences or fabricating actual sexual practices. Also, recall of sexual behavior over time has increased the degree of sampling error (Mirzaei, Ahmadi, Saadat, & Ramezani, 2016). To reduce "recall bias", researchers have amended questionnaires by asking about sexual practices within a shorter time frame (Mirzaei, Ahmadi, Saadat, & Ramezani, 2016). As a result, researchers have employed a range of adaptions to sexual behavior questionnaires to improve the internal consistency of responses (Fenton, Johnson, McMaunus, & Erens, 2001; Bowleg, Neilands, & Choi, 2008). A sexual risk behavior questionnaire that was developed by researchers was used in a study of over 2000 men and women in health care settings (Moreno,

El-Bassel, & Morrill, 2007). The measure tracked sexual risk behaviors within time frames of three, six or twelve months. Risk behaviors that were examined included: 1) condom use frequency; 2) number of sexual partners within a given time-period; 3) history of STD diagnosis; and 4) risk factors associated with sexual partners (HIV sero-discordant relationships, partner history of STD and/or partner who actively injects drugs). The questionnaire was tested for internal consistency and the Cronbach's alpha was strong at 0.80 (Gilbert, El-Bassel, & Wu, 2007). The measure was also determined to be reliable in measuring sexual risk behaviors among women of color (Moreno, El-Bassel, & Morrill, 2007).

For this study, sexual risk behaviors were measured by utilizing a customized **Sexual Risk Behavior Questionnaire (SRBQ)** that was adapted from other studies that examined sexual risk among individuals considered to be at high risk for contracting HIV/AIDS and STDs (Fenton, Johnson, McMaunus, & Erens, 2001; Bowleg, Neilands, & Choi, 2008; Moreno, El-Bassel, & Morrill, 2007; Turchik & Garske, 2009). The SRBQ asked questions about condom use during intercourse, number of sexual partners, risk characteristics of sexual partners and STD incidence history. The measure asked for recall of sexual practices within the last three months. The questionnaire was a Likert-type scale that had nine questions. Some questions provided responses that were nominally-ranked. For example, one question asked, "In the past three months, did you have sex without knowing if your partner had an STD/HIV?", and the response options were either "yes" or "no". Other questions were asked to elicit ordinal-ranked responses. For example, one question asked, "With how many men have you had sex in the past three months?", and the response options were, "0 men", "1 man", "2 or 3 men" and "4 or more men".

Data Analysis

To test the hypothesis, a series of regression models were utilized, with multiple ordinary lease squares (OLS) regression models used for the continuous dependent variable (DV), *Total number of high risk sexual behaviors* and logistic regression models used for the individual nine binary DVs: *Q1 Number of male sexual partners; Q2 Diagnosed with an STD; Q3 Number of times diagnosed with an STD; Q4 Sex while being treated for an STD; Q5 Sex with men without knowing HIV/STD status; Q6 Sex with men knowing HIV/STD status; Q7 Sex with men who used drugs; Q8 Condom use during high-risk sex; and Q9 Condom use during any sex.*

To better understand the level of depression symptomatology and severity of symptoms among the sample, two measures of the independent variable (IV), depression, were included in both OLS and logistic regression models. Both measures were taken from the PHQ-9, with total PHQ-9 Depression Score calculated by adding the total score of the first nine responses to the PHQ-9 symptom questions (0-27). The second measure, Function Impact, was assessed using a separate item on the PHQ-9 that asked the degree to which any of the problems reported in the first nine responses made it difficult for the respondent to do their work, take care of things at home or get along with other people.

Each of the nine sexual risk behaviors were independently included as the dependent variable in two logistic regression models: one with the PHQ-9 Depression Score as the independent variable and demographic data included as covariates (i.e. age, ethnicity, household size and income), and one with Function Impact as the independent variable and demographic data included as covariates.

Multiple regression analysis was used to test the relationship between total number of high-risk decisions and depression. Two models were run: one with the Total number of high-risk behaviors as the DV, PHQ-9 Depression Score as the IV, and age as a covariate; and a

second with the Total number of high-risk behaviors as the DV, Function Impact as the IV, and age as a covariate.

Coding for Data Analysis

For the data analysis, the nine SRBQ questions included in the analysis of dependent variables were coded according to the nominal or ordinal responses to each of the sexual risk behavioral questions. Responses to the SRBQ were then recoded into binary responses for analysis of HIV risk, either "low risk" or "high risk". *Low Risk* was coded "0" and *High Risk* was coded "1". The ranking of DV responses into low and high risk categories was based on previous studies of HIV risk that indicated high risk for contracting HIV being associated with behaviors such as: 1) sex with more than one partner; 2) history of STD; 3) sex while being treated for an STD; 4) the number of sexual encounters with high risk partners; and 5) the number of sexual encounters without using sexually-protected devices, like condoms (CDC, 2017; Jarama, et al., 2007; Zawacki, et al., 2009).

Coding for the IV, Depression, used the raw score from the total number generated from the nine responses to the depressive symptom questions (i.e. score of 15 on the PHQ-9). This raw score was used in the calculation of the IV, total Depression Score. The second IV measure of depression, Function Impact, was coded 0, 1, 2 and 3 for responses to the psychosocial function impact question:

- "not difficult at all" – 0
- "somewhat difficult" – 1
- "very difficult" – 2
- "extremely difficult" – 3

Coding for Function Impact used the raw score from each respondent (Ex. 0, 1, 2 or 3). The total raw score for Function Impact was calculated by adding the total number of responses and generating a mean score for the total. Figure 3.3 outlines the variable descriptions, response codes and the ranking of the dependent variable responses into binary categories of HIV low or high risk.

Figure 3.3 Diagram of variable categories for data analysis

Variable Type	Variable	Individual Measures of Variable Type	Response Codes	HIV Low Risk Category	HIV High Risk Category
Independent Variable	Depression	Total Depression Score *9 questions about symptoms over the last two weeks*	0-Not at all 1-Several days 2-More than ½ the days 3-Nearly every day		
		Function Impact Score *1 question measuring impact of depression on psychosocial functioning*	0-Not difficult at all 1-Somewhat difficult 2-Very difficult 3-Extremely difficult		
Dependent Variable	Sexual Risk Behaviors	Q1-Number of Sexual Partners	0-4 or more men	0-1 man	2 or more men
		Q2-Diagnosed with an STD	No Yes	No	Yes
		Q3-Number of times diagnosed with an STD	N/A Once or twice 3 or more times	N/A	1 or more times
		Q4-Sex while being treated with an STD	N/A No Yes	N/A or No	Yes
		Q5-Sex with a partner without knowing HIV/STD status	No Yes	No	Yes
		Q6-Number of sexual encounters with a partner with known HIV/STD status	Never Once or twice 3 or more times	Never	1 or more times
		Q7- Number of sexual encounters with a partner who used drugs	Never Once or twice 3 or more times	Never	1 or more times
		Q8-Used condoms during high risk sex	N/A No Yes	N/A or Yes	No
		Q9- Used condoms during any type of sex	All of the time Most of the time Some of the time None of the time	Some to all of the time	None of the time

CHAPTER IV: RESULTS

The results of this study are organized into three sections. Chapter IV begins with a descriptive overview of the sample population with demographic information provided. The next section provides results using logistic regression analysis to compare depression with individual risk decisions. The third section provides results using multiple ordinary lease squares (OLS) regression analysis to examine the relationship between depression and overall sexual risk behavior scores.

Sample Characteristics

A total of 54 Black women participated in the study. Among the sample, 27.8% (n = 15) were recruited from community-based organizations that provided targeted HIV prevention services to high risk groups. The majority of the sample, 72.2% (n = 39) was recruited at commercial venues and community events congregated by Black women. Of the cohort that was recruited from commercial venues, like beauty salons and barber shops and other community events, six women were removed due to not meeting the inclusion criteria for participation. All participants recruited from the CBOs met the inclusion criteria. Of the total number of participants, 48 (n = 89%) respondents were used in the data analysis. All participants identified their race as being Black.

As seen in Table 4.1, Over 87% of respondents (n = 42) identified their ethnicity as Non-Hispanic. A majority (87.5%; n = 42) reported living with other people, as opposed to living alone (12.5%; n = 6). All respondents were over the age of 18. Age groupings were categorized as follows: 18-25 (15%, n = 7); 26-35 (35%, n = 17); 36-45 (35%, n = 17); and 46 and older (15%, n = 7). Forty-seven respondents provided annual income information (one participant did not provide income information): 54% (n = 26) of the women reported an annual income ranging

from $14,000-$28,000, 29% (*n* = 14) reported incomes ranging from $28,000-$50,000, and 15% of women (*n* = 7) reported an annual income over $50,000. Research has shown household income to be one of the items on questionnaires that consistently has missing data, with average non-response rates to the question being between 21-26% (Krumpal, 2013). Although there was missing data regarding household income, the absence of one report was determined to not be a significant factor in the data analysis.

Table 4.1 provides an overview of frequencies of the demographic characteristics of Black women who participated in the study, along with mean score, standard deviation and range for the age. The data illustrates very little variance in ethnicity and household size, with the majority (88%) of the sample identifying their ethnicity as "non-Hispanic" and the same percentage identifying their household configuration as mostly living with others.

Table 4.1 Frequencies of demographic characteristics of the sample

Variable	Frequency	Percent	Mean	Std. Deviation	Range
Age Groups (n=48)					
18 to 25	7	14.6			
26 to 35	17	35.4			
36 to 45	17	35.4			
46 and up	7	14.6			
Ethnicity of participant (n=48)					
Hispanic	6	12.5			
Non-Hispanic	42	87.5			
Household size of participant (n=48)					
Live alone	6	12.5			
Live with other people	42	87.5			
Yearly income (n=47)					
14,000-28,000	26	54.2			
28,000-50,000	14	29.2			
Over 50,000	7	14.6			
Age of participant			34.63	9.03	18 to 57

All respondents answered the Sexual Risk Behavior Questionnaire (SRBQ) and reported having sexual intercourse with a male partner within the last three months. Over two-thirds of the sample, 66.7% (*n* = 32), reported having sex with one partner. This cohort was classified as low risk. Only 33.3% (*n* = 16) were classified as high risk due to reports of having had sex with two or more men. To assess past sexual risk, respondents were asked questions regarding past and present diagnosis of a sexually-transmitted disease (STD), along with engagement in sexual intercourse while being treated for an STD. Only 12.5% of participants, classified as high risk for this question, reported ever having an STD (*n* = 6). Of that group, 8.3% (*n* = 4) reported having sexual intercourse while being treated for an STD, and they were considered high risk. The majority of the sample, 91.7% (*n* = 44), was classified as low risk for reporting either not having had an STD in the past three months or not having sex while being treated for an STD.

The next set of questions on the SRBQ asked about high-risk sexual encounters with a male partner within the past three months. Almost 44% (*n* = 21) of participants reported having sexual intercourse without knowing their partner's HIV status. Eight percent (*n* = 4) reported having sexual intercourse with a male partner who was HIV positive. In response to the question regarding sexual intercourse with a partner who used drugs, 44% (*n* = 21) responded to having done so one or more times.

The last two questions on the SRBQ asked about the use of protective devices, such as condom use, during any sex or high risk sexual intercourse. Over 37% (*n* = 18) of participants reported that condoms were not used during high risk sexual intercourse with a male partner. Almost 44% (*n* = 21) reported use of condoms as a protective measure against contracting HIV or an STD during any type of sexual intercourse. Table 4.2 outlines participants' responses to the nine SRBQ questions, along with classifications of low high risk for contracting HIV for

each of the response categories. To illustrate the significance of the total risk behaviors reported by participants, Table 4.2 also shows the mean score and standard deviation calculation for the sample.

Table 4.2 Frequencies of participants' responses to the nine SRBQ sexual risk questions and HIV risk categories for each question, with mean score and standard deviation calculations for total risk behaviors (*n*=48)

Variable	Frequency	Percent	Mean	Std. Deviation	Range
Q1 Number of men had sex with (n=48)					
0-1 man (low risk)	32	66.7			
2 or more men (high risk)	16	33.3			
Q2 Diagnosis of STD (n=48)					
No diagnosis (low risk)	42	87.5			
Yes diagnosis (high risk)	6	12.5			
Q3 Times diagnosed with STD (n=48)					
Not diagnosed (low risk)	42	87.5			
1 or more times (high risk)	6	12.5			
Q4 Had sex while being treat for STD (n=48)					
No STD or no sex with STD (low risk)	44	91.7			
Yes (high risk)	4	8.3			
Q5 Had sex with someone without knowing their HIV status (n=48)					
No (low risk)	27	56.3			
Yes (high risk)	21	43.8			
Q6 Had sex with someone who was HIV positive (n=48)					
No (low risk)	44	91.7			
1 or more (high risk)	4	8.3			
Q7 Had sex with someone using drugs					
No (low risk)	27	56.3			
1 or more (high risk)	21	43.8			
Q8 Used condom during high risk sex (STD, HIV, Drug User) (n=48)					
Not Applicable or Yes (low risk)	30	62.5			
No (high risk)	18	37.5			
Q9 Used condoms during any sex (n=48)					
Some or all of the time (low risk)	21	43.8			
None of the time (high risk)	27	56.3			
Number of high risk decisions			2.56	1.89	0-8

Table 4.3 displays mean scores for PHQ-9 Depression Score and Function Impact for the sample. Depression symptom scores ranged from 0-27, with "0" meaning no depression symptoms present to "27" meaning all depression symptoms present nearly every day. The mean score for depression was 8.40 (*sd* = 7.57). Function Impact was considered a separate measure of depression symptom impact based on psychosocial functioning, and scores ranged from 0-3, with "0" indicating responses of "not difficult at all" to "3" representing "extremely difficult". The average score was 0.83 (*sd* = 0.91).

Table 4.3 Mean and standard deviation scores for Depression and psychosocial Functional Impact among Black women in the sample (*n* = 48)

	Mean	Std. Deviation	Range
PHQ9 Depression Score	8.40	7.57	0-27
Function Impact Score	0.83	0.91	0-3

Table 4.4 is a table summarizing the significant relationships between the PHQ-9 total Depression score and total Function Impact score with the total High Risk Sexual Behavior score for the sample. The table shows a significant relationship between the total PHQ-9 depression score reported and high-risk sexual behaviors ($r = 0.46$, $p = 0.00$). Functional impact was also significantly correlated with overall high-risk sexual behaviors ($r = 0.45$, $p = 0.00$). Age was significantly correlated with the total PHQ-9 depression score ($r = -0.30$, $p = 0.04$), but there was no significant relationship when age was correlated with total function impact score ($r = -0.21$, $p = 0.16$). We tested for the significance of income as a factor in total scores for both measures of depression and high risk sexual risk behaviors. There was no significant relationship when income was correlated with either scores for the depression measure or the total high risk sexual behavior score.

Table 4.4 Relationships between the total scores for Depression and Function Impact and total high risk sexual behavior score for the overall sample (*n* = 48)

	Age of participant	PHQ9 Depression Score	Function Impact	High Risk Sexual Behaviors Total
Age of participant	1			
p=	0.00			
PHQ9 Depression Score	-0.30	1.00		
p=	0.04	0.00		
Function Impact	-0.21	0.82	1.00	
p=	0.16	0.00	0.00	
High Risk Sexual Behaviors Total	0.00	0.46	0.45	1.00
p=	0.98	0.00	0.00	0.00

Analysis of Depression and Individual Risk Behaviors

Both total and individual depression measures (PHQ-9 Depression Score and Function Impact Score) were used as independent variables in two models due to the high correlation between the two ($r = 0.82$, $p < 0.05$). The total PHQ-9 Depression Score significantly predicted: Q6 having sex with someone who was HIV positive; Q7 having sex with someone who used drugs; and Q8 the likelihood of not using a condom during high-risk sex. Additionally, age, as a covariate with total PHQ-9 Depression Score, was found to be a significant predictor of one high risk sexual behavior, Q6 sex with someone who was HIV positive.

There was no significant relationship between total PHQ-9 Depression Score and; Q1 the number of sexual partners; Q2 being diagnosed with an STD; Q3 number of times diagnosed with an STD; Q4 sex while being treated with an STD; Q5 sex without knowing partner's HIV status; or Q9 the likelihood of using condoms during any type of sex.

Total Function Impact score significantly predicted the likelihood of: Q4 sex while being treated with an STD; and Q8 the likelihood of not using a condom during high-risk sex. No other risk behavior of functionality was significantly predicted by Function Impact.

Tables 4.5 through 4.7 provide illustrate the relationships between individual risk behaviors and total PHQ-9 depression score that were found to be significant. Tables 4.8 and 4.9 show the relationships between individual risk-behaviors and Function Impact that were found to be significant.

Table 4.5 Relationship between total PHQ-9 Depression score and sex with someone who was known to have an STD or be HIV-positive (Q6)

			95% C.I.	
	OR	SE	Lower	Upper
Age of participant	1.16*	0.08	1.01	1.35
PHQ-9 Depression Score	1.17*	0.08	1.00	1.38
Constant	0.00	3.70		

*p<0.05

As seen in Table 4.5, total PHQ-9 Depression Score significantly predicted the likelihood of having sex with someone who was known to have an STD or was HIV positive (*OR* = 1.17, *p* <0.05) suggesting that, with every one-point increase in depression score, there was a 17% increase in the likelihood of having sex with someone with an STD or who was HIV positive. Table 4.5 also indicates that the likelihood of having sex with someone with a known STD/HIV positive status increased with age (*OR* = 1.16, *p* <0.05), suggesting that each year increase in age was associated with a 16% increase in the likelihood of having sex with someone who had an STD or was HIV positive.

Table 4.6 shows that total PHQ-9 Depression Score significantly predicted the likelihood of having sex with someone who was used drugs (*OR* = 1.10, *p* <0.05), suggesting that with every one-point increase in depression score, there was a 10% increase in the likelihood of having sex with someone who used drugs.

Table 4.6 Relationship between total PHQ-9 Depression score and sex with someone who used drugs (Q7)

			95% C.I.	
	OR	SE	Lower	Upper
Age of participant	0.97	0.04	0.90	1.04
PHQ-9 Depression Score	1.10*	0.05	1.01	1.21
Constant	0.98	1.45		

*p<0.05

As seen in Table 4.7, total PHQ-9 Depression Score significantly predicted the likelihood of not using a condom during high-risk sex (*OR* = 1.18, *p* <0.05) suggesting that with every one-point increase in depression score there was an 18% increase in risk of not using a condom when having sex while being treated for an STD, sex with someone whose HIV/STD status was unknown, sex with someone who was known to have an STD or was HIV positive, or sex with someone who used drugs.

Table 4.7 Relationship between total PHQ-9 Depression score and condom use during high-risk sex (Q8)

			95% C.I.	
	OR	SE	Lower	Upper
Age of participant	1.04	0.04	0.96	1.13
PHQ9 Depression Score	1.18*	0.06	1.06	1.32
Constant	0.04	1.74		

*p<0.05

As seen in Table 4.8, the Function Impact score significantly predicted the likelihood of having sex while being treated for an STD (*OR* = 4.67, *p* <0.05), suggesting that with every one-point increase in functional impairment due to depression, women were over 4½ times more likely to have sex while being treated for an STD.

Table 4.8 Relationship between total Function Impact score and sex while being treated for an STD (Q4)

			95% C.I.	
	OR	SE	Lower	Upper
Age of participant	1.06	0.07	0.92	1.22
Function Impact	4.67*	0.67	1.26	17.27
Constant	0.00	3.16		

*p<0.05

Table 4.9 shows that the total Depression Function score also significantly predicted the likelihood of not using a condom during high-risk sex (*OR* = 3.10, *p* <0.05). This suggested that, with every one-point increase in functional impairment due to depression, women where three times more likely to not use a condom when having sex while being treated for an STD, sex with someone whose STD/HIV status was unknown, sex with someone who was known to have an STD or was HIV positive, or sex with someone who used drugs.

Table 4.9 Relationship between total Function Impact score and condom use during high-risk sex (Q8)

			95% C.I.	
	OR	SE	Lower	Upper
Age of participant	1.02	0.04	0.95	1.10
Function Impact	3.10*	0.42	1.38	7.17
Constant	0.12	1.47		

*p<0.05

Depression and Overall Sexual Risk Behavior Scores

Although only certain risk behavior scores were significantly associated with depression and psychosocial functionality, the total number of risky behaviors was an important factor. As seen in Table 4.10, a significant relationship was found between total PHQ-9 Depression Score and the total number of high-risk sexual behaviors (*B* = 0.13, *p* <0.05), suggesting that each

additional 8 points in depression score was associated with an additional risky sexual behavior. There was no significant association found between age and total sexual risk behavior score.

Table 4.10 Relationship between total PHQ-9 Depression score and total high-risk sexual behavior score

					95% C.I.	
	B	SE	t-value	p-value	Lower	Upper
Age of participant	0.03	0.03	1.07	0.29	-0.03	0.09
PHQ9 Depression Score	0.13	0.03	3.68	0.00	0.06	0.19
(Constant)	0.45	1.14	0.40	0.69	-1.84	2.74
N	48					
R2	0.23					

As seen in Table 4.11, a significant relationship was also found between Function Impact and the total number of high-risk sexual behaviors ($B = 0.99$, $p < 0.05$), suggesting that each additional point in functional impairment due to depression was associated with an additional risky sexual behavior. There was no significant association found between age and total sexual behavioral risk score.

Table 4.11 Relationship between total Function Impact score and total high-risk sexual behavior score

					95% C.I.	
	B	SE	t-value	p-value	Lower	Upper
Age of participant	0.02	0.03	0.70	0.49	-0.04	0.08
Function Impact	0.99	0.28	3.50	0.00	0.42	1.55
(Constant)	1.06	1.08	0.98	0.34	-1.12	3.24
N	48					
R2	0.21					

CHAPTER V: DISCUSSION

The aims of the study were to better understand: 1) the sexual behaviors of Black women; 2) the experiences of depression among the sample population; and 3) the relationship between depressive symptomatology and sexual behavioral practices as an indicator of HIV risk. To achieve these aims, an exploratory quantitative research study was conducted to test the following hypothesis: Adult Black women who report depressive symptoms will be more likely to engage in sexual behavioral practices that do not protect against HIV than Black women who are not depressed.

Chapter V summarizes the findings and evaluates achievement of the study's aims. This chapter compares results with related research found in the existing literature. To illustrate achievement of the study's aims, reference is made to observations and verbal input received while conducting the research. Participants shared their opinions and personal experiences about a range of topics related to the study's content (i.e. HIV, depression, heterosexual relationships, sexuality). These brief discussions provided richer context for understanding the lived experiences of Black women. This chapter also outlines limitations of the study and areas for future research, followed by a summary of implications for clinical social work practice with Black women. Finally, chapter V concludes with an overview of the research and considers implications for HIV prevention with Black women.

Sexual Behavior

The first aim of the study was to better understand the sexual behavioral practices of Black women. Findings showed that many participants engaged in high-risk sexual behavior. For example, some participants reported having sex with a male partner without knowing his HIV status and/or having sex with a male partner who used drugs. In conversation with

participants, some of the women described how life stress (i.e. parenting, marriage, work, finances) usurped their attention to sexual health safety when deciding to engage in heterosexual intercourse.

Measuring sexual behavioral risk within the context of age proved to be significant in this study of Black women's sexual risk behaviors. Among minority women, HIV/STD incidence data has aggregated high risk groups by age (CDC, 2014; Epidemiology, 2014). Results of this study identified a cohort of women who acknowledged having sex with a male partner who was known to have an STD or be HIV-positive. As age increased, the likelihood of engaging in this high-risk sexual behavior also increased. One possible explanation for this outcome is the persistent misinformation about HIV that gets disseminated in Black communities. Consistent with findings from previous studies (Bontempi, et al., 2008; Altshuler & Rhee, 2015; Neundorfer, Harris, Britton, & Lynch, 2005), as Black women age, they perceive their HIV risk as being lower than that of their younger counterparts. Studies have shown that risk-taking by older Black women regarding sexual intercourse is mostly predicated on pregnancy prevention rather than contracting HIV (Altshuler & Rhee, 2015). Additionally, the sex-ratio imbalance in Black heterosexual relationships may influence Black women's sexual practices as they age (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009). Black women may be more willing to engage in high-risk sexual behavior when assessing the availability of partner choices. These findings underscore a need to further examine the reasons for increased high-risk sexual practices among Black women as they age.

Reports of contracting a sexually transmitted disease (STD) or having sex with a partner while being treated for an STD provided further context for understanding the sexual practices of the Black women in the study. A small fraction of the participants reported being diagnosed

with an STD within the last three months. Of that group, less than a tenth reported engaging in sexual intercourse while being treated for an STD. Risk of STD exposure may have been lower for this sample because the mean age was 35 years, which is not representative of the highest risk age group for STD infections in the United States. The highest risk group by age is young adults between the ages of 15-24 (CDC, 2017).

Despite observing the older mean age of the sample, an under-reporting of STD status may have also occurred among participants who were in the 15-24 high-risk age category. For example, Chlamydia is the most commonly reported STD in the United States, and young people between the ages of 15-24 account for nearly half of all reported cases (CDC, 2017). STD infections are also higher among racial minorities in this age cohort (Epidemiology, 2014). Yet, less than 15% of minority youth within this age range receive STD testing each year (Cuffe, Newton-Levinson, Gift, McFarlane, & Leichliter, 2016). This trend has also been observed at the state level. In New York State, there are disproportionately higher rates of reported Chlamydia and Gonorrhea cases among young people than among adults over the age of 25; in 2013, three out of five STD cases were among young people between the ages of 15-24, and the Department of Health concluded that it captured only a fraction of the actual cases of STD infections among people within this age group (Epidemiology, 2014). Within the geographic catchment of upstate New York (from which this sample was drawn), there were up to 200% more reported Chlamydia infections than expected in 2015, and minorities between the ages of 15-24 had the highest rate of infections (Epidemiology, 2015). Considering STD data captured at both the national and state levels, it can be assumed that some of the participants who were in the high-risk age range may have lacked knowledge about their STD status.

Response bias due to sexual stigma, may have also contributed to the lower report rates of STD status. Cultural and sexual stigma has influenced findings from previous studies of Black women's sexual health, and this has been largely due to non-responses or under-reporting of sexual experiences for social desirability (Bontempi et al., 2008; Choi et al., 2011; Wingood et al., 2013).

Participants also reported use of condoms as a protective measure against contracting HIV or an STD. Many women reported using condoms during high-risk sex, while less than half reported use of condoms during any sexual encounter. These findings suggest that some participants may have used condoms based on their perception of HIV/STD risk. This indicates a level of knowledge among the participants about HIV risk, as well as motivation to apply sexual risk-reduction methods based on perceived risk for contracting HIV or an STD. For example, some participants shared their knowledge of high HIV contraction rates among Blacks around the world, where people are still dying from HIV. The fear of contracting HIV, and a perception of potential death from the disease, was described as a primary motivator by some participants for using condoms during sex. The sexual behavioral practices of these women could serve as an exemplar for highlighting the benefits of knowledge and skill application in HIV prevention. However, it is not clear if HIV risk alone served as a motivator for some women, or if pregnancy prevention was a factor. Engaging Black women in qualitative studies to discuss their sexual practices could further enhance understanding of the various factors influencing decisions to utilize sexual risk-reduction methods for protection against HIV or an STD.

The analysis found no significant association between income and sexual risk behaviors, which was somewhat surprising given that some studies show socioeconomic factors as

influential to risk behaviors. However, this finding was consistent with other studies of minority health that show no hypothesized difference in health risk based solely on income; instead socioeconomic status (SES) has been linked to structural inequalities that adversely impact public health outcomes for populations with limited access to resources (Bratter & Gorman, 2011; Farmer & Ferraro, 2005). Income bias in research studies has also been shown to place the problem on the individual, while ignoring the social and political systems that impede access to quality health care (Braveman, et al., 2005). As a result, researchers have been challenged to examine SES inter-sectionally with other demographic factors associated with health inequalities experienced by minority populations (T. H. Brown, Richardson, Hargrove, & Thomas, 2016).

In sum, the sexual behavioral practices of the sample support the necessity for ongoing education about HIV and STD risks for Black women of all ages (Crepaz et al., 2009). Furthermore, the data on some of the sexual risk behaviors underscores the need to develop strategies in quantitative and qualitative research that promotes greater comfort among Black women to provide more accurate reports of their sexual experiences and the factors that engender risk for contracting HIV (Krumpal, 2013). Having more accurate reporting of sexual experiences will position the fields of clinical and prevention services to sufficiently serve the healthcare needs of Black women.

Depression Experiences

The second aim of the study was to better understand the experiences and influence of depression among Black women as an indicator of sexual risk for contracting HIV. Most of the sample scored in the mild to moderate range of depression symptomatology. Among the sample, 6% of participants reported problems with depression. These findings were consistent with national trends, whereby less than 10% of depressive episodes were reported by Black women in

the U.S. in 2013 (Jones, 2008; NIMH, 2015). As stated in the literature, while depression rates among Black and White women are comparable (slightly over 6% for White women) (Jones, 2008; NIMH, 2015), depressive episodes among Black women tend to be more severe and longer in duration than reports from their White counterparts (Carrington, 2006). Furthermore, studies have revealed a degree of under-reporting of depressive episodes among Black women due to distrust of mental health providers, and social and cultural stigma related to mental illness within Black communities and the larger society (Padgett, Patrick, Burns, & Schlesinger, 1994). These barriers have also been indicated in studies revealing that, when compared to their White counterparts, Black women report lower utilization of mental health treatment and higher rates of attrition when mental health treatment is sought (Jones & Warner, 2011; Carrington, 2006). Participants of this study shared their feelings about depression, and some women disclosed not wanting to tell people that they were depressed due to concerns of being perceived as unable to handle their problems. One woman was overheard disclosing a fear of losing custody of her children if she told someone that she regularly experienced the depressive symptoms outlined in the PHQ-9 depression questionnaire. Another woman expressed a feeling that no help would be accorded her psychological distress, which was directly attributable to the expectation to uphold cultural standards of enduring multiple stressors without asking for support.

Although concerns about stigma were expressed and may have impacted the reporting rates of depression, results also revealed a lack of awareness of depression symptomatology and its functional impact among the sample. During the study, many respondents expressed surprise that the symptoms indicated on the PHQ-9 depression questionnaire were actual signs of depression; several women reported experiencing "symptoms" on a regular basis, but not perceiving them as being indicative of a depressive episode. This finding brought attention to

another possible reason for why more Black women do not get mental health services - lack of education about depression symptoms and the availability of culturally-relevant treatment options. However, the lack of education and awareness about depression among the sample could still have been influenced by social and cultural stigma related to mental health. Additionally, when Black women do decide to get help, negative experiences with health care delivery systems have been shown to garner trepidation in utilizing services for future health care needs (Carrington, 2006; Watson & Hunter, 2015).

Within African American cultures, depression is perceived as a phenomenon experienced only by White people (Williams, 2008). This perception is shared by both, Black women and men. Because many Black women operate under a "superwoman" ideology, their experiences are often masked by a level of functioning that permits them to operate under oppressive systems that perpetuate their depression (Woods-Giscombe & Lobel, 2008; Carr, Szymanski, Taha, West, & Kaslow, 2014). It is only when psychosocial functioning becomes impaired, that depressive symptoms generate attention by/for the sufferer. In *Black Pain: It Just Looks Like We're Not Hurting,* Williams (2008) reveals the impact of depression on African Americans who suffer in silence due to social and cultural stigma, lack of education about depression, and negative experiences with mental health delivery systems. The author reveals how physical, mental and emotional trauma contribute to maladaptive coping behaviors that impact psychosocial functioning due to depression.

While reference is made to structural forms of racial oppression as a risk factor for depression, Williams did not address the intracultural oppressive systems from which Black women struggle to survive. Structural and sociopolitical inequities were identified as causal factors to mental distress among African Americans, but the writer concluded that the burden of

overcoming psychological distress and learning ways to cope were housed in the individual (consistent with most psychodynamic approaches to mental health responses in westernized cultures) (Brown, et al., 2014; Williams, 2008). This theoretical conceptualization was observed while listening to the real-life experiences of some of the participants. There were reports by some of the women of feeling depressed due to being subjugated within their own families and heterosexual relationships. Several women were heard sharing thematic experiences of feeling overwhelmed and psychologically distressed by a lack of adequate support from their male partners. However, they expressed choosing not to bring attention to their feelings because generations of women in their families endured the same without complaint.

The experience of marginalization within Black women's own social and cultural networks illuminates how, even within African American discourses about depression, communities are challenged to integrate, and subsequently address, the impact of heterosexual relational inequities on the mental health of Black women. These experiences underscore the need for practitioners to understand depression experiences among Black women through the lens of an intersecting Black feminist theoretical framework. Appraisals of psychological risks by Black woman cannot be fully understood without considering both the larger sociopolitical oppressive structures *and* the relational oppression from which many Black women struggle to navigate in their heterosexual relationships on a regular basis.

Furthermore, it is incumbent that discourses about intracultural oppressive systems include Black men, who are critical to any efforts to understand and resolve the gender-based inequalities that are consistently manifested in African American heterosexual relationships (Staples, 2007). This phenomenon perpetuates the experiences of psychological distress that persistently compromises Black women's attention to their health care needs, including

consideration of HIV risk when deciding to engage in heterosexual intercourse (Brown, 2016). To promote the emotional and physical health of Black women, eliminating mental health stigma and misinformation about depression requires fluid dialogues about sexuality and inequities in heterosexual relationships between Black women and men.

Depression and Sexual Behavioral Practices

The last aim of the study was to explore for the existence of a relationship between depression symptomatology and sexual behavioral practices as an indicator of HIV risk. It was hypothesized that women who reported depressive symptoms would be more likely to have engaged in sexual behaviors that put them at higher risk for contracting HIV than Black women who were not depressed. While the average raw score for depression was low to moderate, among women who reported being depressed, there was a significant positive relationship between depression symptomatology and increased risky sexual behaviors. For example, depression was significantly associated with several sexual risk behaviors, such as: 1) not using condoms during high-risk sex; 2) sex with someone who had an STD or was known to be HIV positive; and 3) sex with someone who used drugs. Additionally, functional impact, captured from responses to questions that measured the level of difficulty with psychosocial functioning when depressed, was highly correlated with two high-risk sexual behaviors, 1) sex while being treated for an STD; and 2) not using condoms during high-risk sex. Furthermore, results revealed that the more compromised a woman's psychosocial functioning was due to depression, the rate of engagement in high-risk sex increased. The positive association with individual risk behaviors was found when examining both measures of depression (symptom score and function impact). Results also found positive associations for the entire sample between total sexual risk behaviors and both, total depression score and total function impact score. These findings not

only support the hypothesis that depression symptomatology is positively associated with high-risk sexual behavior, but also reveals the impact of the severity of depressive symptoms on high-risk sexual behavior.

Also, there were significant relationships between age and total depression scores and, as discussed earlier, age and having sex with someone who was known to have an STD or was HIV positive. For example, as age increased, reports of depression decreased, showing a negative relationship. As age increased, there was a positive association with one high risk sexual behavior, having sex with someone with an STD or was HIV-positive. Depression was not a factor in this result. These findings suggest that Black women of all ages, from younger to older women, may benefit from health education about depression and high-risk sexual behaviors for contracting HIV. It may be prudent to identify and treat depression early for Black women receiving HIV prevention services. Education and sexual negotiation skills-training, currently exercised in HIV prevention services, may be most beneficial to participants who are not compromised by depression. For women who do have depression, including mental health interventions may strengthen personal appraisals of risk, which may subsequently influence decisions to engage in high risk-sexual behaviors.

Limitations

While these findings are significant and contribute greater knowledge to understanding the sexual and mental health experiences of Black women, there are several limitations that impact the ability to generalize findings to the larger population of Black women living within the United States. First, the sample size was small (n=48). The field of HIV prevention may benefit from future studies of this phenomenon with larger sample sizes and variance in geographic locations, particularly in the southeast portion of the United States and large urban

centers, where there are higher HIV incidence rates among Black women (Mays, Maas, Ricks, & Cochran, 2012). However, this study did increase knowledge of the sexual practices of Black women. The results revealed a population of women who engaged in self-protective sexual behaviors, and much more can be learned through further exploration (i.e. qualitative study) of the factors influencing the self-protecting sexual practices of Black women. Demographically, the sample varied by age and income level. While the relationship between depression and sexual behavioral practices found no associations by income, the observation of high risk sexual practices among Black women as they age provides insight into the increased HIV incidence rates among older Black women, a population that has been experiencing higher rates of HIV in recent years (CDC, 2014). Understanding the unique needs of Black women at all stages of their physical and emotional development may provide valuable information about factors contributing to sexual risk. Integrating a developmental life course model that considers both mental and sexual health stages of development may prove more efficacious in understanding and addressing HIV risk among Black women of all ages.

Second, while recruitment of participants was intended to occur primarily at community-based organizations (CBOs), most participants were recruited at open venues, like cultural events and beauty/barber salons. Women agreed to participate in the presence of people they knew. Response bias (i.e. social desirability) may have led to an underreporting of depression symptomatology and high-risk sexual behavior. Conversely a strength of the study was that this recruitment process allowed access to a broad range of Black women who met the inclusion criteria. As a result, the convenience sampling method used contributed to some generalizability of the population living within Upstate New York.

Further, while not done for this study, it may have been informative to compare depression and sexual behavioral practices among participants recruited at CBOs vs. Black women recruited at community venues and local businesses. A future study could examine depression rates and sexual behaviors among Black women already identified as high-risk, due to being served by CBOs providing HIV prevention services, and compare to Black women from the community, who may not have been previously identified as high-risk for HIV. Understanding the population within this context may increase knowledge sexual risk factors among a broader population of Black women identified with both, known and unknown HIV risk. This new knowledge may engender further questions about the current level of awareness about HIV risk within communities of color.

A third limitation of the study involved the measures used to assess depression and sexual behavioral risks. Administering measures with different reporting timeframes may have limited the ability to fully understand the unique sexual and mental health experiences of Black women and indicators of HIV risk over time. The PHQ-9 depression questionnaire is a useful screen in healthcare settings with proven validity in measuring depression in patients presenting with a range of health concerns (Gilbody, Richards, Brealey, & Hewitt, 2007). The questionnaire measures the presence of depressive symptoms within the last two weeks (Kroenke, Spitzer, & Williams, 2001). However, this timeline did not align with the timeline of the Sexual Risk Behavior Questionnaire (SRBQ), which asked participants about sexual risk behavior within the last three months. As a result, the findings may not have accurately explained the relationship between depression and sexual behavior within a three-month period, but more within a two-week period. Therefore, the results provide insight into the acute HIV risk for Black women, but not for risk over time. Future studies would need to administer the questionnaires to the same

sample over multiple time periods to see if the results would still hold. Future research that applies a longitudinal study of the relationship between depression and sexual behavior may also provide more knowledge about its impact on HIV risk for Black women.

When collecting primary data on participants in the community, researchers have used other measures, like the Beck Depression Inventory II (BDI-II), which also has some good reliability and validity results with African American samples (Settles, Navarrete, Pagano, Abdou, & Sidanius, 2010). Participants may have responded differently to a questionnaire that provided more detailed cognitive and somatic symptom impairment measures, like the BDI-II (Grothe, et al., 2005). Also, the adapted sexual risk behavior questionnaire measured some sexual risk behaviors, but not a full-range of high-risk sexual behaviors.

Despite these observations, the PHQ-9 was found to be a useful depression screening tool for this study. It was shorter than the BDI-II (nine questions compared to the BDI-II's 21 questions), which enabled participants to quickly complete the measure. Using a shorter depression screen was useful for recruitment at community venues outside of the CBOs. At venues like community events and beauty salons, women agreed to participate, but were expressive about not wanting participation to infringe on their time. Both the PHQ-9 and SRBQ were chosen to increase participation by reducing the barrier of time required to complete the questionnaires. In sum, the measures proved useful to this study, but may have limited the ability to fully understand the unique sexual and mental health experiences relationally as indicators of HIV risk for Black women.

While quantitative analysis revealed significance in the relationships between depression symptomatology, psychosocial functional impact and certain sexual risk behaviors, the analysis does not explain why less depressed Black women still engaged in risky sexual behaviors as they

aged. According to the hypothesis, depression should be a predictor of engagement in risky sexual behavior. Yet, this was not the case for some of the older participants in the study. Results of the study bring attention to a need for a more comprehensive understanding of these phenomena, as they are experienced by Black women. Creating forums that permit researchers to listen to the voices of Black women may contribute to a greater understanding of their experiences of depression and other factors that impact risky sexual behavior. For example, while Black women identified high psychological stress as contributing to greater psychological distress, the results were unable to identify the factors contributing to their psychological distress. It is incumbent that future studies apply qualitative methodologies to better understand the unique mental health experiences and sexual behaviors that place Black women at risk for contracting HIV.

Implications for Social Work Practice and Future Research

This study sheds light on depression and the psychological distresses that undergird Black women's experiences of subjugation and oppression from multiple sources. The results also reveal perceptions of depression experiences that impede access to medical care, which the study proved to be a factor in increasing HIV sexual risk among Black women. Social workers are well-positioned to address the unique needs of Black women suffering from depression. The application of an ecological theoretical framework provides a synergistic alignment with other treatment modalities that can be used to understand the relationship between depression and sexual risk behavior among Black women. These intersecting frameworks give recognition to the strength and resilience of Black women having to navigate the social and cultural complexities of life in the United States, while also striving to preserve their mental and sexual health.

Applying Culturally-relevant Therapeutic Approaches: The therapeutic relationship is one of the most significant and transformative connections that a person can sustain with another. The voluntary nature of its formation, combined with its development emerging from experiences of human distress, creates an intense fragility that always threatens to pull it apart. It takes enormous strength for an individual to seek out a stranger, assumed to have the requisite training and expertise, to help resolve painful and complex problems. Social work gives recognition to the strength and resilience it takes individuals to access clinical interventions in times of emotional and interpersonal distress. The vulnerability of acknowledging one's psychological distress and having that distress framed within a psychopathological context is a key factor in the under-utilization of mental health services by Black women suffering from depression (Jones, 2008). This study revealed the positive association between depression and high risk sexual behaviors among Black women, which necessities the field of social work enacting innovative approaches to addressing the complex factors that contribute to depression symptomatology among this population.

Research studies have shown the relationship between experiences of marginalization, racial and gender-based oppression, maladaptive coping skills and depression symptomatology (Gurung, et al., 2004; Settles, et al., 2010; Jones, 2008; Watson & Hunter, 2015). To increase access to mental health services for Black women, practitioners must consider employing therapeutic approaches that consider these causal factors to depression. Therapy can be used to help Black women recognize the different experiences that compromise their identity formation and agentic skills, both of which serve as precursors to depression onset and persistence. Existing treatment modalities for depression require the implementation of specialized

therapeutic processes that address the complex experiences that engender mental health risk among Black women.

The residual effects of historical oppressive experiences may require the use of therapeutic techniques that allow Black women to give "voice" to the impact of those experiences. To facilitate this, social workers may consider applying narrative therapy or relational therapeutic frameworks into their work with depressed Black women. Once awareness is achieved, interventions may be employed to restore agentic skills that enable Black women to prioritize their health and develop new adaptive coping skills that promote engagement in more self-protective health practices.

Narrative and relational theories aim to equalize the therapeutic relationship by developing a collaborative approach to problem solving by both the client and practitioner. Both theories operate within a social justice lens that gives recognition to structural power inequities that adversely impact marginalized populations. These practice modalities subsequently work to restore the sense of agency to promote change in peoples' lives.

Narrative therapy works on identity re-development through the practice of a client "telling a story" of her life experiences; this story-telling helps the client realize her values, knowledge and skills that form the current conceptualization of her self-identity (White & Epston, 1990). The practitioner is instrumental in helping the client re-conceptualize the current narrative, towards reshaping an identity that promotes greater self-efficacy and self-control in managing psychosocial stress (Haugaard, 2016). This approach would have significance in bringing attention to Black women's lived experiences, while also identifying the ways in which those experiences contribute to psychological distress. The use of techniques that restore a sense of agency has the potential to improve Black women's sexual behavioral practices.

Relational psychoanalysis places emphasis on the relationship between client and therapist as central to the therapeutic process and subsequent healing for the client (Tosone, 2004). When compared to other treatment modalities, relational psychoanalysis is also well positioned to recognize the impact of oppression and marginalization on Black women's psychological distress levels. Through its emphasis on the therapeutic relationship as a source for change, relational therapists can engage in an "empathic attunement" that allows for greater attention to the client's subjective experiences through the telling of their stories (Goldstein, Miehls, & Ringel, 2009). Through this practice, the therapist learns about the experiences of the client within social, cultural and political contexts.

Narrative and relational theories also align with the core values of social work. They both embed key elements of social work practice by: 1) emphasizing the importance of the therapeutic alliance between client and therapist; 2) developing trust of the therapeutic process by starting where the client is; 3) recognizing that the client is impacted by her/his environment; and 4) acknowledging the client's inherent worth and strength, which can be utilized to achieve therapeutic outcomes. Both approaches acknowledge the client as being psychologically impacted by her familial, social and cultural experiences. Building upon the strength and resilience that Black women have employed in their lives can be used as an assistance factor in the therapeutic process by encouraging mutuality of both, problem identification and resolution in the treatment of depression. Social work practitioners may also be elements of change by modeling, through the therapeutic process, how egalitarian relationships can look and function.

Addressing Stigma: The findings revealed engagement in sexual risk behaviors among Black women of different ages. Social workers can be instrumental to increasing HIV knowledge and promoting healthier forms of communication about mental and sexual health.

Key to mental health recovery for Black women is the recognition of the cognitions and behavioral practices (that are often borne from familial, cultural and social norms) that cause emotional distress and perpetuate fractured social relationships (Beck, 1995; Staples, 20017). For example, it is important for Black women to realize the ways in which we may be complicit in the belief and dissemination of stigmatized messages about human sexuality in Black communities. It is incumbent that we acknowledge the ways in which culturally-oppressive ideologies get internalized and are subsequently projected onto those who are closest to us. This phenomenon may be instrumental in breaking down collaboration and instead, promoting increased marginalization within oppressed groups. For example, the stigma associated with same-sex sexual practices is endorsed by both Black women and men, and Black men who have sex with men and women remain a hidden population because of this collective stigma (Dyer, et al., 2013).

As a result, HIV risk may continue be a problem in African American communities until Black women and men are able to engage in safe and transparent discourses about mental and sexual health. To promote open lines of communication, it may be beneficial to include practice disciplines trained in these specialized areas. Social workers, whose practices are grounded in social justice for the historically-oppressed, are well-positioned to provide supportive services that demystify sexuality and mental health experiences among marginalized populations. Social workers are also trained in building consensus among differing perspectives, toward achieving mutually-beneficial health outcomes. Furthermore, the field of social work can be instrumental in creating an integration of mental health and sexual behavioral interventions in health care delivery systems that provide HIV prevention services to Black women. The utilization of social work practice skills to achieve these aims can be more easily integrated in health care systems

that deliver services though an interdisciplinary approach. As a result, community-based organizations, which use interdisciplinary service models, are primed for instituting services that address the varied and complex issues that contribute to HIV risk in Black heterosexual relationships.

Future Research: The findings from this study and key discussion points previously highlighted have implications for future research of Black women's mental and sexual health. Depression interventions that restore a sense of personal identity and agency to make self-protective health decisions may increase Black women's self-protective sexual behavioral practices. Research questions that emerged from this work and have implications for future research of HIV risk among Black women include:

1. To what degree do Black women experience gender-based oppression within their heterosexual relationships with Black men?
2. Do African American social and cultural norms impact sexual decision-making among Black women who engage in heterosexual intercourse?
3. How does stigma affect discourses about human sexuality between Black women and men?
4. What factors influence HIV sexual risk for Black women as they age?

Conclusion

In accordance with existing literature, this work highlighted the disproportionate impact of HIV on Black women. The primary mode of disease transmission among Black women is through heterosexual intercourse, and the field of HIV prevention has concentrated on behavioral risk-reduction interventions designed to decrease incidence rates for this population. While there has been a decline in HIV transmission among Black women, the persistently high rate of HIV

incidence necessitates ongoing study of Black women's sexual experiences. The literature has shown the deleterious effects of psychological distress, and the subsequent depression that results, on the overall health outcomes of Black women. Depression has been shown to compromise personal health care practices. Further, Black women with depression have an increased likelihood of engaging in behaviors that jeopardize their health. The impact of depression on sexual behavior requires further examination, which was a key reason for conducting a study of this kind.

HIV prevention has focused on increasing knowledge of HIV and teaching Black women ways to utilize sexual risk-reduction skills. These skills are proven to be effective in reducing risk, but healthy outcomes are primarily observed among participants who complete intervention programs (Beadnell et al., 2003; Onoya et al., 2011). Low retention rates among Black women participating in HIV prevention programs call for an exploration of contributing factors that impact Black women's utilization of sexual risk-reduction skills. This observation was instrumental in considering the impact of depression on the sexual behaviors of Black women. Examining the relationship between depression and sexual behavioral practices among Black women has been an underexplored area of HIV prevention research. The purpose of this work was to enhance understanding of the mental health experiences and sexual practices of Black women, while also exploring to what degree a relationship between the two phenomena held significance for heterosexual Black women's risk of contracting HIV. Results supported the hypothesis that depression is associated with high-risk sexual behaviors that places Black women at risk for contracting HIV. These findings provide an important contribution to the field of Black women's mental and sexual health. The exploration of Black women's mental and sexual health has revealed the importance of: 1) social workers providing culturally-informed

therapeutic interventions that address the multi-faceted experiences of Black women; 2) addressing social and cultural stigma of both, depression and sexuality as barriers to transparent discourses between Black women and men; and 3) increasing knowledge of the lived experiences of Black women. This study is recognized as a *beginning* to a better understanding of how mental health impacts sexual risk and, it calls for further research of larger samples within geographic catchments that continue to have high HIV incidence rates among Black women.

Addressing the mental health of adult heterosexual Black women may be critical to combatting the persistently high rate of HIV transmission. Black women who have higher levels of psychosocial stress that contribute to depression need innovative approaches in mental health treatment that promote healing from the deleterious effects of systemic and intracultural oppressive structures. Increasing access to culturally-grounded mental health services that foster recovery and healing from the residual effects of these oppressive systems may promote greater attention to Black women's mental health needs. Mental health recovery may improve sexual risk-reduction practices among Black women. It may also serve as an assistance factor in engendering healthy sexual discourses between Black women and men. These supports may be provided directly through linkages to collateral resources with known expertise in addressing the unique lived experiences of Black women.

APPENDICES

Appendix A: University of Pennsylvania IRB Approval Letter

University of Pennsylvania
Office of Regulatory Affairs
3624 Market St., Suite 301 S
Philadelphia, PA 19104-6006
Phone: 215-573-2540/ Fax: 215-573-9438
INSTITUTIONAL REVIEW BOARD
(Federal-wide Assurance # 00004028)

12-Jun-2017

Aileen Rothbard
Rothbard@mail.med.upenn.edu
Estella Williamson
belle494@hotmail.com

PRINCIPAL INVESTIGATOR	: AILEEN ROTHBARD
TITLE	: Let's talk about sex: Exploring depression as a mediating risk factor in sexual decision-making practices among Black women at risk for HIV/AIDS
SPONSORING AGENCY	: NO SPONSOR NUMBER
PROTOCOL #	: 827623
REVIEW BOARD	: IRB #8

Dear Dr. Aileen Rothbard:

The above-referenced research proposal was reviewed by the Institutional Review Board (IRB) on 09-Jun-2017. It has been determined that the proposal meets eligibility criteria for IRB review exemption authorized by 45 CFR 46.101, category 2.

This does not necessarily constitute authorization to initiate the conduct of a human subject research study. You are responsible for assuring other relevant committee approvals.

Consistent with the federal regulations, ongoing oversight of this proposal is not required. No continuing reviews will be required for this proposal. The proposal can proceed as approved by the IRB. This decision will not affect any funding of your proposal.

Please Note: The IRB must be kept apprised of any and all changes in the research that may have an impact on the IRB review mechanism needed for a specific proposal. You are required to notify the IRB if any changes are proposed in the study that might alter its IRB exempt status or HIPAA compliance status. New procedures that may have an impact on the risk-to-benefit ratio cannot be initiated until Committee approval has been given.

If your study is funded by an external agency, please retain this letter as documentation of the IRB's determination regarding your proposal.

Please Note: You are responsible for assuring and maintaining other relevant committee approvals.

If you have any questions about the information in this letter, please contact the IRB administrative staff. Contact information is available at our website: http://www.upenn.edu/IRB/directory.

Thank you for your cooperation.

Sincerely,

IRB Administrator

Appendix B: University of Pennsylvania Informed Consent Form

Greetings,

Title of the Research Study: Exploring the relationship between depression and sexual risk practices among Black women

Principal Investigator: Aileen Rothbard, 3701 Locust Walk, Philadelphia, PA:rothbard@upenn.edu
Co-investigator: Estella Williamson, 3701 Locust Walk, Philadelphia, PA:westella@upenn.edu

Emergency Contact: Estella Williamson

You are being asked to take part in a research study. **Your participation is voluntary which means you can choose not to participate.** If you decide not to participate there will be no loss of any benefits or services for which you are otherwise entitled to receive.

The purpose of this study is to achieve a greater understanding of the sexual practices of Black women, while also gaining knowledge about depression among Black women. Your participation in this study will help inform the researcher about the various risks that contribute to Black women contracting HIV/AIDS. Results of this study may inform researchers of ways to reduce/eliminate incidences of HIV/AIDS among Black women.

You are being asked to answer questions on two paper forms. The first questionnaire asks about current symptoms for depression and the second questionnaire asks about your sexual practices. The depression questionnaire has nine questions about depression and the severity of symptoms within the last two weeks. **If your answers reveal the presence of depression, you will be offered resources to assist you with getting help for depression.** The sexual risk behavior questionnaire asks questions about your sexual practices within the last 90 days. You will also be asked a few demographic questions at the end of one of the questionnaires.

Completion of both questionnaires will take approximately 15 minutes. Researchers will be on hand to assist with reading questions to you and to make sure that what you are consenting to is clearly understood.

You will also be asked to provide some demographic information, such as race, age and income level. To protect your confidentiality, there will be no personal identifying information about you in the data collection, and demographic information provided will be coded anonymously.

For completing these two questionnaires and providing demographic information, you will be given a $25 VISA cash card. No other services are required for you to receive the cash card, and there is no need for follow up contact following the completion of the two questionnaires.

By signing this document, you are agreeing to take part in this research study. If you have any questions or if there is something you do not understand, please ask. You will receive a copy of this consent document.

Thank you for your consideration.

I agree to participate in the research study, **Exploring the relationship between depression and sexual risk practices among Black women**.

_____
Signature of Participant

_____
Print Name of Participant

_____Date

Appendix C: Recruitment Flyer

University of Pennsylvania
School of Social Policy and Practice

Black Women Sexual Health Study

ARE YOU OVER THE AGE OF 18?
ARE YOU A WOMAN OF AFRICAN DESCENT?

IF YOU ANSWERED "YES" TO THESE QUESTIONS, YOU MAY BE ELIGIBLE TO PARTICIPATE IN A SEXUAL RISK PREVENTION STUDY.

Incentive Payment
$25 VISA cash card

THE PURPOSE OF THIS STUDY IS TO EXPLORE THE POSSIBLE RELATIONSHIP BETWEEN DEPRESSION AND WOMEN'S SEXUAL DECISION-MAKING PRACTICES. YOUR PARTICIPATION IS STRICTLY VOLUNTARY. YOUR PARTICIPATION WILL INCREASE KNOWLEDGE ABOUT THE MENTAL HEALTH OF BLACK WOMEN AND THEIR SEXUAL RISKS FOR CONTRACTING HIV/AIDS.

ESTELLA WILLIAMSON WILL LEAD ALL ASPECTS OF THE STUDY. MS. WILLIAMSON IS A DOCTORAL STUDENT IN THE DSW PROGRAM AT THE UNIVERSITY OF PENNSYLVANIA, AND SHE WILL WORK UNDER THE DIRECTION OF DR. AILEEN ROTHBARD FROM THE UNIVERSITY OF PENNSYLVANIA, SCHOOL OF SOCIAL POLICY AND PRACTICE.

3701 LOCUST WALK, PHILADELPHIA, PA 19104

Participant Eligibility
- Women of African descent
- Adults over the age of 18
- Currently sexually active with men

Study Description
Complete two questionnaires: 9-question depression screen & a 9-question sexual risk behavior questionnaire (10-15 minutes to complete)

Location
Arranged by participant and researcher at a mutually-agreeable & confidential location. Transportation can be arranged.

Contact
Estella Williamson
University of Pennsylvania
westella@upenn.edu

Appendix D: PHQ-9 Depression Symptom Screen

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	**Somewhat difficult**	**Very difficult**	**Extremely difficult**
⑤	⑤	⑤	⑤

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.

Appendix E: Sexual Risk Behavior Questionnaire

____ Check If Asked by Interviewer
Patient Initials: ___ ___ Patient DOB: ___ ___ ___ ___ ___ ___
Patient ID #: ___ ___ ___ ___ ___ ___
Date M: ___ ___ / D: ___ ___ / Yr: ___ ___ ___ ___
Interviewer Initials: ___ ___ ___ Checked by: ___ ___ ___

Please read each of the following questions very carefully.

As you will see, many of these questions are personal. We understand this and will make every effort to protect the privacy of your answers.

It is very important that you answer the questions honestly. In fact, it's better not to answer a question at all, then to tell us something that is not true for you.

Some questions may not seem to have an answer that is true for you. When this happens, choose the answer that is most right.

Remember, if you are unsure of what to do, you can ask for help.

Thank you for your time and cooperation.

University of Pennsylvania
School of Social Policy and Practice
3701 Locust Walk
Philadelphia, PA 19104

Please note: For the following questions, ***sex*** *means any* ***vaginal intercourse, anal intercourse*** *(in the butt)* ***or oral sex*** *(blowjobs, for example) with men.*

1. With how many men have you had sex in the past three months?
   0. ❑ 0 men
   1. ❑ 1 man
   2. ❑ 2 or 3 men
   3. ❑ 4 or more men

2. In the past three months, were you diagnosed with an STD?
   0. ❑ No
   1. ❑ Yes

3. If yes, how many times were you diagnosed with an STD?

   0. ❑ Not applicable
   1. ❑ Once
   2. ❑ Twice
   3. ❑ Three or more times

4. If you had an STD during this time, did you have sex while being treated for an STD?

   0. ❑ Not applicable
   1. ❑ No
   2. ❑ Yes

5. In the past three months, did you have sex <u>without</u> knowing if your partner had an STD/HIV?

   0. ❑ No
   1. ❑ Yes

6. In the past three months, how often have you had sex with someone you **knew** (or later found out) had HIV/AIDS or an STD?

0. ❑ Never

1. ❑ Once or twice

2. ❑ Three or more times

7. In the past three months, how often have you had sex with someone you **knew** used drugs (either smoked, taken orally or using needles)?

0. ❑ Never

1. ❑ Once or twice

2. ❑ Three or more times

8. If you answered yes to any of the questions in #4-7, did you use a condom during sex?

0. ❑ Not applicable

1. ❑ Yes

2. ❑ No

9. In the past three months, how often did you use condoms when you had sex?

0. ❑ All of the time

1. ❑ Most of the time

2. ❑ Some of the time

3. ❑ None of the time

Demographic Information
What is your current gender identity? 1. Male 2. Female 3. Different gender identity
What is your race? Circle all that apply: 1. White 3. American Indian or Alaskan Native 2. Black/African American 4. Asian or Pacific Islander What is your ethnicity? 6. Hispanic 7. Non-Hispanic
What is your age? (_____number of years)
How many people live in your household (including you)? 1. 1 2. 2-4 3. 4 of more
What is your yearly income level? 1. Less than $14,000 2. $14,001-$28,000 3. $28,001-$50,000 4. More than $50,000

Thank You. Please let the staff person know that you have finished.

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