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Demographic Differences, Self-esteem and Sexual Assertiveness among Black Women

Sharon Lewis-Keith
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Walden University

College of Health Sciences

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Sharon Lewis-Keith

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Walden University

2018

Abstract

Demographic Differences, Self-esteem and Sexual Assertiveness
among Black Women

by

Sharon Lewis-Keith

MSN, Kaplan University, 2011

BSN, North Carolina A&T State University, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Walden University

August 2018

Abstract

There is a high HIV prevalence rate for Black women in Virginia; however, few scholars have examined how sexual assertiveness and self-esteem against HIV vary within this group. Black women who have low levels of self-esteem may increase their risk for HIV. The purpose of this quantitative cross-sectional study was to determine if four aspects of sexual assertiveness (sexual initiation, sexual refusal, HIV/AIDS/STD communication, and contraception/STD prevention) differed across demographic categories and were associated with self-esteem in a diversified group of Black women living in Virginia. A cross-sectional survey was conducted with a community-based sample of 117 adult Black women. The social cognitive theory was the framework that guided this study. ANOVAs were used to determine differences in means of the four sexual assertiveness subscales across the demographic categories (age, sexual orientation, income, education, and relationship status). HIV, AIDS, and sexual transmitted disease communication assertiveness mean scores were significantly higher among higher income Black women ($p_{adj}=.016$) and Black women with a college versus a high school degree ($p_{adj}=.047$). Moreover, Pearson bivariate correlation results showed self-esteem was significantly positively associated with all but one measure (sexual initiation) of sexual assertiveness. Health educators can use the findings of this study to create education initiatives that focus on building self-esteem and sexual assertiveness behaviors among Black women as an HIV/AIDS prevention method.

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Dedication

I would like to dedicate this study to my two daughters, Markia and Sierra. I truly appreciate all the hard work you did, such as cooking, shopping, and cleaning so that I had time to work on my project. I hope that I have been able to demonstrate to you both that you have the power and strength to achieve your goals. To my two grandsons, Matthias and Nathaniel, thanks for the wonderful hugs and kisses that filled my day with joy and happiness. To my parents, siblings, family, friends, and coworkers, thanks for the kinds words of encouragement because you all inspired me to keep on moving forward. Mommy and Daddy, thanks for everything. I love you both so much. To my uncle, Charles Day, who is in heaven smiling down on me, thanks for the conversations we shared, your kind words, and most of all, for always telling me how proud you were of me, and that I had the power to do this. To my mentor, Dr. Schenita Randolph, I want to thank you for being such an excellent teacher in public health nursing, because it is here where I developed my desire to move forward with my education, so that I can improve the health of vulnerable and disabled populations. Thanks for that conversation we had when you encouraged me to seek my doctoral degree in Public Health at Walden University. To Dr. Jennifer Gonzalez and Dr. Laura Plybon, special thanks for all your assistance and support.

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Chapter 1

Introduction to the Study

As recently as the 1990s, there was limited information about the causes of and treatment for AIDS. Some believed that the origin of HIV began in Africa when people became infected from a chimpanzee virus by killing infected chimpanzees (Center for Diseases and Control & Prevention [CDC], 2016). Over the past decades, the HIV virus has spread across Africa and other parts of the world. The virus has been circulating in the United States since the mid to late 1970s (CDC, 2016). In 2013, Black women in the United States represented only 10% of the population, but accounted for 19% of individuals living with HIV/AIDS; in addition, they were 15 times more likely to be living with HIV when compared to women of other race/ethnicities (Virginia Department of Health [VDOH], 2013). Further, one out of four Black women in Virginia was living with HIV (VDOH, 2013). Although Blacks only account for 14% of Virginia's population, they accounted for over 40% of new HIV infection rates (VDOH, 2012). HIV is preventable through behavioral strategies, such as using condoms during sex (Quina, Harlow, Morokoff, & Burkholder, 2000). However, several researchers suggest that Black women may not practice safe sex (Harawa, McCuller, Chavers, & Janson, 2013; Kennedy & Jenkins, 2011). Because HIV is a precursor for AIDS, there is a need to assist Virginia's Black communities in decreasing their risk for HIV/AIDS.

The goals of Healthy People 2020 include preventing HIV-related morbidity and mortality while also reducing HIV/AIDS-related health disparities (National HIV/AIDS Strategy, 2015). In this project, I identified and explored why HIV infection rates are high in Black women so that strategies may be implemented to reduce the disproportionately high HIV infection rates that exist for Black women in Virginia. To reduce disparities in HIV/AIDS-related health status, a comprehensive approach that includes evaluating sexual assertiveness behaviors among all Black women is required (Arya, Behfurouz, & Viswanath, 2009; DiClemente, Wingood, Rose Sales, Lang, & Caliendo, 2009; Kennedy & Jenkins, 2011).

When women practice sexual assertiveness, they conduct a self-evaluation of their own risky behaviors while having personal control over their own sexual health choices with the goal of positive sexual health outcomes (Morokoff, Redding, Harlow, Cho, Rossi, & Meier, 2009; Quina et al., 2000). Sexual assertiveness includes refusal of unwanted sex and initiation of wanted sexual experiences, but using condoms to prevent sexually transmitted illness (STI; Morokoff et al., 2009). In order to achieve these outcomes aligned with sexual assertiveness, women need the ability to communicate sexual needs and desires, refuse unwanted or unprotected sex, negotiate condom use, discuss HIV risk factors with sex partners, and encourage HIV testing with sexual partner(s). Many Black women are at an increased risk for HIV/AIDS because they do not discuss their sexual partner's sexual history, their partner's HIV status, or their risk

factors prior to sexual contact (Harawa et al., 2013). It is important for women to be assertive in expressing their sexual beliefs and practices to their partners, including condom use, which could help prevent STIs (Morokoff et al., 2009; Sales, DiClemente, Davis, & Sullivan, 2012). Because HIV diagnoses rates are high among Black women in Virginia, some woman may not be assertive and lack of open communication about using condoms and discussing their sexual partner's history before engaging in sexual intercourse. When practicing these behaviors, women may put themselves at a higher risk for HIV/AIDS infection. Thus, it is important to evaluate and compare which factors influence all Black women's sexual health choices so that sexual assertiveness and communication needs can be identified to improve future HIV/AIDS prevention and interventions.

Background of the Study

STIs /HIV disproportionately affect Black women in Virginia because of several prevention challenges (Arya et al., 2009). In Virginia, these challenges include the high incidence of STIs among Black men and women, limited access to HIV prevention education, and HIV health care (CDC, 2015). According to Virginia's HIV Epidemiology Profile (2015), Virginia ranked 13th in annually reported new HIV diagnoses in the United States and 20th for HIV diagnosis in the United States in 2014.

In 2014, 59% of newly diagnosed HIV cases were among Blacks, and Black females were 17 times more likely to be diagnosed with HIV than White females

(VDOH, 2015). *Neisseria gonorrhoeae* and *chlamydia trachomatis* were the two leading STIs reported in Virginia (VDOH, 2013). During this time, there were approximately 5,000-6,000 cases of chlamydia and 1,000 cases of gonorrhea diagnosed in the following Virginia locations: Richmond City, Henrico County, and Chesterfield County (VDOH, 2013). Many persons diagnosed with these STIs were Black (VDOH, 2013). Richmond City had the highest proportion of Black patients (82%) compared to Henrico County (77%) and Chesterfield County (55%; author, year). Although most reported being heterosexual, 3% of Black men and 8% Black females reported being bisexual, and 8% reported being homosexual (VDOH, 2013). STI positivity rates were elevated in individuals who reported risky behaviors, such as not using condoms and sex with multiple partners (VDOH, 2013). Out of 11,781 confirmed AIDS cases, Black women accounted for 3,042 (26%) of these cases (VDOH, 201). Virginia's Black communities have a health disparity for STIs/HIV/AIDS.

Minority women are having unprotected sex with bisexual men and are not using communication skills to discuss their partner's sexual history and not encouraging HIV testing or condom use (Harawa et al., 2013). Black women tend to have sexual relations with men of the same race; not being sexually assertive could result in an increased risk of exposure to HIV (McNair & Prather, 2004). \ HIV prevention health education should focus on providing communication techniques to all Black women who are at risk for HIV/AIDS on negotiating condom use, discussing HIV risk factors, and promoting HIV

testing (Kennedy & Jenkins, 2011; Staras, Livingston, Maldonado-Molina, & Komro, 2013). Other HIV prevention barrier methods for Black women should include “encouraging sexual abstinence, HIV testing, and receipt of test results; and reduce the number of sex partners, and unprotected vaginal and anal sex with men” (Painter, Herbst, Dixon-Diallo, & White, 2014, p.4).

Having sex with men is not the only mode of HIV transmission. Female-to-female HIV transmission is possible through vaginal fluid and menstrual blood (Women’s Health.gov, 2012). The Women’s Institute at Gay Men’s Health Crisis (GMHC, 2009) reported that

female-to-female transmission can occur with unprotected oral sex when a female is in the beginning, middle, or end stage of her menstrual period. As well, the presence of a large amount of vaginal secretions during oral sex can increase the risk for HIV. (p.4).

Lesbian sex that engages in sharing sex toys without disinfecting them also increases the risk for HIV (GMCH, 2009). Couples who engage in risky sex should know their HIV status and receive health education in safer sex practices to reduce their risk for HIV (GMCH, 2009; Women’s Health.gov, 2012). To address these diverse modes of transmission, I collected data from Black women that were heterosexual, bisexual, or gay as well from various educational, income, and geographic locations.

Age is important in HIV prevention among Black women. Although the goal for all young women is to feel good about their body and understand that sex is a natural desire, women should use safe sexual practices to prevent STIs/HIV and unwanted pregnancy (Sales, Smearman, Brody Milhausen, Philibert & DiClemente, 2013). Young Black women struggle with this goal and some are unable to communicate their sexual needs and are unable to refuse unwanted sexual activities, resulting in low self-esteem (Sales et al., 2013; Staras et al., 2013). Midlife African-American women struggle in discussing risky sexual behaviors and encouraging condom use with their sexual partners (Jacobs & Kane, 2010). Some older Black women engage in risky sexual behaviors, such as unprotected sex with multiple sexual partners (Ferguson, Quinn, Eng., & Sandelowski, 2006; Jacobs & Kane, 2010). Sexual risk-taking is the main risk factor for HIV infection for midlife African American women; however, there has been little investigation of the underlying social, cultural, and individual circumstances that lead to sexual risk-taking.

Although age is an important factor in considering rates of HIV infection, so are income and education in Black women. Few scholars have described sexual assertiveness in educated Black women to evaluate if sexual assertiveness is a factor used to prevent STIs/HIV/AIDS. Most researchers have focused on poor and uneducated Black women. Scholars have portrayed Black women at risk for HIV/AIDS as poor, uneducated, having been incarcerated, and with substance use disorders (Alleyne & Wodarski, 2009; Fleming, LeBlanc, & Reid, 2013; Sharpe, Voute, Rose, Cleveland, Dean, & Fenton,

2012). Although these factors may increase the risk for HIV/AIDS, ignoring other risky behaviors could threaten sexual health for educated and high-socioeconomic status Black females. Jenkins and Kennedy (2013) found that measured sexual assertiveness in educated Black women attending college was limited to younger Black women and did not consider how low socioeconomic status is a risk factor even for those attending college. Because the incidence rate of HIV/AIDS is high among Black women in Virginia, there was a need to study sexual assertiveness behaviors among Black women from all levels of education and socioeconomic backgrounds, as well as whether they are HIV negative or positive (Chandler, Anstey, Ross, & Morrison-Beedy, 2016).

Some Black women, including married women, perceive that they are not at risk for HIV because they are in a committed relationship (Bradley, Sales, Elifson, & DiClemente, 2013). Some older women who begin to date after a break in dating fail to ask their sexual partners about their risk behaviors and later find out they are HIV positive (National Institute on Aging, 2015). This insufficient communication could be related to women's perceptions that there is no need to use condoms because they can no longer get pregnant, as well their perception of a limited supply of eligible Black men (Stevens-Watkins, Knighton, Mitchell, Oser, & Leukefeld, 2013). Therefore, relationship status and perceived susceptibility to HIV/AIDS were two variables I explored to see whether it was associated with study participants' sexual behaviors. Relationship challenges may include (a) trusting that a partner is faithful (Paranjape, Bernstein, St.

George, Doyle, Henderson, & Corbie-Smith, 2006), (b) lower condom use (Perrino, Fernandez, Bowen, & Argeart, 2006), (c) unequal power in the relationship (Newman, Groom, Pennebaker, & Handelman, 2008), (d) ineffective communication skills in condom use and discussing sexual health history (Bowleg, Valera, Teti, & Tschann, 2010), and (e) low sexual assertiveness (DiClemente et al., 2006; Ferguson et al., 2006).

The context for sexual risk-taking and protective practices is poorly understood for younger and older Black women. Although researchers recommended that Black women need increased sexual assertiveness, this need is notable among Black women who are socioeconomically disadvantaged (CDC, 2015; Kenney & Jenkins, 2011). Most researchers in HIV prevention and HIV health care disparities have focused on younger, poorer, and less educated Black women (CDC, 2015; Fleming et al., 2013; Sharpe et al., 2012; VDOH, 2014). Scholars have not examined the possibility that individuals that are educated and economically stable are engaging in risky sexual behaviors that increase the risk for HIV/AIDS for themselves and those in their community. Public health workers cannot ignore that HIV diagnosis rates are steadily climbing in Virginia among Black women. Unlike many HIV prevention studies that focus predominantly on Black women of low socioeconomic status, a diverse group of Black women were recruited in this study. This recruitment of participants from all socioeconomic backgrounds allowed for an exploration of sexual assertiveness characteristics over life course, income strata,

relationship status, and educational attainment. There is a need for sexual assertiveness and communication training among Virginia's Black women.

Problem Statement

The quantitative literature on the effect of sexual assertiveness skills used to prevent STIs/HIV/AIDS among diverse Black women is limited (Jenkins & Kennedy, 2013). HIV statistics about Black women are often included within the statistics of other populations or are lumped together with statistics on Black men (Black Women's Health Imperative, 2016). Scholars have described sexual assertiveness skills among Black men having sex with men (BMSM). There is a need for quantitative research on HIV prevention strategies, risky sexual behaviors, and perceived HIV risk in a diverse group of Black women. In the State of Virginia, HIV rates are high among Black women (CDC, 2016; VDOH, 2014). A comparative study on a diverse sample of Black women socioeconomically and educationally could determine whether Black women need health education training on how to become sexually assertive to address the HIV health disparity that exists in Black communities. The first step to HIV prevention research is to understand the burden of disease and its relationship with sexual assertiveness in Black women (BWHI, 2016; Jenkins & Kennedy, 2013). Therefore, I compared sexual assertiveness among a diverse sample of Black women to evaluate its use in the prevention of HIV.

Purpose Statement

The purpose of this quantitative study was to fill a gap in HIV prevention research among a diverse group of Black women by using an evidence-based, comprehensive survey of sexual assertiveness and HIV-related risk behavior. When an individual practices sexual assertiveness, they are able to (a) express their sexual desires and needs; (b) refuse unwanted sex; (c) prevent STIs by using condoms; and (d) communicate HIV risk, as well encourage HIV testing. In addition to self-assertiveness, self-esteem, and perceived susceptibility to HIV was measured. I also identified factors associated with sexual assertiveness including perceived susceptibility, income, self-esteem, age, relationship status, sexual orientation, known HIV status, and educational level. This information can be used to predict which women are less likely to be sexually assertive in their sexual relationships so that strategies can be developed and implemented to assist these women in developing high levels of sexual assertiveness. Finally, because there is a gap in examining how sexual assertiveness differs across the life-course in Black women, I characterized these variations.

Research Questions and Hypotheses

I addressed the following four research questions:

1. What is the difference in Black women's sexual assertiveness by age, income, education, sexual orientation, and relationship status?

H_{11} : Black women will show a significant difference in sexual assertiveness (dependent variable) by age, income, education, sexual orientation, and relationship status.

H_{01} : Black women will show no significant difference in sexual assertiveness by age, income, education, sexual orientation, and relationship status.

2. What is the difference in perceived susceptibility of HIV/AIDS (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status?

H_{12} : Black women will show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.

H_{02} : Black women will not show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.

3. What is the difference in self-esteem (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status?

H_{13} : Black women will show a significant difference in self-esteem by age, income, education, sexual orientation, and relationship status.

H_{03} : Black women will not show a significant difference in self-esteem by age, income, education, sexual orientation, and relationship status.

4. Does age, income, education, self-esteem, sexual orientation, or relationship status predict higher levels of self-efficacy in being sexually assertive (dependent variable)?

H₁₄: Black women will show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.

H₀₄: Black women will not show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.

Theoretical and/or Conceptual Framework for the Study

Public health efforts designed to control the spread of HIV/AIDS in the Black community have focused on teaching strategies on how to prevent transmission (BWHI, 2016). Some assume that if people are educated, they will take appropriate self-protective action (Pender, Murdaugh, & Parsons, 2011). Although raising awareness and knowledge about risk behaviors for HIV/AIDS is important, education alone is insufficient to prevent HIV in Black women. Black women need self-efficacy and self-esteem, so they can encourage condom use with their sexual partners, but also communicate their sexual history and recommend HIV testing to their sexual partners (BWHI2016; DiClemente et al., 2009). HIV/AIDS prevention is key for Black women to improve their sexual health.

According to Bandura's (1977a) social cognitive theory (SCT), an individual's behavior is determined by his or her personal behavior, environmental, situations, and

behavioral factors. Bandura (1977a) identified that an effective or a high level of self-regulation behavior is achieved by skills in self- motivation and self-guidance. Bandura (1977a) identified several constructs of the SCT including the environment, situations, behavioral capacity, outcome expectations, outcome expectancies, self-control, observational learning, self-efficacy, and emotional coping. These constructs are critical in informing the understanding of how Black women gain self-esteem in their ability to protect their own health to help decrease their risk for HIV.

Proponents of the SCT focus on self-empowerment and self-efficacy in fulfilling life. Self-efficacy has been found to be associated with positive health behavior change and perceived control (Williams & Esmail, 2014). Self-efficacy is important in personal change; however, knowledge must be combined with perceived ability to make personal change (Williams & Esmail, 2014). Bandura (1977a) believed that some individuals might have certain factors such as lack of self-esteem that could impede them from making changes (Pender et al. 2011). For Black women, these may include situational, socioeconomic, and personal factors (Jenkins & Kennedy, 2013).

Self-efficacy may be defined as an individual's belief in his or her own ability to change or adopt a new behavior (Wulfert, 2014). However, to gain self-efficacy and personal control over one's sexual health choices, a self-assessment must occur with the ability to perceive if one's sexual choices could lead to negative health outcomes so that behavioral changes could occur (Bandura,1977a). Perceived self-efficacy may be

conceptualized as personal beliefs that he or she can exert control his or her own desires, thought processes, emotional states and patterns of behavior (Bandura, 1977a).

The self-efficacy construct is a predictor of behavior that promotes positive health outcomes and is an aspect of behavioral change. In a randomized controlled study, self-efficacy was found to be a predictor of increased exercise in cancer patients (Stacey, James, Chapman, & Lubans, 2016) and for increasing exercise in Black women (Martin, Person, Pratt, Prayor-Patterson, Kim, & Salas, 2008). Individuals who had a high level of self-efficacy were more willing to follow recommended HIV treatment plans and to practice safe sex to prevent transmission to their sexual partners (Brown, Littlewood, & Vanable, 2013; Nokes, Johnson, Webel, Rose, Phillips, Sullivan, & Sefcik, 2012).

Interventions to increase self-efficacy have also been conducted for those with HIV. The Positive Choices Mapping (PCM) intervention increased condom self-efficacy and condom use among African American crack cocaine smokers who are living with HIV (Czuchry, Timpson, Williams, Bowen, & Ratliff, 2009). Study participants who had a high level of perceived self-efficacy were more likely to use condoms and discuss risky sexual risk behaviors with their peers (Kennedy, Reilly, Medley, & Sweat, 2007). In Africa where HIV rates are high, a STI/HIV prevention course was found to be effective in raising awareness about self-efficacy and condom use among those who were HIV positive and those at risk for HIV (Jemmott O'Leary, Icard, Rutledge, Stevens, & Hsu, 2014). After the education was provided, self-efficacy was higher in the study

participants, as well as condom use (Jemmott et al, 2014). Perceived self-efficacy of condom negotiation, lower fear of negotiating condom use, and having communicated with sex partners about condom use served as predictors of consistent condom use in samples of Black women (Crosby et al., 2013; Wingood, DiClemente, Robinson-Simpson, Lang, Caliendo, & Hardin, 2013). Scholars have suggested a need to increase self-efficacy among Black women, so they may practice positive sexual behaviors that will decrease their risk for AIDS.

The SCT was selected as the framework for this study to explain how a person's behavior is influenced by personal, social, and environmental factors (Brown et al., 2013). The variables of age, income, education, relationship status, self-esteem, sexual orientation, HIV status, and perceived susceptibility might be related to self-efficacy in Black women, which could influence their ability to use effective communication to become more sexually assertive. These increases in sexual assertiveness would likely prevent STIs/HIV (DiClemente et al., 2009; Kennedy & Jenkins, 2011).

Few scholars have investigated how psychological processes and attitudes influence self-esteem and self-efficacy, and how self-esteem and self-efficacy impacts their risk and protective behaviors of a diverse group of Black women. Given the many challenges that Black women have in their personal and societal environment, as well the transitions that occur over their life course, it is important to investigate the possible factors associated with self-esteem and self-efficacy. Black women may not be equipped

with sexual assertiveness and communication skills needed to help them make sexual decisions to prevent STIs/HIV (Bowleg et al., 2009). The SCT was used to guide the measurement and inferences about participants' degree of self-efficacy and self-esteem in being sexually assertive to negotiate condom use, communicate about sexual history, and HIV testing.

Nature of the Study

I collected cross-sectional data about sexual assertiveness and communication skills that Black women living in Virginia took to prevent HIV. Questions were asked about the subject's perceived risk for HIV/AIDS and to identify if testing had been done to identify HIV status. I evaluated Black women's self-efficacy and self-esteem in making individual choices to promote their sexual health. I examined how sexual assertiveness and communication in HIV prevention (dependent variables) varied in Black women per their age, income, educational level, HIV status, sexual orientation, and relationship status (independent variables).

This study was a cross-sectional design, which had many benefits. These benefits included being cost-effective and quick. It allowed me the opportunity to describe a breadth of behaviors in a population. I used a convenience sampling technique that could lead to an under or over representation of the population. This could make generalization difficult (Hair et al., 2008; Munro, 2005). However, recruited participants who met the study criteria.

Definitions

Environmental factors: An individuals' expectations, beliefs, and cognitive competencies are developed and modified by social influences and physical structures within the environment (Bandura, 1977a).

New/other sexual partner: An individual who the woman has sexual intercourse with who is not her primary sexual partner (CDC, 2014).

Perceived susceptibility: This refers to the ability for an individual to conduct a self-evaluation of his or her risk behaviors in becoming infected with HIV (Wulfert, 2014).

Personal factors: An individuals' expectations, beliefs, self-perceptions, and goals that influence their behavior (Bandura, 1977a).

Primary sexual partner: An individual who the woman lives with or is in relationship with, sees quite often, and has sexual intercourse with (CDC, 2014).

Self-efficacy/personal control: An individual's confidence in performing a particular behavior (Wingood et al., 2013).

Self-esteem: Belief in a person's own self-worth or how much an individual like themselves (Twenge & Campbell, 2002).

Sexually active: Having sexual intercourse at least one time in 3 months prior to the study (CDC, 2014).

Sexual assertiveness: The ability for an individual to make sexual health choices during sexual engagement that will prevent negative sexual health outcomes such as STIs/HIV (Sierra, Santos Iglesias, & Vallejo-Medina, 2014).

Assumptions

I assumed that because the participants were informed that their responses would be confidential and only shared with those involved in the study, the participants were honest in reporting their behaviors. It would be hard to validate the participant responses; therefore, honesty was assumed. I used validated/reliable scales, and I was confident that any error due to recall bias or dishonesty was random.

Limitations

A limitation of survey studies is that they do not provide an opportunity for the participants to build a trusting relationship with the researcher they might do in qualitative studies. Another limitation to surveys is participant nonresponse, which could cause bias in the data analysis (Creswell, 2009). I attempted to collect data about personal sexual choices, and some respondents may have felt uncomfortable providing accurate information. Therefore, some of the responses may not be truthful. To prevent this, study participants were assured that their responses would be kept confidential during the informed consent process.

Scope and Delimitations

This study was an attempt to fill a literature gap by collecting data through surveys that measured and compared sexual assertiveness, communication techniques, and perceived susceptibility to STIs, HIV, and AIDS among a diverse group of Black women. Because Black women are challenged with socioeconomic, personal, and situational factors that influence their behavior, it is important to examine how these socioeconomic, personal, and situational factors converge to impact sexual assertiveness and communication.

Because HIV rates are high among Black females in several geographical locations in Virginia, recruitment of participants was needed from several locations. Thus, I attempted to sample from various locations of Virginia such as Richmond, Chesterfield, Glen Island, Petersburg, and Colonial Heights. I only collected data from Black females because they have the highest STIs/HIV infection rates when compared to other women in Virginia (VDOH, 2014). In addition, there are not sufficient data on a diverse group of Black women. To demonstrate that there is a true health disparity in Black women living in Virginia, the theoretically derived independent variables in this study included age, income, self-esteem, education, sexual orientation, and HIV status. The dependent variables that were examined in this study were perceived susceptibility, self-esteem, self-efficacy, and sexual assertiveness. These dependent variables were all key factors to evaluate because some Black women despite their age, income,

relationship status, HIV status, sexual orientation, and educational level may perceive they are not at risk for HIV/AIDS.

Significance

Black women continue to be disproportionately affected by HIV when compared to other races and ethnicities. Black women in Virginia have the highest STIs/HIV diagnosis rates when compared to other races (VDOH, 2014). Black women have many HIV prevention challenges, which increases their risk for HIV and those in their community. The risk for getting HIV may be lower for women who use condoms and who practice abstinence (CDC, 2015). Thus, increasing sexual assertiveness skills are essential to help eradicate HIV health disparities in the Black community. Black women must learn that self-confidence is important in their ability to communicate the need for negotiating condom use with every sexual partner; discussing sexual risk behaviors and encouraging HIV testing could be used in conjunction with condom use in HIV prevention. I attempted to fill a HIV prevention research gap by examining sexual assertiveness among a diverse group of Black women in the prevention of HIV. This study contributed knowledge of a need for sexual assertiveness and communication training among Black women in Virginia.

Summary

This study was an attempt to fill a gap in the research by investigating and comparing sexual assertiveness and communication skills as a means of preventing HIV

among a diverse group of Black women in Virginia. HIV rates are high in Virginia's Black communities (VDOH, 2015). Since 2012, HIV rates have begun to climb, and research is needed to explore why this is occurring (VDOH, 2015).

HIV prevention researchers have predominately focused on Black women who are younger and of lower socioeconomic status. In the State of Virginia, Black women continue to have high diagnoses rates for STIs/HIV, which increases the risk for other Blacks living in their communities (VDOH, 2013). HIV prevention research is needed among all Black women to inform interventions to help decrease HIV in the Black community.

The purpose of this study was to use a valid quantitative instrument to collect data about sexual communication skills and sexual assertiveness in a diverse group of Black women living in Virginia. These data were used to compare the variables of age, income, education, relationship status, and sexual orientation to see if these factors impacted sexual assertiveness, self-esteem, self-efficacy, and perceived susceptibility (dependent variables). The SCT (Bandura, 1977a) was used to inform hypotheses and interpret the results. According to the SCT, Black women who lack self-esteem and self-efficacy/personal control will struggle with being sexually assertive. Sexual assertiveness includes being comfortable in discussing risky HIV behaviors with their partners, negotiating condom use, and encouraging HIV testing. Therefore, I expected that lower sexual assertiveness would be associated with HIV (and other STI) infection. This study

has the potential to inform social change by identifying risky sexual behaviors and the limited use of sexual assertiveness and assertive communication skills in Black women so that public health strategies can be developed and implemented to decrease in STIs/HIV in the Black community.

Chapter 2: Literature Review

Introduction

In the state of Virginia, HIV is an epidemic among heterosexual Black women. Black women represented only 10% of the population but accounted for 19% of individuals living with HIV/AIDS, and they were 15 more times likely to be living with HIV when compared to women of other race/ethnicities (VDOH, 2013). Further, one out of four Black women in Virginia is living with HIV (VDOH, 2013). There is a need for sexual assertiveness in Black women that could assist in reducing their risk for HIV/AIDS.

HIV prevention researchers have primarily focused on factors that correlate with increased rates of HIV in poor and uneducated Black women. However, there may be other factors such as social and economic trends, relationship status and/or gender role, age, educational level and life experiences that shape how Black women are sexually assertive in their relationships (Jenkins & Kenney, 2011; Paternon & Jordan, 2012). Public health research regarding HIV prevention in the Black community of Virginia should receive high priority (Arya et al., 2009; Jenkins & Kennedy 2012). Sexual assertiveness includes having the ability to self-advocate for a person's sexual health by refusing unwanted sex and refusing to have unsafe sex. Sexual assertiveness also includes having a high level of self-esteem so a person can communicate and ask his or her sexual

partners about his or her risk behaviors, HIV status, negotiate condoms, and encourage HIV testing (Jenkins & Kennedy, 2011).

Black women who have low income and with low levels of education have psychosocial and social-economic challenges that prevent them from being sexually assertive (Jenkins & Kennedy 2011; Paterno & Jordan, 2012; Sharpe et al., 2012). Some Black women struggle with their relationships and make unhealthy sexual choices resulting in unsafe sex (Brassard, Peloquin, Dupuy, Wright, & Shaver, 2012; James & Kane, 2011). Older and middle-aged women were found to struggle with finding suitable partners, resulting in them dating and having unprotected sex with multiple partners (National Institute on Aging, 2016; P eloquin et al., 2014). Some Black women will allow their male partners to convince them to have sex with them without a condom, despite their fear that their partner(s) were unfaithful (Miller, 2012). Paterno and Jordan (2012) found that since 2005, factors associated with unprotected sex among Black women in the United States included increasing age; relationship status (trust issues, being monogamous, multiple partners); intrapersonal factors such as assertiveness, perceived susceptibility, self-esteem, self-efficacy; depression; gender roles; and relationship authenticity (Paterno & Jordan, 2012)

There is a gap in HIV/AIDS prevention research on the study of sexual characteristics and sexual assertiveness among younger, uneducated, and poorer Black women. Jenkins and Kennedy (2013) found that younger Black collegiate females

attending a Black university had a need for HIV education on how to become sexually assertive in negotiation of condom use. Jenkins and Kennedy identified that there is a gap in the literature about sexual assertiveness skills and characteristics among a diversified group of Black women. Sharpe et al. (2012) suggested that Black women, despite their income or education, have life challenges that increase their risk for being unassertive.

Quantitative studies that are comparative are critical in identifying similarities and/or differences in sexual assertiveness skills per Black women's level of education, age, income, and relationship status so that sexual assertiveness training can be tailored to meet Black women's learning needs. For example, older women may have more self-confidence in their communication skills to discuss risk behaviors and HIV status with their partners, while younger Black women, due to their lack of experience, may lack self-confidence in their communication skills (James & Kane, 2011; Jenkins & Kennedy, 2013). Training that focuses on providing education about how to build self-confidence and communication skills may be needed for younger Black women. Therefore, the purpose of this quantitative study was to use an evidence-based, comprehensive survey to measure and compare sexual assertiveness, perceived susceptibility to HIV, and communication skills in negotiating condom use, discussing HIV risk behaviors, discussing HIV status, and recommending HIV testing with sexual partner(s) among a diversified group of Black women in Virginia.

Literature Search Strategy

To assist with this dissertation, CINAHL, PUBMED and MEDLINE electronic databases were searched for English-language, full-text, peer-reviewed, studies published between 2011 and 2016 that focused on the HIV sexual risk practices of African American/ Black women over the age of 18. When searching for articles using the search term *sexual assertiveness in Black women over the age of 18*, only five articles were found. Therefore, a new search was done using the same electronic databases with search terms *sexual assertiveness in women*, and 21 studies were found. Only 15 of these studies were used because they discussed the other independent variables in this study, which included self-esteem, age, communication skills, risk perception, and relationship status. An additional search term focused on *HIV risk factors among African American/Black women*. This yielded 72 studies. A narrower search was done using the same search terms but in *midlife and older women*, which yielded only six studies. Other terms used to search for articles were the following: *Black men perception of HIV risk* and *HIV risk factors related to Black men*. I used the same electronic databases and focused on HIV/AIDS studies that used the SCT with the concepts of *HIV risk perception*, *self-esteem*, and *self-efficacy*. Because I was interested in how Black women who are gay or bisexual, as well HIV positive, perceive the need for implementing sexual assertiveness skills in their lives, another search was conducted using CINAHL, Google, and MEDLINE electronic databases for English-language, full-text, peer-reviewed, studies

published on *HIV sexual risk practices of lesbian and bisexual African American/ Black women over the age of 18*. There were only six studies found on this topic. This revealed the limitation of using sexual orientation as a variable in studying sexual assertiveness and HIV risky behaviors in this population.

Literature Review Related to Key Variables and/or Concepts

Independent Variables

Relationship status, age, income, education. Sexuality is often related to individuals' relationships (Blackmore, Hart, Albiani, & Mohr, 2011; Christopher & Sprecher, 2000). Understanding how individuals feel or perceive their sexuality is related to their sexual behaviors and is critical to understanding how individuals perceive their risk for HIV (Collins, Holman, Freeman, & Patel, 2006). Some individuals who feel they are in a committed relationship may not feel there is a need to communicate with their partners about their sexual history and will not perceive the need to use condoms because they are not at risk for poor sexual health outcomes (Ferguson, et al, 2006; Quina et al., 2000).

To better understand how sexuality and perceived partner support might influence adult attachment (anxiety, avoidance), self-esteem, sexual assertiveness, and sexual anxiety, Peloquin, Bigras, Brassard, and Godbout (2014) suggested that individuals "who scored high on avoidance, reported lower sexual self-esteem and assertiveness; as well,

more sexual anxiety” (p. 182). Peloquin et al. also reported, “Poorer sexual assertiveness skills, despite their belief of having partner support” (p. 183). Peloquin et al. found that women who scored higher on sexual self-esteem perceived that they had low partner support; in contrast, men who scored high on both partner support and sexual self-esteem also scored high on avoidance. Individuals scoring high on attachment anxiety reported poorer sexual self-esteem and more sexual anxiety when partner support was perceived to be low, but attachment anxiety was unrelated to either sexual anxiety or self-esteem when partner support was perceived to be high. (p. 184)

Relationship status is a variable to consider when discussing sexuality and sexual assertiveness. Attachment avoidance was related to lower sexual anxiety, lower self-esteem, and poorer sexual assertiveness (Peloquin et al., 2014).

Gender power is to be an issue for middle-aged and older Black women. According to Mallory, Harris, and Stampley (2009), two themes emerged in their study among a small group of Black women 40-65 years of age regarding their ability in making sexual health decisions ($N=36$). Mallory et al. revealed that

taking responsibility meant Black women would encourage condom use, abstinence, monogamy, and HIV testing as a function of three important factors: self-esteem, self-confidence, and self-reliance. ‘Getting caught up’ included risky behaviors as a function of the man shortage, reliance on men, and sexual desire.

They argued that Black women could easily shift between these two themes and their choices are influenced by their beliefs and knowledge about HIV and AIDS. (pp. 1253-1254).

Mallory et al. found that midlife Black women struggled with finding suitable partners during their midlife, causing them to engage in sexual risk-taking.

Smit and Larson (2015) explored the risky behaviors of Black women older than 50 years of age. Smit and Larson discovered that there is a gap in HIV prevention research for midlife and older Black women. Smit and Larson found nine studies, eight used a quantitative cross-sectional design and one used a qualitative design but they consistently identified at least one of three major groups of factors that contributed to HIV sexual risk practices in Black women older than 50 years of age: Behavioral (inconsistent condom use and multiple sexual partners), psychological (risk perception, depression/ stress, trauma, and self-esteem issues), and social factors (economics, education, and drugs/alcohol). (pp.69-71)

Relationship status was found to be crucial in older Black women's risk behaviors. Many older Black women did not use condoms or encourage condom use because they trusted their partners and were in long term-relationships with their primary partners; in addition, Black women who became infected with HIV did not communicate their HIV status and refused to use condoms because they were fearful of losing their relationships (Smit &

Larson, 2015). Overall, some older Black women are engaged in HIV risky practices (Smit & Larson, 2015).

Younger Black women also experience different perceptions and issues that may negatively impact their romantic relationships. Waldrop-Valverde, Davis, Sales, Rose, Singood, and DiClemente (2013) collected data from 570 Black females (ages 15-21) to identify individual- and partner-level characteristics associated with sexual concurrency among high-risk, young African American women in Atlanta, GA. Waldrop-Valverde et al. discovered “that many of these young Black women had several concurrent relationships, especially when they did not trust their partners and/or they felt the relationship did not have a future” (pp. 681-684). Hunter and Tilley (2015) used the Black feminist epistemology and symbolic interactionism as a theoretical perspective and philosophical framework to examine experiences and social behaviors of Black women to gain a better understanding of why condom use has been limited among Black women. Hunter and Tilley found that having low self-esteem, gender ratio imbalance, engaging in risky behaviors to maintain relationships, and age difference perceptions and beliefs about condom use were reasons why condom use is limited among Black women. Relationship factors as well as age are variables to use in the study of HIV prevention research among Black women.

Issues such as prescribed gender roles, trust issues, and fear of losing a partner are all contributors to lack of sexual assertiveness for younger and older Black women. The

more sexual partners those younger and older Black women have, the higher their risk for the possibility of mixing low- and high-risk individuals. Thus, a continuum of HIV health care disparities will continue across the United States in Black communities (Sharpe et al., 2012). Interventions targeted toward sexual health among all Black women may need to address partner/relationship factor, age, and income because condom use and other HIV prevention strategies have limited use or nonuse in the relationship between Black men and women. There is a need to further study of relationship characteristics, such as relationship commitment and trust, from various socioeconomic levels and age groups because it can influence risk behaviors (Kennedy & Roberts, 2009). Heterosexual contact is the most common route of transmission (CDC, 2012). Younger, middle aged, and older Black women all have challenges in their lives and many continue to engage in risky sexual behaviors increasing their risk for STIS/HIV.

Education and income are variables in HIV prevention, especially because health care disparities exist in Black communities in the United States. An individual's socioeconomic status (SES) includes measuring educational level, income, and occupation (CDC, 2014). HIV threatens the health of those with socioeconomic challenges (American Psychological Association, 2016). Low SES can increase the risk for poor health, including HIV/AIDS. Having a low income can result in the inability to obtain a college degree and the inability to receive needed health care (CDC, 2014). Because low SES can be a barrier that impacts individual health and wellbeing, I used

SES factors of income and education to evaluate if they impacted Black women's risk for HIV.

Gillen and Markey (2014) focused on the roles of sex, race/ethnicity, and body image in HIV testing and communication with a partner about HIV testing and HIV status. Gillen and Markey expressed "that college student do engage in STIs/HIV risky behaviors and is an adequate population to evaluate sexual behaviors" (p.816). Gillen and Markey revealed that African American/Black college students were more likely to have had an HIV test, recommend HIV testing with sexual partners, and encourage condom use (p. 818). However, overall HIV testing was low (30%), suggesting that college students are unaware of their HIV status, do not discuss risky sexual behaviors with their partners, and do not encourage HIV testing (author, year, p. 820). Although college students have some attainment of higher education, Gillen and Markey revealed that there is a need to promote HIV prevention health education to college students.

Longmire-Avital and Oberle (2016) examined the reasons why highly educated Black women reported condom use. Longmire-Avital and Oberle found the following three themes: (a) the reliable standard, (b) pregnancy prevention, and (c) cost effective and easily accessible. Gillen and Markey (2014) claimed that Black women with some higher education may be more sexually assertive in their sexual relationships. Ferguson et al. (2006) revealed that students who attended a historically Black college or university (HBCU) had a risk for contracting HIV due to having multiple sexual partners and lower

perceived control for condom negotiation. Despite HBCU's providing health education about HIV prevention, many students still practice risky behaviors like those without any college (Danielson, Walsh, McCauley, Ruggiero, Brown, Sales & Clemente, 2014; Ferguson et al., 2006).

Covariate Variables

Sexual orientation, HIV status. There is an increased risk for HIV among homosexual contact (CDC, 2015). The vulnerability of HIV among women who have sex with women (WSW) is a public health challenge. This may be due to the low number of cases reported of HIV transmission among WSW, as well as perceived risk for transmission (Reddy, Sandfort, & Rispel 2009). In 2012, the Houston Department of Health contacted the CDC regarding the confirmation of a HIV transmission likely caused by sexual contact between two women (CDC, 2014). Lesbians or WSW, like heterosexual women, engage in at risk sexual behaviors, such as sex with multiple partners, unprotected sex with men, and exposure to body fluids that transmit HIV (Reddy et al., 2009). Other potential exposures associated with HIV transmission in WSW that must be ruled out include injection drug use (IDU), tattooing, acupuncture, piercing, use of shared sex toys between the partners and other persons, exposure to body fluids of others, and receipt of transplants or transfusion (CDC, 2014).

Matebenia, Reddy, Sandfortc and Southey-Swartz (2013) conducted a community participatory study to gain a better understanding about female-to-female HIV

transmission. Matebenia et al. revealed that some of the participants reported having unprotected sexual relationships with men and discovered that they were HIV positive while in these relationships; in addition, some of these women were raped and forced to have sex when they did not want to (Matebenia et al., 2013). Only one-fifth reported exclusive female-to-female sexual relationships and possible HIV transmission while in these relationships. Some women who reported having sex with women felt that they were safe from HIV transmission (Matebenia et al., 2013). Some of the participants reported that once they were aware of their HIV status, they were willing to let their partner know of their HIV status, encouraging their partner to have HIV testing, and adhering to medical treatment (Matebenia et al., 2013). Matebenia et al. demonstrated that WSW who were HIV positive might feel more confident in discussing their HIV status and risky sexual behaviors with their female partners. Therefore, sexual orientation and HIV status may increase self-efficacy in this population resulting in the ability to be more sexually assertive. I stopped reviewing here due to time constraints. Please go through the rest of your chapter and look for the patterns I pointed out to you. I will now look at Chapter 3.

Through this literature review, I have demonstrated that HIV infection rates may have significant differences per gender, race, education, age, income, sexual orientation, HIV status, and relationship status (CDC, 2014). Therefore, in my proposed study, I did attempt to recruit and gather data from Black females across various age groups, with

various incomes, educational levels, sexual orientation, and different relationship status to better understand if these variables have any impact on the outcome, which is sexual assertiveness in HIV prevention.

Dependent variables

Perceived susceptibility. HIV disproportionately threatens the lives of Black women. The need to understand why some people continue to engage in HIV risky behaviors is important. Researchers Theall, Elifson, Sterk, and Klein (2003) conducted a cross sectional study among Black women (N=183). The sample was divided into two cohorts which included 93 younger women ages 18 to 29 and 90 older than 40 years of age. Their purpose was to see if there was a difference in perceived susceptibility to HIV per age; as well to see if behavioral practices influenced their perceived risk (p.407). The results revealed that regardless of age, "most women either perceived a low risk for HIV or no risk for HIV despite reporting having unsafe sex, cheating on their partner(s) or having sex with a partner they believed cheated on them" (p.423). Yet, as hypothesized, "older women did perceive themselves at a lower risk for HIV" (p.424). Theall et al. (2003) argued, "Educational needs for younger females may need to focus on issues such as pregnancy and dating. Whereas for older women, educational needs may include partner communication, condom negotiation, dating, and risk associated with HIV" (p.426). While a limitation to this study is that it was cross sectional and it cannot prove

causal relationships, it does support the need to explore or predict factors that determine perceived HIV susceptibility in Black women.

Mallory et al. (2009) discovered in their study that Black women older than 50 years of age perceived their risk for HIV was low despite not using condoms. These women believed they did not need to use condoms because they were post-menopausal and could not get pregnant. Importantly, these researchers discovered that older Black women are less well informed about HIV/AIDS. Their study demonstrated that older women have a problem with condom efficacy because they believe there is no health risk for STIs/HIV. Their study supported other research that found older Black women believed there is no need to talk to their partners about their HIV status, risky behaviors, and using condoms (Collins, Elliott, Berry, Kanouse, & Hunter, 2003). Therefore, their study does support the need to evaluate older women's perception of condom efficacy and communication efficacy in the prevention of STIs/HIV.

Researchers Khawcharoenporn, Kendrick, and Smith (2012) conducted a cross-sectional study among heterosexual high-risk participants at a STI clinic in Georgia to assess perceived susceptibility to HIV and condom use. There were 494 participants; 63% male, 70% Black, 88% heterosexual; 83% were categorized into the high-risk group. The results revealed, "That out of the high-risk participants, 84% perceived themselves at no or low-risk despite low condom use and having high levels of knowledge about HIV transmission risk. The perception of HIV risk did not differ significantly across gender"

(p.225). One of the biggest limitations to this study was using only single, heterosexual Blacks with a high school education that attended a STI clinic, which limits generalizability. Therefore, my study did recruit Black women with various levels of income and educational attainment to see if this did make a difference in perceived susceptibility to HIV. Yet, the researchers could demonstrate that Blacks do have a low perceived susceptibility to HIV despite knowledge of HIV transmission risk and their risky sexual behaviors (Khawcharoenporn et.al, 2012

Self-esteem. Self-esteem has been linked to women's sexual behaviors. Some researchers argue that increased aging could cause women to lose their self-esteem and thus causes them to engage in risky behavior (Jacobs & Kane, 2011). When individuals have low self-esteem, they may engage in risky behaviors, while those with high levels of self-esteem practice healthy behaviors and thus decreases their risk for poor health outcomes (Yang, Dedovic, & Zhang, 2010). Therefore, self-esteem is a key variable to consider in HIV prevention. Some researchers argue that older women lose their self-esteem due to negative life experiences such as losing a mate and struggling finding a suitable partner (Mallory et al. 2009; Savasta,2004). These challenges have influenced older women's self-esteem and ability to make safe choices in their sexual relationships. Jacobs and Kane (2013) conducted a quantitative study in 572 women aged 50 and older, using the Social Cognitive Theory (Bandura, 1977a) and Theory of Gender and Power (Connell, 1987) to explore how self-esteem is related to variables that can influence high-

risk sexual behaviors in women over 50. They did hypothesize that there would be significant relationships between age, ethnicity, years in the U.S., psychosocial variables (i.e., HIV stigma, sexual assertiveness, self-silencing, and sensation seeking) and the dependent variable, self-esteem. Regression analysis showed sensation seeking, HIV stigma, and sexual assertiveness, predicted self-esteem in women over 50 ($F=43.632$, $p < .001$). Overall, Jacobs and Kane (2013) provide groundbreaking findings that demonstrate how relational context, interpersonal power, and silencing can affect self-esteem and could cause women to engage in risky behaviors that increase their risk for STIs/HIV.

There is limited research that has evaluated interventions to reduce HIV among lesbian women. Logie, Lacombe-Duncan, Weaver, Navia, and Este (2012) conducted the Queer Women Conversations (QWC) pilot study among 41 WSW in Canada to examine the effects of a HIV/STI health education with the goal to improve risky sexual practices, as well improve self-esteem and safer sex self-efficacy. The researchers used the Modified Social Ecological Model (MSEM) framework³⁰ because “it high lights multi-level factors associated with HIV and STI vulnerability” (p.322). Participants completed a pre-test, post-test, and 6-week follow-up. While scores did significantly increase in the post-test regarding risky sexual practices, self-esteem and safer sex self-efficacy, they decreased during the 6-week follow up. Unfortunately, most of the women did not return for the 6-week follow up (Logie et al., 2012, pp.324-326). Yet, the researchers were able

to demonstrate there is a need to study HIV risk practices among homosexual women; as well measure self-esteem and self-efficacy in this population (Logie et al., 2012, pp.324-326).

Researcher Ellis (2014) recruited 512 Black females that attended a historically black university with the purpose to examine the perceptions of HIV/AIDS–STI risk and determine whether those correlates are related to risk-reduction practices among these students. While the perceptions of HIV/AIDS–STI risk and HIV/AIDS knowledge were negatively related, there was a positive relationship between the perceptions of HIV/AIDS–STI risk and agreement with the self-esteem element “I feel I do not have much to be proud of.” Of the 44 students who agreed with this statement, only (18%) held the conviction that they were at risk of HIV/AIDS–STI infection. Ellis, the author and researcher, did express that a limitation to this study was “using the Rosenberg Self-Esteem Scale, which is designed to provide a more global measure of self-esteem. This scale is comprised of 10 elements that differ in valence; some are positive thoughts while others are more negative beliefs regarding the self” (p.170). My study did use a scale that measured an attitude about the self that is related to personal beliefs to achieve outcomes. While this was a limitation, Ellis did demonstrate that self-esteem is an important variable to consider regarding self-views and the need to change risky situations.

Sexual Assertiveness/Assertive Communication. Sexual assertiveness is another dependent variable in this proposed study. Sexual assertiveness includes

communication skills in negotiation of condom use, ability to discuss risky behaviors and HIV status, and recommending HIV testing with sexual partners. Kennedy and Jenkins (2011) conducted an analytical review of studies that focused on sexual assertiveness in Black women, focusing on the following three themes: sexual assertiveness and HIV risk, sexual assertiveness and communication, and women with low sexual assertiveness.

What they discovered is that there was a gap in HIV prevention research that evaluates sexual assertiveness skills in a diverse group of Black women. Most research has focused on Black women with social-economic challenges such as poverty, substance abuse, low education, and gender role challenges. Sexual assertiveness was a strong predictor for condom use in many of the studies they examined. Women with a positive attitude were stronger in being sexually assertive and were more likely to negotiate condom use and communicate with their partners about their risky behaviors. Women who had low self-esteem and were not sexually assertive, had riskier partners, were unable to negotiate condom use, avoided thoughts of STI, and many believed they did not have the right to be sexually assertive. Kennedy and Jenkins argued that there is a need to conduct more quantitative research that could compare sexual assertiveness characteristics across a diversified group of Black women. Since we know that a lack of sexual assertiveness does exist among Black women that are poor, uneducated, and with psychosocial challenges, research is needed to see if there is a lack of sexual assertiveness in Black

women with higher income, more education, and without social-economic and psychosocial challenges.

Sales et al., (2012) conducted semi-structured interviews with 50 young Black women (18-23 years of age) to evaluate if condom use increased after providing HIV prevention education. Some did not increase condom use because they struggled with communicating and negotiating condom use with their partners; they feared losing their relationships, despite high rates of infidelity.

Jenkins and Kennedy (2013) conducted a descriptive study using the multifaceted model of HIV where 104 Black young women attended a one-day HIV prevention training class. Jenkins and Kennedy's analysis revealed that after the prevention training class, the participants believed they could communicate with their partners about their risky behaviors and recommend condom use to prevent an unwanted pregnancy or a STI. However, some still struggled with refusal of sex even when they did not trust their partner. Through their study, Jenkins and Kennedy do reveal a need to understand the sexual assertiveness characteristics of Black collegiate women so that variations in sexual assertiveness, communication, and negotiation skills can be discovered and implemented into HIV prevention and intervention.

Communication is a part of being sexually assertive because it involves women having enough self-esteem and self-confidence to ask their partners about their HIV status, their risk behaviors, and negotiation of condom use. Black women of all ages may

have life challenges that clouds their perception about communication and condom efficacy. Researchers Wright, Randall, and Hayes (2012) utilized the Expanded Health Belief Model (EHBM) to understand why 251 predominately White (only 2% Black) collegiate females in the United States were more condom assertive than others. They evaluated the participant's perceived susceptibility to HIV/AIDS. They used a questionnaire to gather data from these collegiate students between the ages of 18 and 29 years comparing their responses and ranking the data to those who were assertive versus non-assertive. This comparison revealed that 70% of the students who believed that using condoms could prevent STIs, as well possessed self-esteem in their communication skills in asking their partners to use condoms, were more sexually assertive. The EHBM was an excellent choice for their study because it encompassed the old HBM and the SCT. I use the SCT was the theoretical framework in my study, focusing on the same concepts (self-esteem, self-efficacy, and risk perception) to help explain why some Black women are more sexually assertive. The limitation to the Wright, Randall, and Hayes study was that only 2% of the subjects were Black. It would have been useful to compare sexual assertiveness in a higher percentage of Black collegiate students and to also compare these findings to evaluate sexual assertiveness skills in middle-aged and older collegiate females. My study did attempt to use Black women across various age groups, educational and income levels to evaluate if they are negotiating condom use, asking their partners about their risk behaviors; as well their HIV status. Despite this limitation, the

Wright, Randall, and Hayes study did use an effective evaluation method that incorporated the EHBM and revealed the need for effective training on sexual assertiveness communication skills in collegiate females.

Issues with Men having Sex with Men and Women/DL Brother. Since STIs/HIV is high in the United States Black communities, Black women must consider that their partners may not be truthful about disclosing their risk-taking behaviors (multiple sexual partners; bi-sexual) to their female partners (Jacob & Thomilson, 2009). Goparaj and Warren-Jeanpiere (2012) conducted a focus group study to examine Black women's knowledge, attitudes, beliefs, and behavior related to the Down Low/DL brother. A DL brother is one who has sexual relationships with both women and men but does not disclose this information with their partners. They recruited a small number of participants (N=36) but it did include a wide range of women between 25-60 years of age. The majority were low income, some did not finish high school, and none of them had a higher educational degree. They used the Black Sexual Politics perspective framework (Goparaj & Warren-Jeanpiere, 2012), which helps to better understand issues of heterosexual interpersonal communication between Black women and men. Issues they discovered were that these women did fear of being infected with HIV or re-infected with a different strain of HIV by having sex with a DL brother. While many were suspicious of their partners, some reported that they did not always engage in direct communication with their male partners about their sexual orientation, risky behaviors,

and their HIV status. In addition to holding attitudes of suspicion regarding all potential male partners, participants reported having empathy for men who do not disclose their sexuality to female partners. This study supports other research that bisexual behavior among Black men is a problem in Black communities since HIV is higher and there is a greater chance of bisexual activity in Black men, which increase the risk for HIV in Black women (Millett et.al, 2005; Malebranche et al. 2010).

In another similar study, Tieu, Spikes, Patterson, Bonner, Egan, Goodman, & Koblin (2012) conducted a cross-sectional study that compared sociodemographic and risk behavior characteristics between black men who have sex with both men and women (MSMW) and those who have sex with men only (MSMO) and assess factors associated with having any unprotected vaginal and/or anal intercourse (UVAI) with women in the last three months. The study was conducted in New York City and 326 Black men 18 years or older were recruited. Their analysis revealed that MSMW reported they were less likely to be HIV infected, to use amyl nitrates (“popper”), and have unprotected anal sex with their recent male partners. They were also likely to be older than 40 and to use heroin. Yet, more than 50% reported having unprotected vaginal/anal sex with women in the last 3 months, disclosed having sex with men to their female partner, and were more likely to have greater than four male sex partners in the last 3 months. While their study does not imply that Black women are at greater risk for contracting HIV with a MSMW, this study does support the current literature review that there is a need for Black women

to use direct communication skills to evaluate their partner's risky behaviors, ask about their HIV status, recommend HIV testing, and to negotiate condom use with each sexual encounter and/ or suspicious inquiries.

Theoretical Framework

The Social Cognitive Theory. The SCT is based on the belief that individuals take action by observing or learning from others while receiving some type of benefit or reward (Santrock, 2008). The SCT proclaims that individuals react differently from their social environment according to many variables such as age, income, education, perceived susceptibility, and relationship status (Wulfert, 2014). It has also been suggested that the ability of women to engage in safer sex behaviors is driven by factors related to gender inequities and fear of losing their relationships (Ferguson et al., 2006). Dolcini and Catania (2000) found that some Black women who are afraid to discuss risk behaviors with their partners will not recommend condom use or discuss the benefits of HIV testing. Additionally, Ickovics, Beren, Grigorenko, Morrill, Druley, and Rodin (2002) revealed that some Black women when under the influence of drugs and/or alcohol will not use condoms. Younger black women may feel a desire for social acceptance and/or a fear of rejection, which results in not using condoms (Foreman, 2003). Older Black women struggle discussing risky sexual behaviors and/or recommending condom use because they are fearful of losing relationships; as well

perceive there is no need to use condoms since they cannot get pregnant (Jacobs, 2011). Engaging in unprotected sex will likely occur with a partner who is not equipped with self-efficacy himself or herself. Kasen, Vaughan, and Walter (1992) found that women have the lowest assurance in their efficacy to exercise control when a desirable partner wants to engage in unprotected intercourse. Therefore, women that perceive they have a low self-efficacy may allow personal, environmental, and social factors to increase the likelihood of not negotiating condom use, discussing risk behaviors with their partners, and recommend HIV testing. Another challenge is that some Black women feel if they reduce the number of sexual partners they have, then they do not need to use condoms (Jacobs, 2011). However, even in the reduction of sexual partners, both younger and older black women are still not sure of their own HIV status or their partners (Dolcini & Catania, 2000).

Another concern is that many Black women are unaware if they are having sexual relationships with bisexual partners (Goparaj & Warren-Jeanpiere, 2012). Black women tend to have sex with individuals from their own race/ethnicity, and in the state of Virginia, HIV is high among BMSM (VDOH, 2014). There are still Black men and women who may be afraid and un-truthful to their sexual partners about their sexual preference. Norment (2004) notes that this is the concept of the DL brother who will engage in risky sexual behaviors with men and women. Black women must understand that most people will not be truthful about their subjective risk for HIV/AIDS and using

condoms and/or abstinence is their best prevention strategy. Hence, the development of communicative efficacy should center on skills for negotiating safer sex practices rather than for history taking of highly suspect reliability (Goparaj & Warren-Jeanpier, 2012).

When it comes to HIV prevention, the two concepts most often used are *self-efficacy* and *behavioral change*. Yet, individuals must perceive that they need to change a behavior and perceive they can do it. Geshnizjani, Torabi, and Jozkowski (2011) conducted a meta-analysis to find out which theories were being used in HIV prevention research. They discovered out of 25 articles, that the SCT (N=16) was used more often either alone or in combination with another theory.

Washington and Mottley (2013) used the SCT concept of self-efficacy in an observational study to examine how their adaptations of Bandura's classic four sources of self-efficacy form a distinctive intervention practice designed to help older Black women emerge from homelessness. They discovered that Black homeless women could develop a level of self-efficacy that allowed them to reach out for resources and tools in their communities to improve their health and life.

Malloy, Harris, and Stampley (2009) used the SCT in combination with the Afrocentric Paradigm, Theory of Gender and Power in a focused group interview of Black women (n=36) between 40 and 64 years of age to find out conflicts these women had in utilizing HIV prevention strategies. Many of these women struggled with their self-esteem, self-confidence, and self-reliance. Many of these women did not perceive

their risk for using condoms, did not ask their partners about their HIV status or their risk behaviors. For my study, the Social Cognitive Theory (SCT) was the main theoretical framework to support the concepts of self-esteem and self-efficacy and how it can impact one's self-perception about their risk for poor sexual health outcomes (STDs/HIV) and the need to be sexually assertive.

Wingood et al. (2013) conducted a randomized controlled study using 854 Black women at a Kaiser Permanente located in Georgia that evaluated the efficacy of a two 4-hour HIV health promotion educational program, in reducing incidence of non-viral STIs (Chlamydia, gonorrhea, trichomoniasis), HPV, sexual concurrency, and other HIV-associated behaviors over a 12-month period. The education was based on the SCT and the Theory of Gender and Power with the goal of increasing the participants' self-esteem, attitudes and skills associated with condom use. What was great about this study was that it encouraged STIs testing and treatment. Data analysis revealed that those in the intervention group relative to the comparison were less likely to have non-viral incident STIs; and incident high-risk HPV infection, or concurrent male sex partners. They also reported increased communication efficacy in encouraging their partners to have STIs testing, condom use during oral sex, and reported decreased sexual partners (Wingood et al., 2013). Their study used a large sample and demonstrated that HIV health education using the SCT as their framework could help improve Black women's self-esteem and self-efficacy in being sexually assertive while reducing their risk for STIs/HIV.

Similarly, Kanekar, Sharma, and Bennet (2015) used the SCT in their cross-sectional study with the purpose to study predictors of safer sex behaviors among 180 sexually active collegiate men and women (22-50 years of age) recruited from a single university in the Midwest. Results revealed that among all the different constructs of social cognitive theory, self-efficacy towards safer sex explained 14.7% of variance towards the participants using safer sex behaviors. The researchers did acknowledge several limitations, including: 1) only using one college, 2) the time frame for collecting data about sexual relations among the participants ranged from 30 days to 1 year, resulting in an inability to recall truthful data; 3) the data was self-reported which results in subject bias, 4) the researchers were present, which could make participants may nervous; 5) the researchers could not show temporality of association (Kanekar et al., 2015). Despite these limitations, their study does support the validity of using the SCT and the concept of self-efficacy as a predictor in making safe sexual choices.

These above studies demonstrate that the SCT is a useful theory in HIV prevention research, especially when studying the constructs of self-efficacy and behavioral change. My study did use the SCT while using self-efficacy to help predict and/or better understand why some Black women are more sexual assertive than others. In addition, results from my study did provide insight on a need in designing health education about sexual assertiveness skills, including communication and condom efficacy. This advancement in strategies of STIs/HIV prevention can provide positive

social change that could help Black women make healthier sexual choices that will assist in decreasing HIV in Black communities.

Summary and Conclusions

The purpose of this literature review was to identify that Black women are disproportionately affected with HIV in the United States. The results of the review indicated that Black women despite their age, income, education, sexual orientation, and HIV status, lack the ability to be sexually assertive in their sexual relationships, thus increasing their risk and their sexual partners risk for HIV/AIDS. As well, the results of the review indicated that Black women might have low levels of perceived susceptibility to HIV despite their risky sexual behaviors; as well having knowledge about HIV transmission. Through this review, I also demonstrate that low levels of self-esteem could impact Black women's ability to be sexually assertive in their sexual relationships, thus increasing their risk for HIV. Additionally, I highlighted the critical need for quantitative research that can study sexual assertiveness skills among a diverse group of Black women at risk for HIV/AIDS. Through this study, I may contribute to positive social change because I identified factors that may prevent Black women in being sexually assertive in their sexual relationships so that public health strategies can be developed and implemented to meet specific educational and health needs for Black women. In doing so, the state of Virginia can begin to see a decrease in STIs/HIV in the Black community.

Chapter 3: Research Method

Introduction

The purpose of this cross-sectional, quantitative study was to examine and compare sexual assertiveness characteristics among a diversified group of Black women living in Virginia. I examined which factors are predictors of sexual assertiveness. The theoretically driven factors that were studied included age, income, education, sexual orientation, HIV status, and relationship status. Self-esteem and perceived susceptibility to HIV/AIDS were other factors examined. Examining predictor variables is important in research because this information can be used to characterize women who are more likely not to be sexually assertive in their sexual relationships so that strategies can be developed and implemented to assist these women in developing high levels of sexual assertiveness and in turn, prevent HIV.

Research Design and Rationale

I followed the postpositivist view, which is the exploration of a problem in need of evidence-based strategies (Creswell, 2009). There has been more HIV/AIDS research conducted among Black men than Black women, especially men who have sex with men. Thus, there is a gap in HIV/AIDS research among Black women. HIV/AIDS infection rates are high among Black women in Virginia, and additional research is required to understand why this is occurring. There is an HIV health disparity in Virginia. This problem requires numeric measurements of sexual behaviors of Black women in Virginia

that could explain why HIV/AIDS infection rates are high among Black women in Virginia.

To address this gap in the literature, a cross-sectional design was used to collect data by anonymous, written questionnaires using a community-based sample of Black women over 18 residing in Virginia. The setting for this study was a variety of community sites where women frequently visit (community health fairs, beauty salons, and barber shops). I may not have been able to recruit all women at risk for HIV in Virginia because they are difficult to access (e.g., homeless population). Yet, by selecting several community sites, I had the opportunity to access Black women from various age groups, income levels, relationship status, and educational levels. A recruitment booth was used to introduce the study to multiple women at once rather than one at a time. The women were given a questionnaire, a pen, and an envelope in which to place the completed questionnaire. Participants were given instructions verbally and in writing that communicated the purpose of the study, consent to participate, benefits of and risks related to participation, directions for completing the questionnaire, an assurance of anonymity, and plans for the dissemination of research findings. The questionnaire was available in English. The participants were assured that no personal identifiers (e.g., names, address, and telephone or e-mail contacts) would be requested and were instructed not to put their names or other personal identifiers anywhere on the questionnaire or envelope. During data collection, I was available to answer questions. Participants were

instructed to place the completed questionnaire in the envelope, seal it, and drop it into the questionnaire collection box. For those who were willing to complete the questionnaire but did not have the time to complete it at the event, they were provided with a self-addressed stamped envelope so they could mail it. Each survey was individually numbered so that a response rate could be calculated, especially because envelopes were provided for individuals to mail back. There was a total of 15 participants who wanted to mail their surveys, and all 15 were received.

A survey design was suited for this study because I sought answers to questions about sexual choices that Black women take to prevent HIV/AIDS. The questions were used to collect data about sexual assertiveness and communication skills in using condoms to prevent STIs and unwanted pregnancy. I also asked questions about perceived risk for HIV/AIDS and identified if testing had been done. I evaluated Black women's self-efficacy and self-esteem in making individual choices to promote their sexual health. Because a diverse group of Black women was used, a survey allowed me to study several attributes and characteristics of a large population from a smaller sample.

My research study attempted to answer the following research questions:

1. What is the difference in Black women's sexual assertiveness by age, income, education, sexual orientation, and relationship status?

H_{11} : Black women will show a significant difference in sexual assertiveness (dependent variable) by age, income, education, sexual orientation, and relationship status.

H_{01} : Black women will show no significant difference in sexual assertiveness by age, income, education, sexual orientation, and relationship status.

2. What is the difference in perceived susceptibility of HIV/AIDS (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status?

H_{12} : Black women will show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.

H_{02} : Black women will not show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.

3. What is the difference in self-esteem (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status?

H_{13} : Black women will show a significant difference in self-esteem by age, income, education, sexual orientation, and relationship status.

H_{03} : Black women will not show a significant difference in self-esteem by age, income, education, sexual orientation, and relationship status.

4. Does age, income, education, self-esteem, sexual orientation, or relationship status predict higher levels of self-efficacy in being sexually assertive (dependent variable)?

H_{14} : Black women will show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.

H_{04} : Black women will not show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.

Methodology

Population

The target population for this dissertation was Black women older than 18 years of age who lived in Virginia. I gathered data from sexually active Black women from various age groups, income levels, geographic areas, educational levels, and relationship status. These women identified themselves as being bisexual, lesbian, married, single, or in multiple relationships. There was no criteria preference for being HIV negative. I also gathered data from Black women who are HIV positive.

Sampling and Sampling Procedures

The study participants were recruited using a nonprobability sampling technique known as convenience sampling. Although a limitation to this sampling technique is that the findings may not be representative of the population, convenience sampling does

allow for rapid data collection among members of the target population who are accessible and proximally located near the researcher, especially when no sampling frame is available (Fowler, 2009). I attempted to recruit at least one third of women who had higher income from places such as salons/spas to balance a high number of low-income participants. To achieve this goal, data were monitored on a weekly basis to examine the education and income distribution of the sample. If the sample disproportionately represented low-income women, recruitment would have been shifted towards venues that solicited women who were more highly educated with higher incomes.

The inclusion criteria for this study was Black females who resided in Virginia and who were 18 years of age or older. Additionally, participants included a diverse group of Black women from various age groups, income levels, geographic locations, sexual preference, and educational levels. This assisted in obtaining and comparing data regarding how these variables impacted the dependent variables-sexual assertiveness and assertive communication. Because a diverse population was sought in the recruitment, this sampling technique with the criteria allowed for documentation of characteristics associated with sexual assertiveness in the prevention of HIV.

I distributed a recruitment flyer to help recruit study participants. The flyer was placed at churches and Black-owned businesses, such as beauty salons and barbershops. Distributing flyers in these sites increased the chance of recruiting older Black women

and various incomes. The flyer stated the inclusion criteria, the study's purpose, benefits, risk, and instructions on how to complete the survey.

Study Sample Size

The study was cross-sectional, meaning the data were collected at only one-time point for each study participant, which was when participants completed the survey. Because there was a possibility that some women may not own a computer, a paper survey was provided. Each survey was individually numbered so it could be tied back to a survey location, and a response rate could be calculated. The surveys were anonymous. The respondents was provided an envelope to place their surveys into before placing them into a survey box. If participants were more comfortable completing the survey at another time, I provided a stamped envelope for them to mail the survey. However, this method is limited in that individuals may not return a substantial proportion of surveys. This study had a 100% return rate for mailed survey. All surveys were locked and stored in a cabinet for security purposes.

I collected data from Black women who lived in Virginia. According to Suburban Stats (2016), the population for Black women living in Virginia for 2015 was 811,249. G*Power software was used to calculate the sample size needed for each research question using the following assumptions:

1. What is the difference in Black women's sexual assertiveness by age, income, education, sexual orientation, and relationship status? Assuming an *a priori* $\alpha =$

.05, 2-tailed hypothesis test, and 80% power for six independent variables and a continuous dependent variable, a sample size of 24 was needed to detect a critical F value of 2.69 (the effect size identified in Loshek, 2014, p.48). These models were refitted for each of the four SAS subscales separately.

2. What is the difference in perceived susceptibility of HIV/AIDS (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status? Assuming an *a priori* $\alpha = .05$, 2-tailed hypothesis test, and 80% power for six independent variables and a continuous dependent variable, a sample size of 41 was needed to detect a beta coefficient of .207 (natural log of OR=1.23; effect size for relationship between sexual preference and perceived susceptibility among older women in Theall et al., 2003).
3. What is the difference in self-esteem (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status? Assuming an *a priori* $\alpha = .05$, 2-tailed hypothesis test, and 80% power for six independent variables and a continuous dependent variable, a sample size of 31 was needed to detect a beta coefficient of -.28 (the effect size for single marital status on self-esteem; McMullin & Cairney, 2004)?
4. Does age, income, education, self-esteem, sexual orientation, or relationship status predict higher levels of self-efficacy in being sexually assertive (dependent

variable)? Assuming an *a priori* $\alpha = .05$, 2-tailed hypothesis test, and 80% power for six independent variables and a continuous dependent variable, a sample size of 96 was needed to detect a beta coefficient of .084 (Jacob & Kane ,2010).

A minimum of 96 participants were needed to be recruited from this study to achieve 80% power to detect effect sizes identified in the existing literature.

Instrumentation and Operationalization of Constructs

Dependent Variables

Morokoff, Quina, Harlow, Whitmire, Grimley, Gibson, & Burkholder (1997) created the Sexual Assertiveness Scale (SAS). Morokoff et al. (1997) argued that while sexual assertiveness is needed to prevent unwanted sexual encounters, it is also a struggle for women who have difficulty with gender roles and relationship problems. These researchers argued that women who are passive may struggle with refusing unwanted sex and using condoms. In turn, this increases their risk for STDs. Hence, Morokoff et al (1997) suggested that for women to be sexually assertive, they must have self autonomy in initiation of wanted sex and in the refusal of unprotected sex.

Morokoff et al. (1997) conducted four studies using over 1600 diversified females to help develop and test the validity of the SAS. These included participants with various incomes, educational attainment, relationship status, races, sexual orientation, and age groups. After conducting their confirmatory analyses, they also decided to measure sexual assertiveness with 24 items that are scored using a 5-point Likert-type scale

(1=never; 5=always). Scores may have ranged from 18 to 90, with higher scores indicating greater sexual assertiveness.

The instrument is factored into four subscales of 6 items each. The four subscales of the SAS are: Information Communication, or inquiry regarding a sexual partner's HIV/AIDS risk or risk behaviors (e.g., "If I want to know about the AIDS risk of my partner's past sexual partners, I would ask"); Initiation, or a propensity to initiate desired sexual experience (e.g., "I begin sex with my partner if I want to"); Refusal, or ability to not engage in unwanted sexual experience (e.g., "I have sex if my partner wants me to, even if I don't want to"), and Contraception/STD Prevention Subscale(e.g., "I refuse to have sex if my partner refuses to use a condom or latex barrier). The SAS has an overall published Cronbach's alpha of .82 (Morokof et.al, 1977).

The SAS was used by researchers Jacobs and Thomlison (2012) who conducted a cross-sectional, correlational design to explore how psychosocial factors impacted sexual behaviors of midlife and older women. They used a community-based sample of ethnically diverse women (N=572) between the ages of 50 and 93, who completed standardized measures of self-silencing, self-esteem, sensation seeking behavior, HIV-related stigma behavior, sexual assertiveness, and safer sex behavior. The results revealed that despite risky sexual behaviors, many did not believe they were at risk for HIV. The SAS demonstrated high reliability estimates with this sample, i.e., Cronbach's alpha =.83 (Jacobs & Thomlison, 2012).

The SAS was also used by researchers Jacob and Kane (2009) who conducted a cross sectional, correlational study that explored the influence of self-esteem, and sexual assertiveness on the HIV-stigmatizing behaviors in 572 women aged 50 to 93 who lived in Florida. The results revealed that older women engaged in unprotected sex with their male partners with the assumption that their partners do not engage in high-risk sexual behaviors (Jacobs & Kane, 2010).

These studies reveal that Black women despite their age, income, and education, struggle with implementation of sexual assertiveness in their sexual relationships. As well, these studies demonstrate that the SAS is a useful scale in measuring sexual assertiveness skills among a diverse group of Black women.

Perceived susceptibility of STIs/HIV. Perceived *susceptibility* will be measured using the Perceived risk of HIV infection scale (PRHS). Per Napper, Fisher, and Reynolds (2012), perceived susceptibility is an important factor to better understand why some individuals may engage in behaviors to reduce HIV transmission. These researchers developed the 8-item PRHS which incorporates items assessing cognitive assessments of risk (e.g., chance of infection), as well as intuitive assessments (e.g., feeling vulnerable, worry, gut feeling about likelihood) and salience of risk (e.g., thought about risk, can picture it happening). The participants ($N = 771$) were recruited from HIV testing and prevention services in Long Beach, California. The participants ranged between 18 to 79 years old and from various ethnicities. The largest number was among Blacks who

represented 38% of the participants. Scores on the PRHS were associated with retrospective reports of risky sexual behaviours, including multiple sex partners and times had unprotected sex. As well, the PRHS does help demonstrate a difference in perceived HIV risk among those who tested positive for HIV. These individuals saw themselves to be at higher risk. (Napper, Fisher, & Reynolds, 2012). The 8-item scale was found to have excellent internal consistency ($\alpha = 0.88$). The 8 items are measured on a Likert type scale with response options ranging from “Extremely Unlikely” to “Extremely likely”. For example, to the question, “What is your gut feeling about how likely you are to get infected with HIV?” response options include: “Extremely unlikely”, “Very unlikely”, “Somewhat likely”, “Very likely”, or “Extremely likely”. For the item, “I worry about getting infected with HIV”, response options include, “None of the time”, “Rarely”, “Some of the time”, “A moderate amount of time”, “A lot of the time”, and “All of the time”. Following the author’s scoring guidelines (see appendix B); the 8 items were summed to generate a single scale for analysis.

Self-Esteem. Self-esteem was measured using the Single-Item Self-Esteem Scale, which is a one-item measure of global self-esteem (Robin, Hendine, & Trzeniewski, 2013). It was designed as an alternative to the Rosenberg Self-Esteem Scale (RSE). Participants answer the single item on a 5-point Likert scale, ranging from 1 (not very true of me) to 5 (very true of me). Researchers Robin, Hendin, & Trzesniewski (2013) tested construct validity between the RSE and SSIE in three studies. They found strong

convergent validity for men and women, different ethnic groups, and for both college students and community members. Both scales had almost identical correlations. The first study, the mean reliability estimate for the SISE was .75. The mean reliability estimate for the RSE was .88 (the same as its alpha reliability). Construct validity correlations between the SISE and the RSE ranged from .72 to .76 across the six assessments, with a median of .75. (In comparison, the 10 RSE items had median item-total correlations ranging from .46 to .71.). The second study found the exact same correlation even in a 7- point Likert type scale. Study three recruited community members from various settings. The correlation between the SISE and the RSE was .80, even higher than in the two college student samples. These studies reveal that the SSE could be an alternative to test self-esteem in adults (Robin, Hendin, & Trzesniewski, 2013). In this study, self-esteem was retained as an ordinal variable.

Sexual Health Self-efficacy. The World Health Organization defines sexual health as the state of physical, emotional, mental, and social well-being related to sexuality (World Health Organization, 2009). Sexual health is important for each individual's overall wellness and quality of life (World Health Organization, 2000). The Sexual Health Practices Self-Efficacy Scale (SHPSES) was developed to measure respondents' confidence (self-efficacy) as described as their knowledge, skills, and comfort to carry out various sexual health practices. Self-efficacy is recognized as one of the most important factors to promote behavior change (Bandura, 1997).

Koch, Colaco, and Porter (2007) which consists of 20 items representing a variety of sexual health practices developed the Sexual Health Practices Self-Efficacy Scale (SHPSES). Respondents indicate their confidence in performing these practices (self-efficacy) on a scale from 1 (*not at all confident*) to 5 (*extremely confident*). Through the use of factor analysis, six subscales were identified, including self-efficacy in regard to Sexual Relationships (5 items), Sexual Health Care (4 items), Sexual Assault (3 items), Safer Sex (4 items), Sexual Equality/Diversity (3 items), and Abstinence (1 item). SHPSES is appropriate for adolescents to older adults of all backgrounds (Fisher, Davis, Yarber, & Davis, 2010; Mirzaie et.al, 2016). Summative scoring of these scales will result in a final variable ranging from 20 indicating the least self-efficacy, to 100, indicating the most self-efficacy. Validity was derived from a study from 2004-2008 in which 1200 surveys were completed by undergraduate students of various ages, races, and incomes at a northeastern university. The overall Cronbach's alpha coefficient was .89 (Koch, 2009).

Validity of the instrument included a panel of three sexuality educators/researchers who reviewed the surveys using and revealed the following six factors representing sexual health practices self-efficacy: Sexual Relationships (15.4% explained variance), Sexual Health Care (13.4%), Sexual Assault (11.2%), Safer Sex (10.1%), Sexual Equality/ Diversity (10.0%), and Abstinence (5.8%) (Fisher et al., 2013. pp.345-346]. Researchers Charest, Kleinplatz, and Lund (2016) conducted a quantitative study

using the SHPSES scale to compare sexual self-efficacy in sexual health practices among heterosexual and homosexual women from various races ranging from 18-25 years of age (N=365). The results revealed that heterosexuals were more confident in their sexual health practices (Charets, Kleinplatz, & Lund, 2016, p.82). The SHPSES scale has been used in women with different levels of income, education; as well various ethnicities, ages, and sexual orientation. Therefore, this scale was used to measure sexual self-efficacy among a diverse group of Black women living in Virginia.

Measuring the Independent Variables

Descriptive Statistics

Descriptive statistics was used to report the demographic characteristics of the sample, which will include the medians (Mdn), means (M) modes (/), standard deviations, range, and percentages for the following items.

Age. The age variable was retained as a continuous variable. The participant were asked their specific age. Because age was not normally distributed, the measure was log-transformed or categorized.

Race/Ethnicity. The race was defined as Black and not of Hispanic ethnicity. This study only recruited Black females and women who identified as races other than Black were excluded from the study. Therefore, the race variable was measured at the nominal (categorical) level. Therefore, the frequency and related percent of persons

falling within the stated categories was provided. The following categories were used:

(1) African American, (2) Caribbean American, (3) Multi-Racial, and (4) Other.

Income. Income was retained as a continuous variable in which each participant provided his or her income for 2016. Individuals who were supported financially by another person(s) did include the annual house income (e.g., college students). Because the income variable was not normally distributed, the measure was log-transformed or categorized.

Relationship Status. The sample was asked to report their relationship status, which was defined as the following: (1) Single, (2) Never married, (3) Married or domestic partner relationship, (4) Widowed, (5) Divorced, and (6) Separated. Thus, the variable relationship status was measured on a categorical scale.

Relationship Satisfaction. The variable relationship status was measured on a nominal/categorical scale of three categories: (1) Happy, (2) Un-Happy, (3) Neither Happy nor Un-Happy.

Sexual orientation. The variable sexual orientation was measured on a nominal scale. These three choices did include: (1) Heterosexual, (2) Bisexual, and (3) Homosexual. Therefore, the frequency and related percent of persons falling within the stated categories was provided.

Sexual partners. The subjects were asked to report how many sexual partners they have been with in the past 6 months. Response options did include: (1) None, (2)

One, (3) Two, (4) Three or more, or (5) Not reported. Thus, the variable sexual partners was measured on an ordinal scale.

Education. The educational variable was measured on an ordinal scale. Educational level did include a set of responses from elementary school, high school, some college, and college graduate. A copy of the demographic questionnaire is in the Appendix (F).

Confounding Variables

This study did not get IRB approval to use HIV status as a covariate. However, sexual orientation was used a confounding variable. Black women living with HIV is high in Virginia (VDOH, 2016). Since HIV is a pre-cursor for AIDS, it is important to compare sexual assertiveness in those who are HIV negative to those who are HIV positive to help identify if there is a difference in sexual behavior (Hunter & Tilley, 2015; Kennedy & Jenkins, 2011). I did use categorical sexual orientation as a confounder when I ran my multivariate analysis.

Data Analysis

Data analysis was conducted using SPSS 24 (IBM, 2016). Descriptive statistics was used to report the demographic characteristics of the population by reporting the medians (*Mdn*), modes (*f*) and means (*M*), standards of deviation, ranges, and percentages. The following is listed in a table under demographics: age, income,

education, relationship status, relationship satisfaction, race, sexual orientation, and number of sexual partners.

1: What are the differences in Black women's sexual assertiveness (DV) by age, income, education, sexual orientation, and relationship status (IV)?

The hypothesis for this research question was:

H1: Black women will show a significant difference in sexual assertiveness by age, income, education, and relationship status.

H0: Black women will show no significant difference in sexual assertiveness by age, income, education, and relationship status (null hypothesis).

This question measured four separate items on the SAS: Initiation, Refusal, Information Communication, and Contraception/STD Prevention. The SAS variable was ordinal with responses ranging from never (0) to always (5). Higher scores on the SAS indicated greater sexual assertiveness. As per the author, the subscales were individually scored and not summed for a total score.

Multiple bivariate, one-way ANOVAs were fit to examine if there were differences in sexual assertiveness by age, income, education, or relationship status. After fitting the initial ANOVA, I determined which and where the groups differ significantly by conducting a post-hoc Bonferroni (or alternative) test for pairwise differences. As well, a test of homogeneity of variance (Levene's test) was used to examine equal variances. I did have to choose a post-hoc based on whether equal variances were

assumed (Scheffe), and one based on whether equal variances were not assumed (Games-Howell). Means and standard deviations of the groups were included if a significant difference is found.

Based upon the results from ANOVAs, multiple ordinary least squares regression models (assuming normality for the dependent variables) were built using the Hosmer and Lemeshow (2004) method. First, all independent variables were tested for their statistical significance with sexual assertiveness in bivariate models. All independent variables with *p*-values below .20 in bivariate models were added to generate a final, multivariate model. An *a priori* alpha of 0.05 was used as the threshold for statistical significance. If this threshold was reached, I did reject the null hypothesis (H₀).

2: What is the difference in perceived susceptibility of HIV/AIDS among the study participants by age, income, education, and relationship status?

The hypothesis for this research question was:

H₁: Black women will show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, and relationship status.

H₀: Black women will not show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, and relationship status.

This question was answered using the quantitative/numerical the perceived risk of HIV infection scale (PRHS) Scale, which consists of 8 items Likert type scale. According to the publisher, I did sum the items to create a total score.

Multiple bivariate, one-way ANOVAs were fit to examine if there were differences in perceived susceptibility of HIV/AIDS by age, income, education, or relationship status. After fitting the initial ANOVA, I did determine which and where the groups differ significantly by conducting a post-hoc Bonferroni (or alternative) test for pairwise differences. Also a test of homogeneity of variance (Levene's test) was used to examine equal variances. I did have to choose a post-hoc based on whether equal variances were assumed (Scheffe), and one based on whether equal variances were not assumed (Games-Howell). Means and standard deviations of the groups were included if a significant difference was found.

Based upon the results from ANOVAs, multiple ordinary least squares regression models (assuming normality for the dependent variables) were built using the Hosmer and Lemeshow (2004) method. First, all independent variables, including the covariates HIV status and sexual orientation, were tested for their statistical significance with perceived susceptibility in bivariate models. All independent variables with p -values below .20 in bivariate models were added to generate a final, multivariate model. An *a priori* alpha of 0.05 was used as the threshold for statistical significance. If this threshold was reached, I did reject the null hypothesis (H_0).

3. What is the difference in self-esteem among the study participants by age, income, education, and relationship status?

H1: Black women will show a significant difference in self-esteem by age, income, education and relationship status.

H0: Black women will not show a significant difference in self-esteem by age, income, education, and relationship status.

Self-esteem was retained as an ordinal variable derived from the quantitative/numerical Single-Item Self-Esteem Scale. This question was answered using the Kruskal-Wallis H test to examine if there are differences in self-esteem according to age, income, education, or relationship status. Following fitting of these bivariate models, multiple ordinal regression models was built using the Hosmer and Lemeshow (2004) method. First, all independent variables, including the covariates HIV status and sexual orientation, were tested for their statistical significance with self-esteem in bivariate models. All independent variables with p -values below .20 in bivariate models were added to generate a final, multivariate model. An *a priori* alpha of 0.05 was used as the threshold for statistical significance. If this threshold was reached, I did reject the null hypothesis (H0).

4. Is age, income, and education, and relationship status predictive factors for self-efficacy, self-esteem, and sexual assertiveness in Black women?

Multiple ordinal regression analysis was used to identify the independent effects of risk and protective factors of self-efficacy, self-esteem, and sexual assertiveness controlling for HIV status and sexual orientation. This method did allow me to identify

which factors were the most robust predictors of self-efficacy, self-esteem, and sexual assertiveness while controlling for theoretically derived confounders. To test this hypothesis, an ordinal regression model was built using the standard methodology discussed above. Briefly, all independent variables and covariates were tested for their statistical significance with self-efficacy, self-esteem, and sexual assertiveness in bivariate models. All independent variables and covariates with p -values below .20 in bivariate models were added to generate a final, multivariate model. An *a priori* alpha of 0.05 was used as the threshold for statistical significance.

Threats to Validity

One internal threat is valid data from the respondents based on the need of responses pertaining to one's sexual behaviors. Therefore, the research did attempt to recruit a larger sample to assist with receiving enough data. Since this was a quantitative study, the researcher did not develop a relationship, which could assist with the participants feeling more comfortable in answering the surveys. The researcher did explain the benefit of the study and ensured the participants that their responses would be used only for the study. As well, they were told that this study was anonymous.

External validity threats to cross-sectional study designs is that they do not allow for cause and effect relationships between study variables to be inferred (Creswell, 2009). This study did attempt to identify confounding variables that could influence the measurable outcome. As well, this study did make implications on the need to conduct

further research that could explore other factors that could have a relationship on sexual assertiveness. A future replication of a longitudinal study could assist with this.

Ethical Procedures

This study did abide by ethical principles of a cross-sectional survey study design. This study was based on scientific knowledge of other scholars; as well the need to discover new knowledge to reduce STDS/HIV among Black women in the United States. Because I am a Black middle age female myself living in Virginia, I have examined my own biases and have written them down so they would not be brought into this study. My goal is to help Black women decrease STDs/HIV by finding evidence to support the need for sexually assertive training in Virginia. I did separate myself from the study and allowed the instrument to gather the data.

Consideration did include gaining permission from the recruitment sites to allow for posting the recruitment flyer. Permission was given by a few organizations to recruit participants for data collection. Gatekeepers were identified to request permission and to obtain any policies and procedures that must be considered to use their facility for advertisement. The setting for this study was a variety of community sites where women frequently visit (e.g., spas, beauty salons, barber shops). A recruitment booth was used to allow the ability to introduce the study to multiple women at once rather than one at a time. The women were given a questionnaire, a pen, and an envelope. Participants were given instructions verbally and in writing that communicated the purpose of the study,

consent to participate, benefits of and risks related to participation, directions for completing the questionnaire, an assurance of anonymity, and plans for the dissemination of research findings. The participants were instructed not to put their names or other personal identifiers anywhere on the questionnaire or envelope. During data collection, the researcher was available to answer questions. Participants were instructed to place the completed questionnaire in the envelope, seal it, and drop it in a questionnaire collection box supplied by the researcher. For those who were willing to complete the questionnaire but did not have the time to complete it at the event, they were provided with a self-addressed stamped envelope so they can mail it. No one was pressured to participate in this study.

Walden's code of ethics has been examined and was included in this study. The proposal was turned into Walden's University Institutional Review Board (IRB). The study subjects were informed of the purpose of the study in the flyer and the flyer did state that this is voluntary study. The subjects were informed that their names were not needed to answer the survey. They were not pressured into signing the survey, but they were told how the data would be used and if they would like to receive information about the study's findings, contact information would be provided. They were told that they could withdraw from the study at any time and thanks would still be given for their effort.

Summary

This dissertation was a cross sectional study that did collect demographic and sexual behavior data using instruments that have been tested in previous studies for validity and reliability. No new questions were used that have not been validated so that the data collection was fair and reliable. This study used a convenience sampling technique. The criteria were already known for this study and a diversified group of Black women was recruited for the study with the goal of receiving enough participants that varied in age, income, relationship status, and their educational level.

The overall purpose of this study was to gather data about sexual assertiveness, sexual communications, and perceived STIs/HIV risk among a diversified group of Black women living in Virginia while comparing their responses to see if there was any significant difference in their responses according to the independent variables (age, income, education, relationship status). Descriptive statistics was used to place the variables into groups to see the means, percentages, and modes. A one-way ANOVA was used to examine the differences among the groups. After ANOVA, a post-hoc or multiple comparisons tests was done. A test of homogeneity of variance was used to examine equal variances to help determine whether equal variances were assumed (Scheffe), and if equal variances were not assumed (Games-Howell). Means and standard deviations of the groups were included if a significant difference was found. If the p value (0.05) was less than the significance level, I did reject the null hypothesis (H0) and accepted the

alternative hypothesis (H1). To help display the results of this study, SPSS was used to help with the analysis and formulate visual diagrams and tables.

Chapter 4: Results

Introduction

The purpose of this cross-sectional, quantitative study was to compare sexual health characteristics among a diversified group of Black women living in Virginia. I examined differences across and associations between the theoretically derived independent variables of age, income, education level, sexual orientation, and relationship status and the dependent variables of sexual assertiveness, perceived HIV/AIDS susceptibility, global self-esteem, and self-efficacy in being sexually assertive. In recognition of the influence of the potential confounders of global self-esteem on the sexual health outcomes, self-esteem was included in analyses conducted for hypothesis testing for the dependent variables pertaining to sexual assertiveness (Research Question 1), perceived HIV/AIDS susceptibility (Research Question 2), and self-efficacy for being sexually assertive (Research Question 4). HIV status was initially proposed as an additional confounding variable. However, the Walden IRB did not permit a question inquiring about HIV status to be included as part of the study survey. As such, HIV status was not included as a confounding variable in this study.

My study addressed the following research questions:

What is the difference in Black women's sexual assertiveness by age, income, education, sexual orientation, and relationship status?

H_{11} : Black women will show a significant difference in sexual assertiveness (dependent variable) by age, income, education, sexual orientation, and relationship status.

H_{01} : Black women will show no significant difference in sexual assertiveness by age, income, education, sexual orientation, and relationship status.

2. What is the difference in perceived susceptibility of HIV/AIDS (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status?

H_{12} : Black women will show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.

H_{02} : Black women will not show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.

3. What is the difference in self-esteem (dependent variable) among the study participants by age, income, education, sexual orientation, and relationship status?

H_{13} : Black women will show a significant difference in self-esteem by age, income, education, sexual orientation, and relationship status.

H_{03} : Black women will not show a significant difference in self-esteem by age, income, education, sexual orientation, and relationship status.

4. Does age, income, education, self-esteem, sexual orientation, or relationship status predict higher levels of self-efficacy in being sexually assertive (dependent variable)?

H_{14} : Black women will show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.

H_{04} : Black women will not show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.

The purpose of this chapter is to present the study findings. I review the data collection procedures of the study, followed by a presentation of findings from descriptive statistics as they pertain to participants' demographic and related information. Attention is then given to study findings. The results section includes (a) descriptive statistics on study variables; (b) a summary and rationale for the inferential statistics, namely one-way ANOVA and multiple linear regression, conducted for hypothesis testing; (c) a presentation and summary of findings from these analyses, including the testing of assumptions; and (d) conclusions drawn for the null hypotheses of each research question based on inferential statistic findings. A summary concludes the chapter.

Data Collection

The data collection period for this study was from late July to early November 2017. The study participants were a community-based sample of adult Black women (18 or older) residing in a central Virginia urban community. I used a variety of community forums where women often visit (e.g., beauty salon/spa, and barbershop) as data collection sites. A recruitment flyer was posted at community businesses located in Richmond and Chesterfield, Virginia, as well as a Baptist Church located in Mechanicsville, Virginia. The beauty salon/spa and barber shop provided a private data collection area where I personally escorted all study participants. I did not remain in the room but was accessible at another location in case the participants had questions. A consent form was provided to each participant. Each participant was told that once she completed their survey, to seal it into the provided sealed envelope and drop it into the locked data collection box for me to collect at the end of the day. For those who asked to mail back their surveys, they were provided a stamped addressed envelope and it was explained not to include their returned address when mailing back their survey because the study was anonymous. All six mailed surveys were returned. In total, 122 women completed the anonymous surveys.

The initial study sample size was 122. The data were reviewed for cases that had missing not at random (MNAR) data, and none were found. Fifteen cases (participants) had three or fewer missing at random (MAR) data points, and these missing data points

were imputed using mean imputation. Mahalanobis distances were calculated for each case to determine if any showed multivariate normality regarding the study dependent variables of the four sexual assertiveness measures, self-esteem, perceived susceptibility of HIV, and sexual self-efficacy in being sexual assertiveness. Five cases had Mahalanobis distance values greater than 14.05, the critical value at 7 degrees of freedom (*Df*; Darlington & Hayes, 2016). These cases were removed from the data set. The final study sample size was 117 (95.9% of original sample).

Descriptive Statistics: Participant Variables

The study included a final sample of 117 participants, all of whom were women. The majority ($n=94$, 80.3%) identified as African/Caribbean American, while 23 (19.7%) identified as multiracial/other. A series of independent samples *t* tests were conducted to determine if African/Caribbean American participants had significantly different sexual assertiveness, perceived HIV/AIDS susceptibility, self-esteem, or self-efficacy for sexual assertiveness mean scores in comparison to multiracial/other participants. None of the findings from the *t* tests were significant, indicating no significant mean scores differences across ethnic groups.

Participants provided information on their age group, highest level of education, and household income (see Table 1). Over a third of participants ($n=44$, 7.7%) were between the ages of 25 and 34 years, while 24 (20.5%) were between the ages of 18 and 24 years, 28 (23.9%) were between the ages of 35 and 44 years, and 21 (17.9%) were 45

years of age or older. Almost half ($n=56$, 47.9%) of the participants were college graduates. The household income brackets were based on information from the Urban Institute (2015). Over a third of study participants ($n=43$, 36.8%) were of middle-income status, making between \$50,000 to \$59,999 per year. The next largest group of participants ($n=34$, 29.1%) were of low-income status, reporting annual household incomes between \$5,000 and \$29,999 per year. Based on this demographic information, the sample of participants in this study were, in general, young adults who were of middle-income status.

Table 1.

Descriptive Statistics: Participant Age Group, Highest Level of Education, and Annual Household Income (N=117)

Variable	Frequency <i>N</i>	Percentage %
Age		
18-24	24	20.5
25-34	44	37.7
35-44	28	23.9
45 or older	21	17.9
Highest Level of Education		
High school graduate	21	17.9
Some college	40	34.2
College graduate	56	47.9
Annual Household Income*		
Low Income (\$5,000-\$29,999)	34	29.1
Low Middle Income (\$30,000-\$49,999)	23	19.7
Middle Income (\$50,000-\$99,999)	43	36.8
Upper Middle Income (>=\$100,000)	17	14.5

Note. * The household income brackets were based on information from the Urban Institute (2015)

Participants provided information on their current relationship status, sexual orientation, and degree of satisfaction about their current relationship (see Table 2). Many participants ($n=63$, 53.8%) were single, while 36 (30.8%) were married and 18 (15.4%)

had been previously married but were currently divorced or widowed. Most of the participants ($n=87$, 74.4%) identified as heterosexual, whereas 22 (18.8%) identified as bisexual and eight (6.8%) identified as homosexual. Half of the participants ($n=58$, 49.6%) reported having one sexual partner in the past 6 months, while an equal number ($ns=26$, 22.2%) of participants reported having two or more sexual partners in the past month. Eight (6.6%) reported having no sexual partners in the past 6 months. A chi-square test of independence was conducted to determine if the number of sexual partners in the past 6 months significantly differed across sexual orientation. The results were significant, $\chi^2(6) = 50.75, p < .001$. There was a significantly higher number of participants who identified as bisexual ($n=15$, 68.2%) and who reported having three or more sexual partners than there were participants who identified as heterosexual ($n=7$, 8.0%) and who reported having three or more sexual partners. Most participants ($n=92$, 78.6%) reported being happy about their current relationship.

Table 2

Frequencies & Percentages: Relationship Status, Sexual Orientation, and Satisfaction about Current Relationship (N=122)

Variable	Frequency <i>n</i>	Percentage %
Relationship Status		
Single	63	53.8
Married	36	30.8
Previously Married (e.g., Divorced, Widowed)	18	15.4
Sexual Orientation		
Heterosexual	87	74.4
Homosexual	8	6.8
Bisexual	22	18.8
Number of Sexual Partners in Past Six Months		
None	7	6.0
1	58	49.6
2	26	22.2
3 or more	26	22.2
Satisfaction about Current Relationship		
Happy	92	78.6
Not Happy	25	21.4

Results

Descriptive Statistics: Study Scales

Descriptive statistics (i.e., mean, median, standard deviation, minimum score, maximum score) and Cronbach's alphas as indicators of interitem reliability were computed for the study scales. Table 3 provides these results. Four subscales of the SAS (Morokoff et al., 1997) were used to measure four types of sexual assertiveness: (a) initiation of sexual interactions, (b) refusal of sexual activity, (c) HIV/AIDS/STD communication, and (d) contraception/STD prevention. Each subscale was comprised of six items that had 5-point Likert-type response coding (i.e., from 1=*never* to 5=*always*). The possible range of scores for all SAS subscales was 6.00 to 30.00 points, with a higher score denoting more sexual assertiveness specific to the subscale.

The SAS initiation of sexual interactions assertiveness subscale had a mean of 19.28 ($Md= 19.00$, $SD=3.37$). Initiation of sexual interactions assertiveness subscale scores ranged from 12.00 to 28.00 points. The interitem reliability of the SAS subscale was poor, Cronbach's $\alpha = .51$. The SAS sexual refusal assertiveness subscale had a mean of 20.89 ($Md= 20.00$, $SD=4.73$), and scores on this subscale ranged from 10.00 to 30.00 points. The sexual refusal assertiveness subscale had acceptable interitem reliability, Cronbach's $\alpha = .70$. The SAS HIV/AIDS/STD communication subscale had a mean of 22.84 ($Md= 29.00$, $SD=8.76$); scores on this subscale ranged from 6.00 to 30.00 points. The HIV/AIDS/STD communication subscale had excellent interitem reliability,

Cronbach's $\alpha = .97$. The SAS contraception/STD prevention subscale had a mean of 20.21 ($Md= 29.00$, $SD=8.76$), and the subscale scores ranged from 11.00 to 30.00 points. The contraception/STD prevention subscale had adequate interitem reliability, Cronbach's $\alpha = .68$.

The PRHS (Napper et al., 2012) was used to measure participants' perceived HIV/AIDS susceptibility. The PRHS is comprised of eight items that differ in scoring and scoring response. The scale can range in scores from 8.00 to 43.00; a higher score denotes perceived increased susceptibility to acquiring HIV/AIDS. In this study, the PRHS had a mean of 21.21 ($Md= 21.00$, $SD=7.26$), and PRHS scale scores ranged from 8.00 to 38.00 points. The PRHS had very good interitem reliability, Cronbach's $\alpha = .88$.

Sexual health self-efficacy and global self-esteem of participants were also assessed in this study. The SHPSES (Koch et al., 2007) was used to measure sexual health self-efficacy. The SHPSES is comprised of 20 items that had 5-point Likert-type response coding (from 1=*not at all confident* to 5=*extremely confident*). A higher score on the SHPSES indicates higher self-efficacy for being sexually assertive. In this study, the SHPSES mean score was 74.05 ($Md= 79.00$, $SD=17.79$), and SHPSES scale scores ranged from 35.00 to 95.00 points. The SHPSES had excellent interitem reliability, Cronbach's $\alpha = .96$. Global self-esteem was assessed using the Single-item Self-esteem Scale (SISES; Robin et al., 2013). The mean score on the SISES was 3.94 ($Md=4.00$,

$SD=1.06$), and scores on the SISES ranged from 2.00 to 4.00 points. As the SISES had just one item, interitem reliability was not relevant to this variable.

Table 3

Descriptive Statistics and Cronbach's Alphas of Study Scales (N=117)

Variable	<i>M</i>	<i>Md</i>	<i>SD</i>	Min	Max	α
SAS Sexual Assertiveness: Initiation of Sexual Interactions	19.28	19.00	3.37	12.00	28.00	.51
SAS Sexual Assertiveness: Refusal	20.89	20.00	4.73	10.00	30.00	.70
SAS Sexual Assertiveness: HIV/AIDS/STD Communication	22.84	29.00	8.76	6.00	30.00	.97
SAS Sexual Assertiveness: Contraception/STD Prevention	20.21	18.00	4.99	11.00	30.00	.68
PRHS HIV/AIDS Susceptibility	21.21	21.00	7.26	8.00	38.00	.88
SHPSES Sexual Self-efficacy	74.05	79.00	17.79	35.00	95.00	.96
SISES Self-esteem	3.94	4.00	1.06	2.00	5.00	N/A

Note. The four SAS sexual assertiveness subscales, each comprised of 6 items, had a potential range of scores from 6.00 to 30.00. The 8-item PRHS had a potential range of scores from 8.00 to 43.00. The SHPSES had a potential range of scores from 20.00 to 100.00. The SISES had a potential range of scores from 1.00 to 5.00.

Overview of Data Analysis for Hypothesis Testing

In this study, two types of statistical analyses were conducted to address study research questions. One-way ANOVAs were conducted to determine individual independent variable (i.e., age group, income level, education, sexual orientation, relationship status) effects on the dependent variables of sexual assertiveness, perceived HIV/AIDS susceptibility, self-esteem, and sexual self-efficacy for sexual assertiveness. A Bonferroni *post hoc* test was conducted to determine which specific groups differed from one another. For the first, second, and fourth research questions, a Pearson bivariate correlation was conducted between self-esteem and the dependent variables measuring sexual assertiveness, perceived HIV/AIDS susceptibility, and sexual self-efficacy for sexual assertiveness.

Multiple linear regression analyses were then conducted to examine the effects of the independent variables, in consideration of the shared variance between these variables, on the dependent variables. All the independent variables were categorical, which required that these variables be recoded for multiple linear regression. The number of new variables created for each predictor was based on $k-1$, where k is the number of groups (Darlington & Hayes, 2016; Mertler & Reinhart, 2016). Dummy coding was used, where 0 identified the referent group and 1 identified the comparison group. With dummy coding, a negative standardized beta weight denotes significant referent group effects

while a positive beta weight indicates significant comparison group effects (Darlington & Hayes, 2016; Mertler & Reinhart, 2016).

In this study, the *18-24* group was the referent group, with three variables created to allow for comparison to the *25-34*, *35-44*, and *45 or older* age groups, respectively. The *low income (LI)* group was the referent group, and three variables were created to allow for comparisons to the *lower middle class (LMI)*, *middle class (MI)*, and *upper middle class (UMI)* groups, respectively. The *high school graduate* group was the education referent group, and the creation of two new variables allowed it to be compared to some *college* and *college graduate* group. The sexual orientation referent group was *heterosexual*; two new variables were developed to allow for comparisons between *heterosexual and homosexual* participants and *heterosexual and bisexual* participants, respectively. Finally, the *single* group was the relationship status referent group, and two variables were created so that the single group could be compared to the *married* and *previously married* groups, respectively.

One multiple linear regression was conducted for each dependent variable, and all predictor variables were included in the first model (step) of the multiple linear regression analyses. Self-esteem was both a dependent and confound variable. In the multiple linear regression conducted to address the third research question, self-esteem was the dependent variable. For all other multiple linear regression analyses, self-esteem was treated as a confound variable. It was the first predictor entered the regression

model, followed by (in order), the age group, income level, education level, sexual orientation, and relationship status variable.

Testing of Assumptions

Certain assumptions of the data must be met for one-way ANOVA and multiple linear regression. One assumption that these statistical analyses share is normality in the distribution of scores for continuously coded dependent variables. $Z_{skewness}$ values were computed to determine if the study variables of sexual assertiveness, perceived HIV/AIDS susceptibility, self-esteem, and self-efficacy for being sexually assertive. A $Z_{skewness}$ value that is less than ± 3.29 indicates that the variable displays relative normality and that the assumption of normality is met (Kim, 2013; Mertler & Reinhart, 2016). Table 4 presents the $Z_{skewness}$ value of each study variables. As seen in Table 4, none of the study variables had zskewness values that were greater than ± 3.29 .

Table 4

Testing the Assumption of Normality: Zskewness of Study Variables (N=117)

Variable	Z _{skewness}
Sexual Assertiveness (4 Dimensions)	
- Assertiveness: Sexual Initiation	1.74
- Assertiveness: Sexual Refusal	1.70
- Assertiveness: HIV, AIDS, & STD Prevention	-2.09
- Assertiveness: Contraception & STD Prevention	2.49
Perceived HIV/AIDS Susceptibility	0.71
Self-Esteem	-2.23
Self-Efficacy for Sexual Assertiveness	-2.62

One-way ANOVA and multiple linear regression analyses also have similar assumptions regarding homogeneity of variances/homoscedasticity. The homogeneity of variance assumption of one-way ANOVA means that the dependent variable variances are similar for each category of the independent variables (Hesamian, 2016; Mertler & Reinhart, 2016). The homoscedasticity assumption for multiple linear regression denotes that dependent variable variances around the regression line are similar for all values of the independent predictor (Darlington & Hayes, 2016; Mertler & Reinhart, 2016).

A Levene's test of homogeneity of variances was conducted for every one-way ANOVA, as a non-significant (at $p > .05$) Levene's test indicates that the homogeneity of variances assumption is met (Hesamian, 2016; Mertler & Reinhart, 2016). If the homogeneity assumption is violated, it effects the ANOVA model F -value, often inflating it, which can result in a Type I error, or rejecting the null hypothesis when in fact it is true (Hesamian, 2016; Mertler & Reinhart, 2016). Statisticians therefore recommend the use of the Welch adjusted F -value to determine significance, as well as the use of the Dunnett C *post hoc* test to determine specific group differences (Hesamian, 2016; Mertler & Reinhart, 2016). In the sections that report one-way ANOVA findings, only significant Levene's tests are reported. For those findings in which this assumption was violated, the Welch adjusted F , denoted as F_{adj} , was reported, along with its adjusted degrees of freedom (Df_{adj}) significance level, and the adjusted significance level, denoted as p_{adj} , with $p_{adj} < .05$ indicating significance. Moreover, the Dunnett C *post hoc* test was utilized to determine which specific groups differed from one another.

Scatterplots of predicted versus actual residuals were computed to determine if the data met the multiple linear regression assumption for homoscedasticity. The data points on the scatterplot should be equally dispersed above and below the horizontal, resulting in a somewhat rectangle shape for the homoscedasticity assumption to be met (Darlington & Hayes, 2016; Mertler & Reinhart, 2016). The scatterplots are provided for each

multiple linear regression analysis, and a determination as to whether the assumption of homoscedasticity was met was denoted.

Results: Research Question 1

The first research question was “What are the differences in Black women’s sexual assertiveness (DV) by age, income, education, sexual orientation, and relationship status (IV)?”

The first set of analyses to address the first research questions were a series of one-way ANOVAs to determine if there were any significant differences in the four different types of sexual assertiveness across the individual independent variables and a series of Pearson bivariate correlations to assess the relationship between self-esteem and the four-sexual assertiveness dependent variables. Four multiple linear regression analyses were then conducted in alignment with the four sexual assertiveness scales. In each multiple linear regression analysis, the confound of self-esteem was entered as the first variable in analyses, followed by the predictor variables in order.

Dependent variable: Sexual initiation assertiveness. Results from the one-way ANOVAs showed no significant differences in sexual initiation assertiveness across age, income, and education, sexual orientation, or relationship groups. A Pearson bivariate correlation conducted between the confound variable of self-esteem and sexual initiation assertiveness was not significant, $r(117) = .147, p = .113$.

The scatterplot for sexual initiation assertiveness predicted versus actual residuals, presented in Figure 1, indicated that the assumption of homoscedasticity was met.

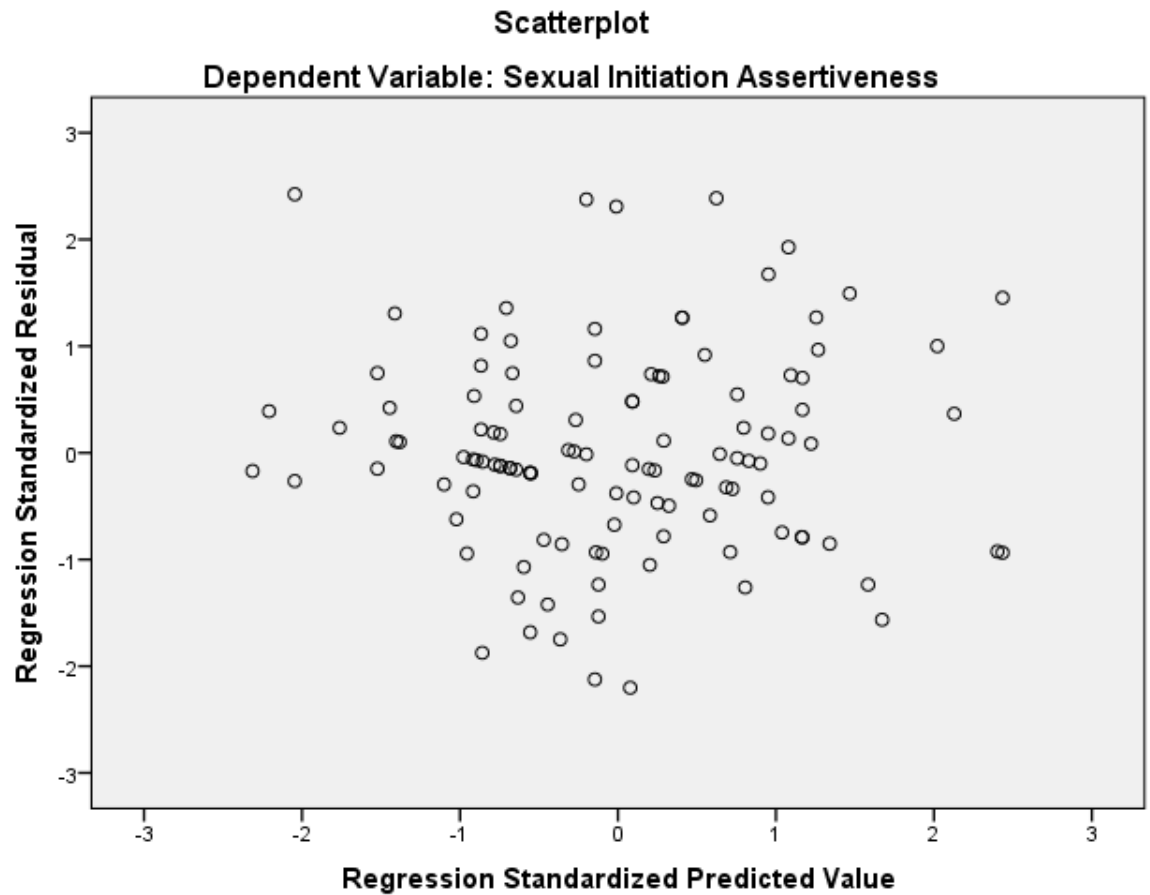


Figure 1. *Scatterplot of sexual initiation assertiveness actual versus predicted residuals*

Results from the multiple linear regression are presented in Table 4. The overall regression model was not significant, $F(13, 103) = 1.09, p = .374, R^2 = .121$. The confound variable of self-esteem and the independent variables were not significantly associated with assertiveness regarding sexual initiation.

Table 5

Multiple Linear Regression: Self-esteem, Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting Sexual Initiation Assertiveness (N=117)

Variable	B	SE B	B	p
Self-esteem	0.64	0.34	.201	.060
Age				
Age 18-24 (Baseline)	-	-	-	-
Age 25-34	0.04	0.99	.006	.969
Age 35-44	-0.07	1.10	-.008	.953
Age 45 or older	-1.10	1.32	-.125	.409
Income				
LI (< \$5000-\$29,999) (Baseline)				
LMI (\$30,000-\$39,999)	-1.49	0.99	-.177	.133
MI (\$40,000-\$99,999)	0.25	1.00	.037	.800
UMI (\geq \$100,000)	0.48	1.35	.050	.725
Education				
High school graduate (Baseline)				
Some college	0.99	0.98	.140	.317
College graduate	-0.50	1.02	-.074	.630
Sexual Orientation				
Heterosexual (Baseline)				
Homosexual	-0.73	1.30	-.055	.577
Bisexual	-0.53	0.90	-.061	.559
Marital Status				
Single (Baseline)				
Married	-1.38	0.81	-.190	.092
Never married	-0.60	1.20	-.065	.616

Note. $F(13, 103) = 1.09, p = .374, R^2 = .121$

Dependent variable: Sexual refusal assertiveness. Results from the series of one-way ANOVAs showed no significant differences in sexual refusal assertiveness mean scores across the age, income, education, sexual orientation, or relationship status groups. The Pearson bivariate correlation between self-esteem and sexual refusal assertiveness was significant, $r(117) = .28, p = .010$. As self-esteem increased, so did sexual refusal assertiveness.

The scatterplot for sexual refusal assertiveness predicted versus actual residuals, presented in Figure 2, indicated that the assumption of homoscedasticity was met.

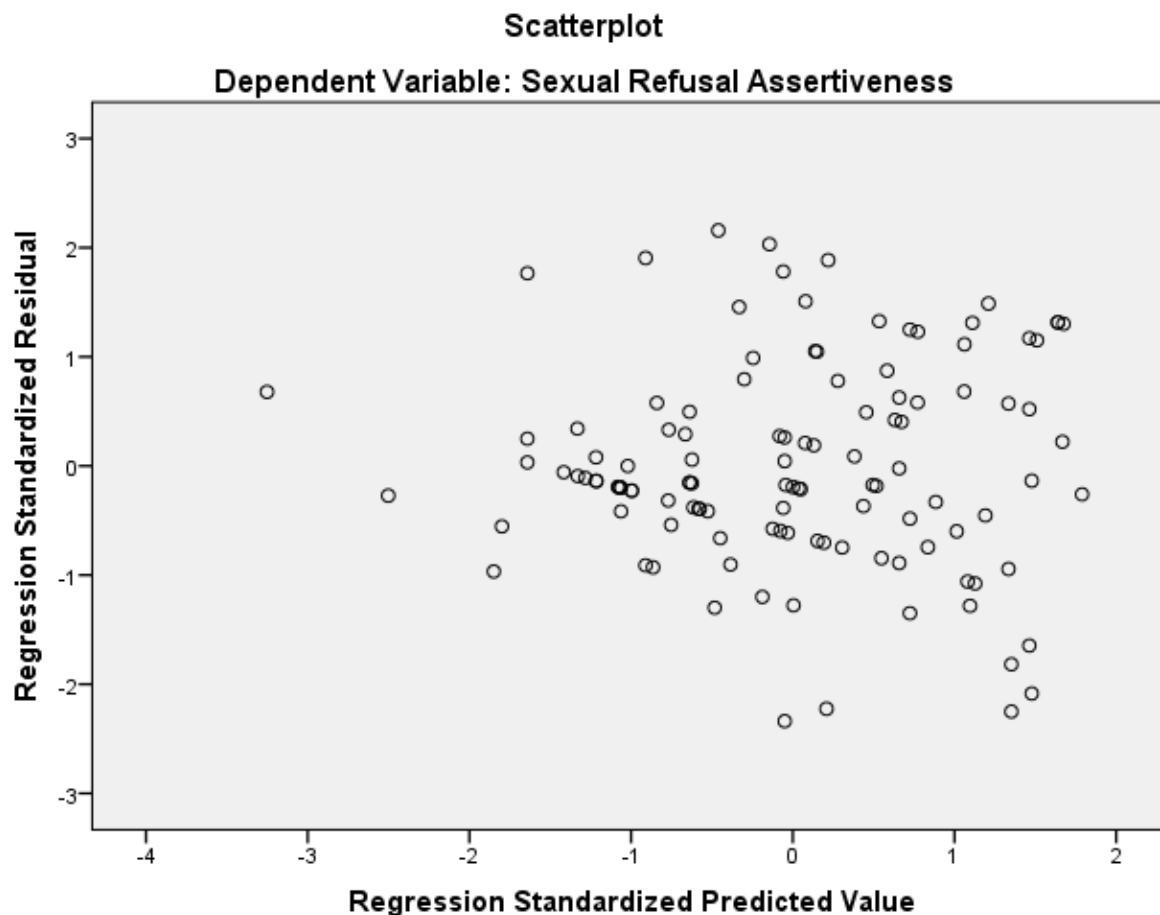


Figure 2. *Scatterplot for sexual refusal assertiveness predicted versus actual residuals*

Results from the multiple linear regression conducted with the dependent variable of sexual refusal assertiveness are presented in Table 5. The overall regression model was not significant, $F(13, 103) = 1.44, p = .156, R^2 = .153$. However, a review of the findings for the individual predictor variable effects on sexual refusal assertiveness showed that the confound variable of self-esteem and the independent variable of relationship status

were significantly associated with sexual refusal assertiveness. As participants' self-esteem increased, so did their sexual refusal assertiveness, $\beta (115) = .241, p = .023$.

Results further showed that single participants reported higher levels of sexual refusal assertiveness than did married participants, $\beta (115) = -.276, p = .013$.

Table 6

Multiple Linear Regression: Self-esteem, Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting Sexual Refusal Assertiveness (N=117)

Variable	B	SE B	B	p
Self-esteem	1.07	0.46	.241	.023
Age				
Age 18-24 (Baseline)	-	-	-	-
Age 25-34	0.41	1.37	.043	.763
Age 35-44	0.44	1.52	.040	.772
Age 45 or older	-0.09	1.82	-.007	.960
Income				
LI (< \$5000-\$29,999) (Baseline)				
LMI (\$30,000-\$39,999)	-1.02	1.36	-.086	.453
MI (\$40,000-\$99,999)	-0.60	1.38	-.062	.663
UMI (\geq \$100,000)	0.82	1.86	.061	.661
Education				
High school graduate (Baseline)				
Some college	0.57	1.36	.058	.673
College graduate	0.81	1.41	.086	.566
Sexual Orientation				
Heterosexual (Baseline)				

Homosexual	-1.12	1.80	-.060	.534
Bisexual	-1.91	1.24	-.159	.127
Marital Status				
Single (Baseline)				
Married	-2.82	1.12	-.276	.013
Never married	-1.13	1.66	-.086	.653

Note. $F(13, 103) = 1.44, p = .156, R^2 = .153$. Significant findings are bolded.

Dependent variable: HIV, AIDS, and STD communication assertiveness.

Results from the series of one-way ANOVAs revealed significant differences in HIV, AIDS, and STD prevention mean scores across all independent variables except relationship status. Mean score differences in HIV, AIDS, and STD communication assertiveness were significant across age groups, $F(3, 113) = 2.74, p = .047$. A Bonferroni *post hoc* test showed that participants between the ages of 25 and 34 ($n=44$) had a significantly higher HIV, AIDS, and STD communication assertiveness mean score ($M=24.91, SD=8.05$) than did participants who were between the ages of 18 and 24 ($n=24, M=18.79, SD=8.27$).

The Levene's test of homogeneity of variances indicated unequal variances in HIV, AIDS, & STD communication assertiveness scores across income brackets, $F(3, 113) = 4.79, p = .004$, and education levels, $F(2, 114) = 4.15, p = .018$, requiring the use of the Welch adjusted *F*-value and the Dunnett *C post hoc* test. There were significant HIV, AIDS, and STD communication assertiveness mean score differences across income brackets, $F_{adj}(3, 54.02) = 3.76, p_{adj} = .016$. Participants who were in the upper-middle-

income bracket ($n=17$) had a significantly higher communication assertiveness mean score ($M=27.35$, $SD=5.88$) in comparison to participants who were in the low-income bracket ($n=34$, $M=20.56$, $SD=8.69$). There were significant HIV, AIDS, and STD communication assertiveness mean score differences across highest level of education groups, $F_{adj}(2, 77.42) = 3.19$, $p_{adj} = .047$. Participants who were college graduates ($n=56$) had a significantly higher HIV, AIDS, and STD communication assertiveness mean score ($M=24.93$, $SD=7.66$) than did participants who were high school graduates ($n=21$, $M=20.05$, $SD=8.71$).

There were significant differences in HIV, AIDS, and STD communication assertiveness mean scores across sexual orientation categories, $F(2,114)=6.71$, $p=.002$. A Bonferroni *post hoc* test showed that participants who were heterosexual ($n=87$) had a significantly higher HIV, AIDS, and STD communication assertiveness mean score ($M=24.34$, $SD=8.09$) than did participants who were bisexual ($n=22$, $M=17.05$, $SD=9.42$). There were no significant HIV, AIDS, and STD communication assertiveness mean score differences across income bracket or relationship status groups. Results from the Pearson bivariate correlation analysis revealed that self-esteem was significantly associated with HIV, AIDS, and STD communication assertiveness, $r(117) = .499$, $p < .001$.

The scatterplot for HIV, AIDS, and STD communication assertiveness predicted versus actual residuals, presented in Figure 3, indicated that the assumption of

homoscedasticity was met.

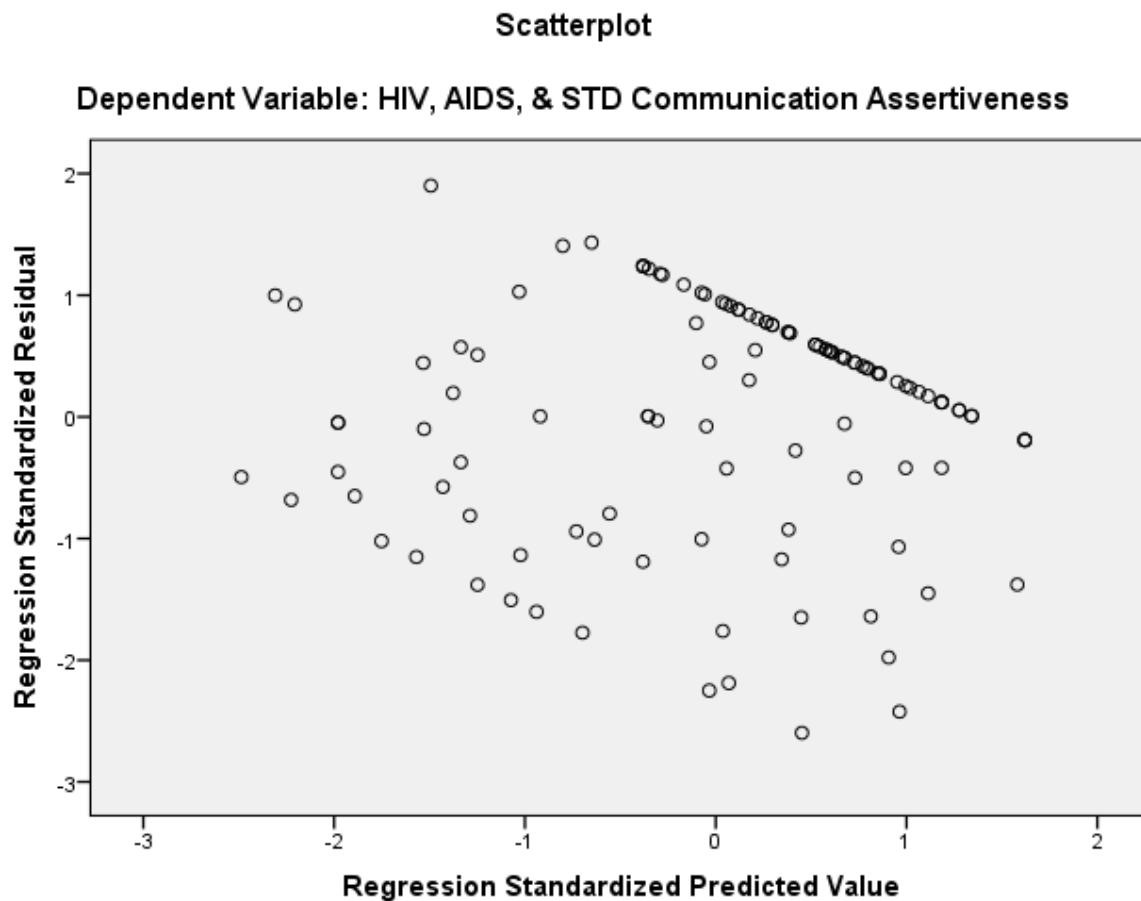


Figure 3. *Scatterplot for HIV, AIDS, and STD communication assertiveness predicted versus actual residuals*

Results for the third multiple linear regression conducted for the first research question are presented in Table 6. The overall regression model was significant, $F(13, 103) = 4.57, p < .001, R^2 = .366$, a large effect size. However, a review of the findings for the individual predictor variables showed that the confound variable of self-esteem

was the only variable that was significantly related to HIV, AIDS, and STD communication assertiveness. As participants' self-esteem increased, so did their HIV, AIDS, and STD communication assertiveness, β (115) = .469, $p < .001$. None of the independent variables remained significantly associated with HIV, AIDS, and STD communication assertiveness in the multiple linear regression.

Table 7

Multiple Linear Regression: Self-esteem, Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting HIV, AIDS, and STD Communication Assertiveness (N=117)

Variable	B	SE B	B	p
Self-esteem	3.88	0.74	.469	.000
Age				
Age 18-24 (Baseline)				
Age 25-34	3.15	2.20	.175	.155
Age 35-44	0.73	2.43	.036	.764
Age 45 or older	-0.75	2.92	-.033	.797
Income				
LI (< \$5000-\$29,999) (Baseline)				
LMI (\$30,000-\$39,999)	-0.92	2.18	-.042	.673
MI (\$40,000-\$99,999)	-2.10	2.22	-.116	.345
UMI (\geq \$100,000)	2.99	2.99	.121	.319
Education				
High school graduate (Baseline)				
Some college	-1.30	2.17	-.071	.552

College graduate	0.42	2.26	.024	.852
Sexual Orientation				
Heterosexual (Baseline)				
Homosexual	-0.25	2.88	-.007	.930
Bisexual	-3.67	1.99	-.164	.068
Marital Status				
Single (Baseline)				
Married	-0.37	1.80	-.020	.836
Never married	-2.19	2.65	-.091	.410

Note. $F(13, 103) = 4.57, p < .001, R^2 = .366$. Significant findings are bolded.

Dependent variable: Contraception and STD prevention assertiveness.

Results from the series of one-way ANOVAs indicated significant contraception and STD prevention assertiveness mean score differences regarding two independent variables: highest level of education and sexual orientation. The Levene's test of homogeneity of variances indicated unequal variances in contraception and STD prevention assertiveness scores across education levels, $F(2, 114)=12.83, p<.001$, and sexual orientation, $F(2, 114)=6.04, p=.003$. As such, the Welch adjusted F -value and the Dunnett C *post hoc* test was utilized.

There was significant mean score differences across education groups, $F_{adj}(2, 74.09) = 10.61, p_{adj} < .001$. Participants who had some college education ($n=40$) had a significantly higher contraception and STD prevention assertiveness mean score ($M=21.13, SD=4.83$) than did participants who were high school graduates ($n=21, M=17.71, SD=1.87$). There were significant differences in contraception and STD

prevention assertiveness mean scores across sexual orientation groups, $F_{adj}(2,15.93)=5.31, p_{adj}=.017$. Participants who were homosexual ($n=8$) had a significantly higher contraception and STD prevention assertiveness mean score ($M=24.38, SD=5.37$) than did participants who were bisexual ($n=22, M=18.32, SD=3.05$) and participants who were heterosexual ($n=87, M=20.31, SD=5.14$).

There were no significant contraception and STD communication assertiveness mean score differences across age groups, income bracket, or relationship status groups. Results from the Pearson bivariate correlation analysis revealed that self-esteem was significantly associated with contraception and STD prevention assertiveness, $r(117) = .188, p = .042$.

The scatterplot for contraception and STD prevention assertiveness predicted versus actual residuals, presented in Figure 4, indicated that the assumption of homoscedasticity was met.

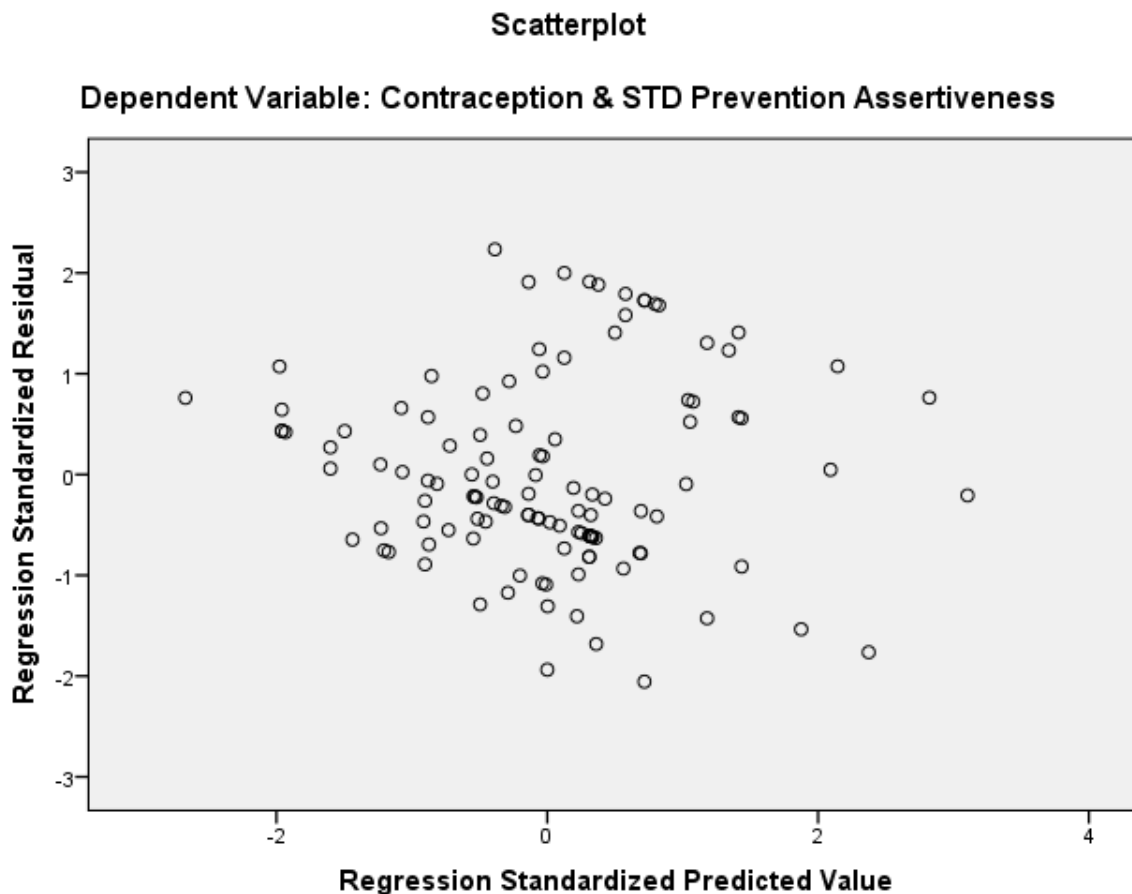


Figure 4. *Scatterplot for contraception and STD prevention assertiveness predicted versus actual residuals*

Results from the fourth and last multiple linear regression conducted for the first research question are presented in Table 7. The overall regression model was significant, $F(13, 103) = 1.88, p = .041, R^2 = .191$, a medium effect size. Sexual orientation was the only independent variable that remained significantly associated with contraception and STD prevention assertiveness. In the multiple linear regression analysis, the heterosexual

group was the reference category, with homosexual and bisexual as the comparisons groups (across two variables). As such, bisexual and homosexual categories were not compared. Participants who were homosexual reported significantly higher contraception and STD prevention assertiveness than did participants who were heterosexual, β (115) = .253, $p = .008$.

Table 8

Multiple Linear Regression: Self-esteem, Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting Contraception and STD Prevention Assertiveness (N=117)

Variable	B	SE B	B	p
Self-esteem	0.78	0.48	.166	.105
Age				
Age 18-24 (Baseline)				
Age 25-34	0.34	1.41	.033	.812
Age 35-44	-0.55	1.56	-.047	.725
Age 45 or older	-0.50	1.88	-.039	.790
Income				
LI (< \$5000-\$29,999) (Baseline)				
LMI (\$30,000-\$39,999)	0.35	1.40	.028	.801
MI (\$40,000-\$99,999)	0.86	1.43	.084	.546
UMI (\geq \$100,000)	2.73	1.92	.194	.158
Education				
High school graduate (Baseline)				
High school graduate: Some college	2.50	1.40	.239	.076

High school graduate: College graduate	1.49	1.45	.150	.308
Sexual Orientation				
Heterosexual (Baseline)				
Homosexual	4.98	1.85	.253	.008
Bisexual	-0.81	1.28	-.063	.530
Marital Status				
Single (Baseline)				
Married	-1.87	1.16	-.173	.110
Never married	0.53	1.71	.039	.755

Note. $F(13, 103) = 1.88, p = .041, R^2 = .191$. Significant findings are bolded.

Null hypothesis: Research question 1. The null hypothesis for the first research question was, “Black women will show no significant difference in sexual assertiveness by age, income, education, sexual orientation, HIV status, and relationship status.” Results from the series of one-way ANOVAs and multiple linear regression analyses are presented in Table 8. As seen in this table, there were no consistent significant findings regarding the independent variables of age group, income level, and highest level of education, sexual orientation, and relationship status. While there were no mean differences across any of the independent variable groups for the dependent variable of sexual refusal assertiveness, relationship status emerged as a significant predictor of sexual refusal assertiveness in the multiple linear regression findings. In contrast, while one-way ANOVA results revealed significant HIV, AIDs, and STD communication mean score differences for the variables of age group, education level, and sexual orientation, these variables did not stay significant in the multiple linear regression. One-way ANOVA results indicated significant contraception and STD prevention mean score differences

across education level and sexual orientation groups, but findings from the multiple linear regression showed that sexual orientation remained the only significant predictor of contraception and STD prevention. Based on these findings, which revealed significant differences in sexual orientation and relationship status on the outcome, the null hypothesis was retained for the first research question.

Table 9

Summary of One-way ANOVA and Multiple Linear Regression Results for the Four Sexual Assertiveness Dependent Variables (N=117)

Sexual Assertiveness Dependent Variable	One-way ANOVA Significant Group Differences	Multiple Linear Regression Significant Effects
Sexual Initiation	--	--
Sexual Refusal	--	Relationship Status: Single > Married Self-esteem
HIV, AIDs, & STD Communication	Age Group: 25-34 > 18-24 Income Bracket: Upper-middle-income >Low- income Education Level: College Grad > High School Grad Sexual Orientation	Self-esteem

 Heterosexual > Bisexual

Contraception & STD Prevention	Education Level:	Sexual Orientation:
	Some College > High School Grad	Homosexual > Heterosexual
	Sexual Orientation:	
	Homosexual > Bisexual	
	Homosexual > Heterosexual	

Results: Research Question 2

The second research question was, “What is the difference in perceived susceptibility of HIV/AIDS among the study participants by age, income, education, sexual orientation, and relationship status?” Five one-way ANOVAs were conducted to determine if there were any significant perceived susceptibility of HIV/AIDS mean scores across the five independent variables. Results revealed significant differences in perceived susceptibility of HIV/AIDS mean scores across age groups, $F(3,113) = 3.49$, $p = .018$. A Bonferroni *post hoc* test showed that participants between the ages of 18 and 24 ($n = 24$) had a significantly higher perceived HIV/AIDS susceptibility mean score ($M = 24.79$, $SD = 7.11$) than did participants who were between the ages of 25 and 34 ($n = 44$, $M = 21.45$, $SD = 7.64$).

There were significant differences in perceived susceptibility of HIV/AIDS mean scores across income brackets, $F(3,113) = 4.88$, $p = .003$. A Bonferroni *post hoc* test revealed that participants in the low-income bracket (\$5,000-\$29,999) ($n = 34$) had a significantly higher perceived HIV/AIDS susceptibility mean score ($M = 24.71$, $SD = 7.28$)

than did participants in the middle-income bracket (\$30,000-\$49,999) ($n=43$, $M=19.28$, $SD=6.35$) and participants in the upper middle-income bracket ($\geq \$100,000$) ($n=17$, $M=18.53$, $SD=6.69$). There were significant differences in perceived susceptibility of HIV/AIDS mean scores across relationship status groups, $F(2,114) = 5.76$, $p = .004$. A Bonferroni *post hoc* test revealed that single participants ($n=63$) had a significantly higher perceived HIV/AIDS susceptibility mean score ($M=23.17$, $SD=7.26$) than did married participants ($n=36$, $M=18.36$, $SD=7.19$).

There were no significant HIV/AIDS susceptibility mean scores across education or sexual orientation groups. Results from the Pearson bivariate correlation analysis revealed that self-esteem was significantly associated with perceived susceptibility for HIV/AIDS, $r(117) = -.79$, $p < .001$. As participants' self-esteem increased, their perceived susceptibility to HIV/AIDs decreased.

The scatterplot for perceived HIV/AIDS susceptibility predicted versus actual residuals, presented in Figure 5, indicated that the assumption of homoscedasticity was

met.

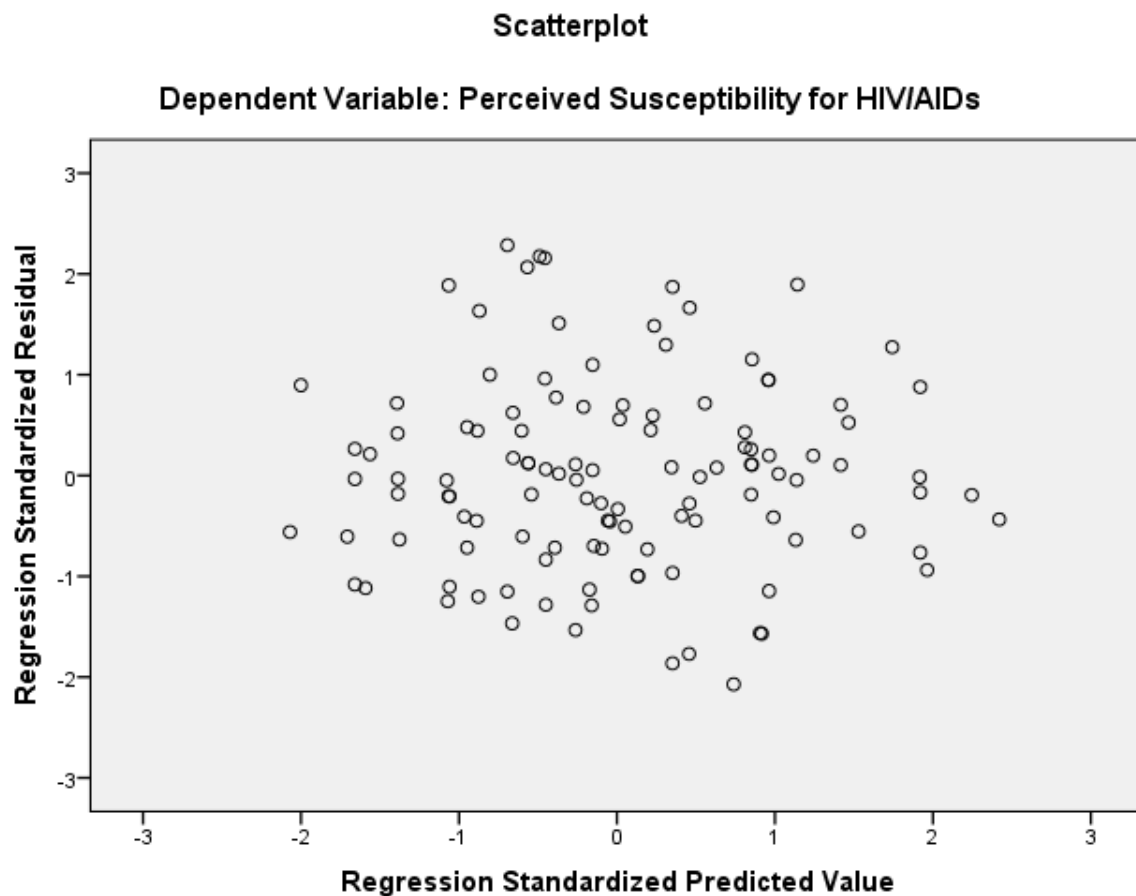


Figure 5. *Scatterplot for perceived HIV/AIDS susceptibility predicted versus actual residuals*

Results from the multiple linear regression, presented in Table 9, showed that the overall model was significant, $F(13, 103) = 2.58, p = .004, R^2 = .246$, a large effect size. A review of the results regarding the individual predictor variables showed that only the confound variable of self-esteem was significantly associated with perceived

susceptibility of HIV/AIDS and drove the overall significance of the model. As participants' self-esteem increased, their perceived susceptibility of HIV/AIDS significantly decreased, $\beta (115) = -.265, p = .008$.

Table 10

Multiple Linear Regression: Self-esteem, Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting Perceived HIV/AIDS Susceptibility (N=117)

Variable	B	SE B	B	p
Self-esteem	-1.81	0.67	-.265	.008
Age				
Age 18-24 (Baseline)				
Age 25-34	-1.02	1.98	-.068	.610
Age 35-44	-2.81	2.20	-.166	.204
Age 45 or older	-0.32	2.64	-.017	.905
Income				
LI (< \$5000-\$29,9999) (Baseline)				

LMI (\$30,000-\$39,999)	-2.20	1.97	-.121	.266
MI (\$40,000-\$99,999)	-3.28	2.00	-.219	.105
UMI (\geq \$100,000)	-3.62	2.70	-.177	.183
Education				
High school graduate (Baseline)				
Some college	1.80	1.97	.118	.361
College graduate	1.82	2.05	.126	.375
Sexual Orientation				
Heterosexual (Baseline)				
Homosexual	-3.37	2.60	-.118	.198
Bisexual	0.63	1.80	.034	.728
Marital Status				
Single (Baseline)				
Married	-2.21	1.63	-.141	.177
Never married	-1.23	2.40	-.061	.609

Note. $F(13, 103) = 2.58, p = .004, R^2 = .246$. Significant findings are bolded.

Null hypothesis: Research question 2. The null hypothesis for the second research question was, “Black women will not show a significant difference in their perceived susceptibility of HIV/AIDS by age, income, education, sexual orientation, and relationship status.” Results from the one-way ANOVAs and multiple linear regression

analyses are presented in Table 10. While one-way ANOVA findings were significant regarding age group, income bracket, and relationship status, results from the multiple linear regression showed that none of the independent variables was significantly associated with the dependent variable of perceived susceptibility of HIV/AIDS. Due to the lack of significant findings for all five independent variables, the null hypothesis was retained for the second research question.

Table 11

Summary of One-way ANOVA and Multiple Linear Regression Results for the Perceived Susceptibility of HIV/AIDS Dependent Variable (N=117)

Dependent Variable	One-way ANOVA	Multiple Linear Regression
	Significant Group Differences	Significant Effects
Perceived HIV/AIDS	Age Groups:	Self-esteem
Susceptibility	18-24 > 25-34	
	Income Brackets:	
	Low Income > Middle Income	
	Low Income > Upper Middle	
	Income	
	Relationship Status:	

Results: Research Question 3

The third research question was: “*What is the difference in self-esteem among the study participants by age, income, education, sexual orientation, and relationship status?*” All the results from the five one-way ANOVAs were significant. There were significant differences in self-esteem mean scores across age groups, $F(3,113) = 5.38$, $p = .002$. A Bonferroni *post hoc* test revealed that 35-44-year-old participants ($n=28$) had a significantly higher self-esteem mean score ($M=4.21$, $SD=1.03$) than did 18-24-year-old participants ($n=24$, $M=3.29$, $SD=1.16$); and that 45-year-old or older participants ($n=21$) had a significantly higher self-esteem mean score ($M=4.38$, $SD=0.97$) than did 18-24-year-old participants ($n=24$, $M=3.29$, $SD=1.16$).

There were significant differences in self-esteem mean scores across income brackets, $F(3,113) = 5.64$, $p = .001$. A Bonferroni *post hoc* test revealed that middle income participants ($n=43$) had a significantly higher self-esteem mean score ($M=4.28$, $SD=0.93$) than did low income participants ($n=34$, $M=3.38$, $SD=1.10$); and that upper middle-income participants ($n=17$) had a significantly higher self-esteem mean score ($M=4.24$, $SD=1.03$) than did low income participants ($n=34$, $M=3.38$, $SD=1.10$). There were significant differences in self-esteem mean scores across education level, $F_{adj}(2, 67.79) = 4.15$, $p_{adj} = .020$. A Dunnett C *post hoc* test revealed that participants who were

college graduates ($n=56$) had a significantly higher self-esteem mean score ($M=4.18$, $SD=0.90$) than did participants who were high school graduates ($n=21$, $M=3.38$, $SD=1.16$).

There were significant differences in self-esteem mean scores across sexual orientation groups, $F(2,114) = 6.36$, $p = .002$. A Bonferroni *post hoc* test revealed that participants who were heterosexual ($n=87$) had a significantly higher self-esteem mean score ($M=4.13$, $SD=0.95$) than did participants who were bisexual ($n=22$, $M=3.27$, $SD=1.16$). There were significant differences in self-esteem mean scores across relationship status groups, $F(2,114) = 4.08$, $p = .019$. A Bonferroni *post hoc* test revealed that married participants ($n=36$) had a significantly higher self-esteem mean score ($M=4.31$, $SD=0.89$) than did single participants ($n=63$, $M=3.70$, $SD=1.07$).

The scatterplot for self-esteem predicted versus actual residuals, presented in Figure 6, indicated that the assumption of homoscedasticity was met.

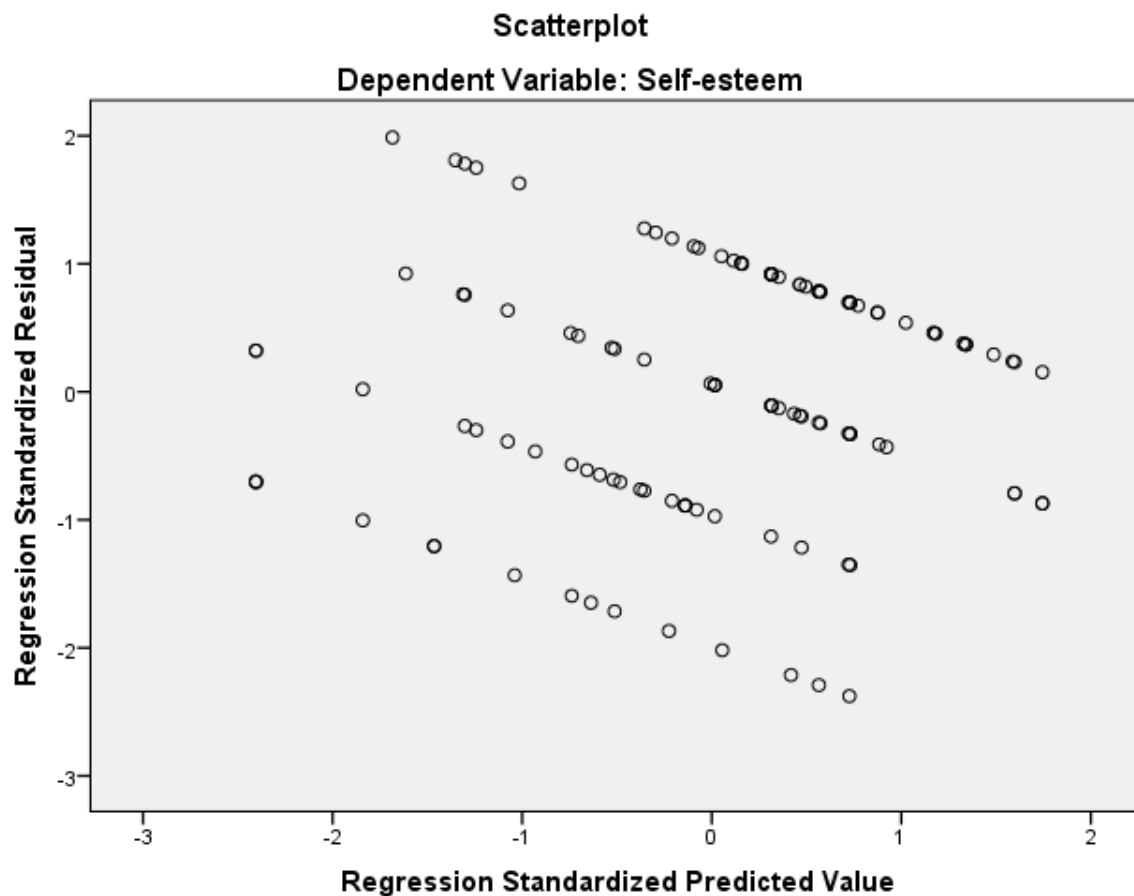


Figure 6. *Scatterplot for self-esteem predicted versus actual residuals*

Results from the multiple linear regression, presented in Table 11, showed that the overall model was significant, $F(12, 104) = 2.76, p = .003, R^2 = .242$, a large effect size. A review of the significance of each of the independent variables showed that only sexual orientation was significantly associated with the dependent variable of self-esteem and

drove the overall significance of the model. Participants who were heterosexual reported higher levels of self-esteem in comparison to participants who were bisexual, β (115) = -.213, $p = .027$.

Table 12

Multiple Linear Regression: Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting Self-esteem (N=117)

Variable	B	SE B	B	p
Age				
Age 18-24 (Baseline)				
Age 25-34	.118	.289	.054	.684
Age 35-44	.570	.316	.230	.074
Age 45 or older	.647	.380	.235	.092
Income				
LI (< \$5000-\$29,999) (Baseline)				
LMI (\$30,000-\$39,999)	.194	.286	.073	.500
MI (\$40,000-\$99,999)	.349	.290	.159	.232
UMI (\geq \$100,000)	.214	.393	.072	.587

Education				
High school graduate (Baseline)				
Some college	.294	.285	.132	.304
College graduate	.376	.296	.178	.207
Sexual Orientation				
Heterosexual (Baseline)				
Homosexual	-.085	.379	-.020	.824
Bisexual	-.575	.256	-.213	.027
Marital Status				
Single (Baseline)				
Married	.218	.236	.095	.686
Never married	-.315	.348	-.109	.375

Note. $F(12, 104) = 2.76, p = .003, R^2 = .242$. Significant findings are bolded.

The null hypothesis for the third research question was, “Black women will not show a significant difference in self-esteem by age, income, education, sexual orientation, HIV status, and relationship status.” Results from the series of one-way ANOVAs revealed significant differences in self-esteem across all five independent variables, although multiple linear regression results showed that, when independent variables were included as a group of predictors of self-esteem, sexual orientation was the

only independent variable significantly related to self-esteem (see Table 12). Based on the significant one-way ANOVA findings, the null hypothesis was rejected for the third research question.

Table 13

Summary of One-way ANOVA and Multiple Linear Regression Results for the Self-esteem Dependent Variable (N=117)

Dependent Variable	One-way ANOVA Significant Group Differences	Multiple Linear Regression Significant Effects
Self-esteem	Age Groups: 25-34 > 18-24 45+ > 18-24 Income Brackets: Middle Income > Low Income Upper Middle Income > Low Income Education Level: College Grad > High School Grad Sexual Orientation:	Sexual Orientation: Heterosexual > Bisexual

Heterosexual > Bisexual

Relationship Status:

Married > Single

Results: Research *Question 4*

The fourth research question was, “Does age, income, education, self-esteem, sexual orientation, or relationship status predict higher levels of self-efficacy in being sexually assertive?” Results from the five one-way ANOVAs were all significant. There were significant differences in self-efficacy in being sexually assertive mean scores across age groups, $F(3,113)=6.72, p<.001$. Results from this one-way ANOVA are presented in Table 13. A Bonferroni *post hoc* test revealed that 25-34, 35-44, and 45 or older participants had significantly higher self-efficacy in being sexually assertive mean scores than did 18-24-year-old participants (see Table 13 for specific results).

Table 14

One-way ANOVA: Sexual Self-efficacy for Sexual Assertiveness Mean Score Differences across Age Groups (N=117)

Variable	n	M	SD	F	Df	p
Age Group				6.72	3,113	<.001
18-24 years of age	24	60.96*				
25-34 years of age	44	79.34				
35-44 years of age	28	76.82				
45 or older years of age	21	74.24				

Note. * 18-24-year-old participants had significantly lower self-efficacy in being sexually assertive mean score than did 25-34, 35-44, and 45 or older participants.

The Levene's test of homogeneity of variances indicated unequal variances in HIV, AIDS, & STD communication assertiveness scores across income brackets, $F(3, 113)=3.20$, $p=.026$, and education levels, $F(2, 114)=7.61$, $p=.001$, requiring the use of the Welch adjusted F -value and the Dunnett C *post hoc* test. There were significant differences in self-efficacy for sexual assertiveness mean scores across income brackets,

$F_{adj}(3, 51.73) = 5.97, p_{adj} = .001$. Middle-income participants ($n=43$) had a significantly higher self-efficacy for sexual assertiveness mean score ($M=77.51, SD=15.66$) than did low income participants ($n=34, M=64.53, SD=18.52$); and upper-middle-income participants ($n=17$) had a significantly higher self-efficacy for sexual assertiveness mean score ($M=82.94, SD=12.84$) than did low-income participants ($n=34, M=64.53, SD=18.52$).

There were significant differences in self-efficacy for sexual assertiveness mean scores across education level, $F_{adj}(2, 46.44) = 8.27, p_{adj} = .001$. Results from the one-way ANOVA are presented in Table 14. A Dunnett C *post hoc* test revealed that participants who had some college education and participants who were college graduates had significantly higher self-efficacy for sexual assertiveness than did participants who were high school graduates (please see Table 14 for specific results).

Table 15

One-way ANOVA: Sexual Self-efficacy for Sexual Assertiveness Mean Score Differences across Highest Level of Education Groups (N=117)

Variable	n	M	SD	F_{adj}	Df_{adj}	p_{adj}
<i>Highest Level of Education</i>				8.67	2,114	<.001

High school graduate	21	64.10*	20.32
Some college education	40	70.43	19.04
College graduate	56	80.38	13.12

Note. * Participants who had graduated from high school had significantly lower self-efficacy for being sexually assertive than did participants with some college education and participants who had graduated from college.

There were significant differences in self-efficacy for being sexually assertive mean scores across sexual orientation groups, $F(2,114)=11.43, p<.001$. A Bonferroni *post hoc* test revealed that participants who were heterosexual ($n=87$) had a significantly higher self-efficacy for being sexually assertive mean score ($M=77.86, SD=15.14$) than did participants who were bisexual ($n=22, M=59.18, SD=19.75$).

The Levene's test of homogeneity of variances indicated unequal variances in self-efficacy for sexual assertiveness across relationship status groups, $F(2, 114)=7.29, p=.001$, requiring the use of the Welch adjusted F -value and the Dunnett C *post hoc* test. There were significant differences in self-efficacy for being sexually assertive mean scores across relationship status groups, $F_{adj}(2,45.25)=4.25, p_{adj}=.020$. A Dunnett C *post hoc* test revealed that married participants ($n=36$) had a significantly higher self-efficacy for being sexually assertive mean score ($M=80.03, SD=12.51$) than did single participants

($n=63$, $M=70.71$, $SD=19.47$). The Pearson bivariate correlation between self-esteem and self-efficacy for being sexually assertive was also significant, $r(117) = .474$, $p < .001$. The scatterplot for self-efficacy for sexual assertiveness predicted versus actual residuals, presented in Figure 7, indicated that the assumption of homoscedasticity was met.

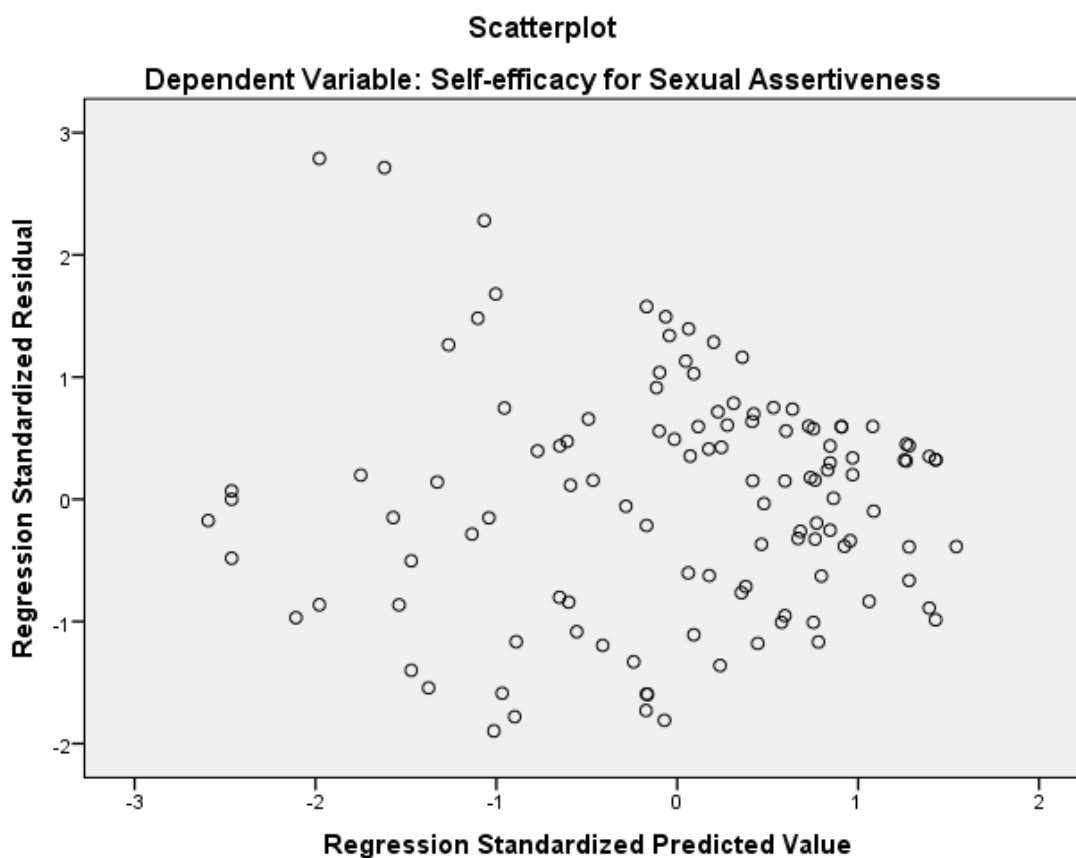


Figure 7. *Scatterplot for self-efficacy for sexual assertiveness predicted versus actual residuals*

Results from the multiple linear regression conducted for the fourth research question are presented in Table 15. Results showed that the overall model was significant, $F(13, 103) = 5.49, p < .001, R^2 = .409$, a large effect size. The confound of self-esteem was significantly associated with self-efficacy: as participants' self-esteem increased, so did their self-efficacy in being sexually assertive, $\beta(115) = .329, p < .001$. A review of results for the individual independent variables showed that only age group and sexual orientation remained significant predictors of self-efficacy in being sexually assertive. Participants who were between the ages of 25 and 34 reported significantly higher self-efficacy in being sexually assertive in comparison to participants between the ages of 18 and 24. Participants who were heterosexual reported significantly higher levels of self-efficacy in being sexually assertive in comparison to participants who were bisexual, $\beta(115) = -.212, p = .015$.

Table 16

Multiple Linear Regression: Self-esteem, Age Groups, Income Level, Highest Level of Education, Sexual Orientation, and Relationship Status Predicting Self-efficacy in Being Sexually Assertive (N=117)

Variable	B	SE B	B	p
Self-esteem	5.52	1.46	.329	.000
Age				
Age 18-24 (Baseline)				

Age 25-34	9.68	4.30	.265	.026
Age 35-44	6.12	4.77	.147	.202
Age 45 or older	0.39	5.73	.008	.946
Income				
LI (< \$5000-\$29,999) (Baseline)				
LMI (\$30,000-\$39,999)	2.78	4.27	.062	.517
MI (\$40,000-\$99,999)	2.23	4.35	.061	.609
UMI (\geq \$100,000)	6.19	5.86	.123	.293
Education				
High school graduate (Baseline)				
Some college	-1.48	4.26	-.040	.730
College graduate	4.55	4.44	.128	.307
Sexual Orientation				
Heterosexual (Baseline)				
Homosexual	1.70	5.64	.024	.764
Bisexual	-9.61	3.90	-.212	.015
Marital Status				
Single (Baseline)				
Married	1.26	3.52	.033	.720
Never married	-0.58	5.20	-.012	.911

Note. $F(13, 103) = 5.49, p < .001, R^2 = .409$. Significant findings bolded.

The null hypothesis for the fourth research question was, “Black women will not show a significant difference in self-efficacy for sexual assertiveness by age, income, education, sexual orientation, and relationship status.” Results from the five one-way ANOVAs were significant. Table 16 summarizes these findings. Results from the multiple linear regression showed that, in addition to the confound variable of self-esteem, age group and sexual orientation were significantly associated with self-efficacy

for sexual assertiveness. Based on the significant findings from the one-way ANOVAs, the null hypothesis was rejected for the fourth research question.

Table 17

Summary of One-way ANOVA and Multiple Linear Regression Results for the Self-efficacy for Being Sexually Assertive Dependent Variable (N=117)

Dependent Variable	One-way ANOVA Significant Group Differences	Multiple Linear Regression Significant Effects
Self-efficacy for being sexually assertive	Age Groups: 25-34>18-24 35-44 > 18-24 45+ > 18-24 Income Brackets: Middle Income > Low Income Upper Middle Income > Low Income Education Level: Some College > High School Grad College Grad > High School Grad	Age Groups: 25-34>18-24 Sexual Orientation: Heterosexual > Bisexual

Sexual Orientation:

Heterosexual > Bisexual

Relationship Status:

Married > Single

Summary

The purpose of this cross-sectional quantitative study, conducted with 117 Black women residing in Richmond, Virginia, was to determine if there were significant differences in sexual assertiveness, HIV/AIDS susceptibility, self-esteem, and self-efficacy for sexual assertiveness mean scores across the independent variables of age, income, education level, sexual orientation, and relationship status as well as to determine if, as a group, the independent variables were significantly associated with these dependent variables. There were also statistical examinations as to whether the confound variable of global self-esteem was significantly associated with sexual assertiveness, perceived HIV/AIDS susceptibility, self-efficacy for being sexually assertive. One-way ANOVAs and multiple linear regression analyses were utilized for hypothesis testing.

Results from the statistical analyses for hypothesis testing revealed no consistent significant findings regarding the independent variables of age group, income level,

highest level of education, sexual orientation, and relationship status and the dependent variables pertaining to sexual assertiveness. Based on these inconsistent and, overall, nonsignificant findings, the null hypothesis was retained for the first research question. While one-way ANOVA findings were significant regarding HIV/AIDs perceived susceptibility across age group, income bracket, and relationship status, results from the multiple linear regression showed that none of the independent variables was significantly associated with the dependent variable of perceived susceptibility of HIV/AIDS. Due to the lack of significant findings for all five independent variables, the null hypothesis was retained for the second research question. Results from the series of one-way ANOVAs revealed significant differences in self-esteem across all five independent variables, although multiple linear regression results showed that, when independent variables were included as a group of predictors of self-esteem, sexual orientation was the only independent variable significantly related to self-esteem (see Table 12). Based on the significant one-way ANOVA findings, the null hypothesis was rejected for the third research question. All five one-way ANOVAs were significant regarding self-efficacy for sexual assertiveness mean scores across all independent variable groups. Results from the multiple linear regression showed that, in addition to the confound variable of self-esteem, age group and sexual orientation were significantly associated with self-efficacy for sexual assertiveness. Based on the significant findings from the one-way ANOVAs, the null hypothesis was rejected for the fourth research

question. The following chapter, chapter 5, provides an overview and discussion of the study findings.

Chapter 5

Introduction

The purpose of this cross-sectional, quantitative study was to conduct HIV prevention research among 117 Black females 18 years and older who resided in Virginia that would measure and compare sexual health characteristics. According to the Virginia 2015 Health Profile, Virginia ranked 12th among the 50 states in the United States in the number of HIV diagnoses (CDC, 2017). Although Blacks represented 19% of Virginia's population, between 2010-2014, they accounted for 55-65% of new HIV diagnoses (VDH, 2016). Due to the high incidence of HIV within the Black community, I examined associations between the theoretically-derived independent variables of age, income, education level, sexual orientation, and relationship status and the dependent variables of sexual assertiveness, perceived HIV/AIDS susceptibility, global self-esteem, and self-efficacy in being sexually assertive to see if Black women were engaging in risky sexual behaviors that increased their risk for HIV. In recognition of the influence of the potential confounders of global self-esteem on the sexual health outcomes, self-esteem was included in analyses conducted for hypothesis testing.

Bandura's (1977a) SCT served as the theoretical framework for this study. According to the SCT, people can change their behavior when they have high levels of self-esteem and self-efficacy. The SCT was suited for this study because it allowed for

the measurement of the study participants' level of self-esteem and self-efficacy in being sexually assertive.

Interpretation of the Findings

The following subsections contain my interpretation of findings for each of the research questions, as well as a discussion of the theoretical framework I used to help interpret and understand my findings. In each subsection, I briefly summarize the findings, interpret the findings, and discuss how they relate to the existing literature reviewed in Chapter 2.

Research Question 1

The first research question was the following: What are the differences in Black women's sexual assertiveness (DV) by age, income, education, sexual orientation, HIV status, and relationship status (IV)? Sexual assertiveness was measured using four subscales.

The results for the first research question, which measured sexual assertiveness using four subscales, varied. In the first regression analysis results, I found that the confounding variable of self-esteem and the independent variables were not significantly associated with sexual assertiveness regarding sexual initiation. In the second subscale results, I found that single women reported higher levels of sexual refusal assertiveness than did married participants. As the study participant's self-esteem increased, so did their sexual refusal assertiveness. The third multiple linear regression subscale analysis

was conducted with HIV, AIDS, and STD communication assertiveness. In the results from the series of one-way ANOVA, I found significant differences in HIV, AIDS, and STD prevention mean scores across all independent variables except relationship status. Finally, the fourth multiple linear regression was conducted with the contraception and STD prevention subscale. I found that participants who had some college education or who were homosexual had a significantly higher contraception and STD prevention assertiveness mean than those with less education or who were heterosexual. Additionally, self-esteem was significantly associated with contraception and STD prevention assertiveness.

In the results regarding the first subscale, I found that none of the independent variables nor covariates were significantly associated with sexual initiation assertiveness. Few scholars have focused on sexual initiation aspect of sexual assertiveness (Smith & Larson, 2015). The null findings regarding self-esteem and initiation differs from Kennedy and Jenkins's (2011) study with younger collegiate Black females 18 to 25 years of age. In that study, women with low versus high self-esteem were more likely to initiate unwanted sex in fear of losing their relationships, as well promoting an emotional relationship with their partner (Kennedy & Jenkins, 2011). Jacobs and Kane (2011) found similar findings in a multiethnic group of women. Other scholars have found that mid-life-age Black women, despite their education or income, initiated sex because they struggled with finding suitable partners and wanted to keep their mate happy (Mallory et

al., 2009; Sharpe et al., 2012). It may be that variables similar to/associated with but distinct from self-esteem (ie., fear of rejection, depression, and risk perception) may influence initiation behaviors in Black women (Jacobs & Kane, 2011; Smith & Larson, 2015). Alternatively, self-esteem may influence sexual initiation indirectly through a mediational process (Jacobs & Kane, 2011). Low self-esteem may influence what Jacobs and Kane (2011) termed “self-silencing” attitudes and behaviors, such as decreased comfort about sexual behavior, focusing on partners versus self-needs, suppression of desires, and poor communication with partner that directly affect initiation assertiveness (p. 29).

In the results pertaining to the second subscale, I found that single women more so than married women and women with higher versus lower self-esteem reported higher levels of sexual refusal assertiveness. These findings have been supported in prior literature (Smith & Larson, 2015). Some researchers have found that Black married females, and those in relationships with low self-esteem, will engage in unwanted sexual activity, despite trustworthiness concerns of their partners (Hunter & Tilley, 2015; Peloquin et al., 2014). Older and younger Black women who are fearful of losing a relationship tend to have lower levels of self-esteem, resulting in their inability to refuse unsafe sex (Jacobs & Kennedy, 2011; Yang et al., 2010). Black women with high levels of self-esteem also have higher levels of sexual assertiveness and are able to engage in safe sexual activity (Ellis, 2014; Logie et al., 2012).

In the results from the third subscale, I found significant differences in HIV, AIDS, and STD communication prevention mean scores across all independent variables except relationship status. A Bonferroni post hoc test showed that participants between the ages of 25 and 35 had a significantly higher HIV, AIDS, and STD communication assertiveness mean score than other study participants. Study participants who were in the upper-middle-income bracket had a significantly higher communication assertiveness mean score in comparison to participants who were in the low-income bracket. Participants who were college graduates had a significantly higher HIV, AIDS, and STD communication assertiveness mean score than did participants who were high school graduates. Finally, participants who were heterosexual had a significantly higher HIV, AIDS, and STD communication assertiveness mean score than did participants who were bisexual. In the results from the Pearson bivariate correlation analysis, I found that self-esteem was significantly associated with HIV, AIDS, and STD communication assertiveness. As self-esteem increased, so did communication assertiveness.

In the fourth subscale, I found significant mean score differences across education groups and sexual orientation. Participants who had some college education had a significantly higher contraception and STD prevention assertiveness mean score than did participants who were high school graduates. Participants who were homosexual had a significantly higher contraception and STD prevention assertiveness mean score than did participants who were bisexual.

Some of these results are supported by other researchers who found that Black females of a lower income bracket and with less education have psychosocial and socioeconomic challenges and were less sexually assertive (Jenkins & Kennedy, 2011; Sharpe et al., 2012). Black females with collegiate education have expressed high levels of self-esteem and ability to be sexually assertive (Jenkins & Kennedy, 2013). According to some researchers, Black females who attend college are at an increased risk for HIV because risky sexual behaviors exist high in this environment, and they often do not receive HIV prevention health education (El Bcheraoui, Sutton, Hardnett, & Jones, 2013; Ferguson et al., 2006; Payne et al., 2006). Other researchers have found that midlife, Black females struggle with using condoms because they perceive that because they cannot get pregnant, there is no need to use condoms (Hunter & Tilley, 2015). Other studies have found that younger, Black females 18-25 years-old and midlife Black females may not use condoms or ask their partners about their HIV status or risky sexual practices because they are fearful of losing their relationships; these women may also have low self-esteem, which resulted in their inability to be sexually assertive (Gillen & Markey, 2014; Kennedy & Jenkins, 2011).

I found that heterosexual women had higher levels of self-esteem and HIV, AIDS, and STD communication mean scores. HIV/AIDS incidence rates are climbing among Black heterosexual females (CDC, 2015). The VDH (2016) reported that Black women comprised 27% of all HIV cases in 2015; moreover, Black women were 15 times more

likely than White women to receive an HIV diagnosis. The Virginia STD prevalence report reported higher cases of gonorrhoeae and Chlamydia trachomatis among Black heterosexual females than bisexual or homosexual Black females (VDH, 2013). Black heterosexual females may not practice safe sex (Harawa et al., 2013).

There is a limited amount of HIV research being conducted among bisexual and homosexual Black females. Agenor, Austin, Kort, and Muzny (2016) focused on sexual and HIV prevention behaviors among Black women who identified as lesbian or bisexual, but this study did not include a heterosexual group of Black women. Some bisexual and homosexual women are unaware of HIV transmission risk factors, such as having sex with uncleaned sex toys, oral sex, and sex during menstruation (GMCH, 2009; Women's Health.gov, 2012). This lack of health knowledge could impact their sexual assertiveness skills. Finally, other scholars have found that Black females who are in a committed relationship may not use condoms to prevent HIV because they trust their partners or do not perceive they are at risk for HIV (Bradley et al., 2013).

Research Question 2

The second research question was the following: What is the difference in perceived susceptibility of HIV/AIDS among the study participants by age, income, education, sexual orientation, and relationship status?

In the second research question, I found significant differences in perceived susceptibility of HIV/AIDS mean scores across income brackets and relationship status. I

found that participants in the low-income bracket and single participants had a significantly higher perceived HIV/AIDS susceptibility mean score. Despite having some college education, as well as knowledge of HIV prevention, Black collegiate students continue to engage in risky sexual behaviors and did not perceive themselves at risk for HIV (Adefuye et al., 2009; El Bcheraoui et al., 2013; Ferguson et al., 2006; Payne et al., 2006). Other researchers have found that Black females in a relationship may not feel there is a need to communicate about risky sexual behaviors with their partners or a need to use a condom, and some did not perceive their risk for HIV (Ferguson et al., 2006; Quina et al., 2000; Smith & Larson, 2015).

Research Question 3

The third research question was the following: What is the difference in self-esteem among the study participants by age, income, education, sexual orientation, and relationship status?

In the third research question, I found that there were significant differences in self-esteem mean scores across all the independent variables. Younger, Black females 18-24 years of had significantly lower levels of self-esteem than other age groups. Study participants from the middle-income bracket had a significantly higher self-esteem mean score than other participants. In addition, college graduates had a significantly higher self-esteem mean score than did participants who were high school graduates. Study participants who were heterosexual had a significantly higher self-esteem mean score

than did participants who were bisexual. Additionally, married participants had a significantly higher self-esteem mean score than did single participants.

Women with high levels of self-esteem were able to be more sexually assertive. Women with low levels of self-esteem and self-efficacy were less sexually assertive. Black females with less education and lower income are at an increased risk for HIV (CDC, 2015). Black females with less education and less income have low self-esteem, which results in their inability to be sexually assertive (Alleyne & Wodarski, 2009; Fleming et al., 2013; Sharpe et al., 2012). Black females who struggle with their relationships have been found to have low self-esteem and low sexual assertiveness (Sharp et al., 2013; Smith & Larson, 2015); while, some researchers have found that being younger and older results in low self-esteem and an inability to be sexually assertive (Jacobs & Kennedy, 2011; Mallory et al., 2009).

Research Question 4

The fourth research question was the following: Does age, income, education, self-esteem, sexual orientation, or relationship status predict higher levels of self-efficacy in being sexually assertive?

Finally, in the results from the analyses for the fourth research question, I found that self-esteem, age group, and sexual orientation were significantly related to self-efficacy in being sexually assertive. As participants' self-esteem increased, so did their self-efficacy in being sexually assertive. Participants who were between the ages of 25

and 34 reported significantly higher self-efficacy in being sexually assertive in comparison to participants between the ages of 18 and 24. Participants who were heterosexual reported significantly higher levels of self-efficacy in being sexually assertive in comparison to participants who were bisexual. Black females, who had low levels of self-esteem, also had low levels of self-efficacy, resulting in their inability to be sexually assertive, thus increasing their risk for HIV (Malloy et al., 2009). By increasing Black females' self-esteem through sexual assertiveness training, their self-efficacy increased while reducing their STD/HIV risk (Wingood et al., 2013).

Studies on sexual behaviors among sexual minority Black women are limited (Agenor et al., 2016). Agenor et al. (2016) found that the percentage of bisexual Black (98.6%) who had ever been tested for HIV was significantly higher than the percentage of homosexual Black women (86.9%). Some homosexual and bisexual women still engage in unsafe sex with men and women, which increases their risk for HIV transmission (Reddy et al., 2009). In my study, I found that heterosexual participants had higher levels of self-esteem and self-efficacy in being sexually assertive when compared to bisexual participants. Bisexual Black females may not be self-confident in their ability to be sexually assertive (Matebenia et al., 2013). Some bisexual women are not comfortable speaking with their male partners about their sexual preference, but had no problems communicating with other women as well as sharing their known HIV status (Reddy et al., 2009). In this study, bisexual participants had lower scores for self-esteem

and self-efficacy in being sexually assertive. Researchers have found lower levels of self-esteem and self-efficacy in sexual assertiveness when Black women were fearful of losing their relationships or felt their mate did not support them emotionally (Jacob & Kane, 2011; Malloy et al., 2009; Yang et al., 2010). There is a need to consider sexual orientation when measuring Black female self-esteem and self-efficacy levels in being sexually assertive so that health education training can include measures to assist these women in being sexually assertive to prevent HIV transmission.

Theoretical Framework and the Results of This Study

Bandura's (1977a) social cognitive theory was used as the theoretical framework for this study to guide the measurement and inferences about participants' degree of self-efficacy and self-esteem in being sexually assertive. HIV prevention does require individuals with the ability to use self-esteem and self-efficacy in controlling their risky behaviors, as well changing their social environment to improve their own sexual health outcomes (Bandura, 1977a; Wulfert, 2014). According to the SCT theory, an individual is capable of self-regulation of behavior when he or she believes in him or herself (Wulfert, 2014). HIV prevention among Black females requires the ability for these women to make positive self-change (DiClemente et al., 2009). Bandura (1977a) believed that to make this change, social support and changing a person's environment is required. I found that self-efficacy and self-esteem are two concepts that are in the center of human behavior, as Bandura suggested. I found that as individuals' self-esteem increased, so did

their self-efficacy in being sexually assertive. Individuals found to have lower levels of self-efficacy were females between the ages of 18 and 24, and those who reported being bisexual.

These findings could be explained because despite the need for young Black females to have self-efficacy, so they can feel good about their body and their sexual choices; many struggle with sexual assertiveness skills (Staras et.al, 2013). Some young Black females believe that if they were to ask Black men about their sexual history or using a condom, the men would be angry, suspicious, or refuse to have sex (Danielson et al., 2014; Ellis, 2014). For some Black women condom negotiation and discussing sexual behavior could suggest infidelity and a lack of trust (Ferguson et al, 2006; Ellis, 2014). While not being sexually assertive does increase young Black females risk for HIV, so does lack of social support systems (VDH, 2014).

This study revealed that young Black females do worry about HIV transmission. It has been discovered that while Black females do worry about HIV transmission, many have higher rates of medical deprivation than do white women, and they often have other financial, cultural, and institutional barriers in obtaining health care (Center for American Progress, 2018). Therefore, Bandura is correct that behavioral change requires a supportive environment to help improve self-efficacy. This study's findings support the need for age and culturally specific HIV prevention that focus on assisting young Black females in learning how to be sexually assertive to reduce HIV transmission while

improving their self-efficacy. However, society will need to evaluate societal barriers that could impede young Black women in their ability to be sexually assertive. In his discussion of SCT, Bandura (1977) believed that it is not enough to teach safe sexual behaviors, but people need skills and belief that they can act on these behaviors in despite of other counteracting pressures one may be challenged with.

Black females who identify as bisexual also struggle with effective sexual assertiveness communication skills (Agenor et al., 2016; Avert, 2016). Some Black women who identify as lesbian may still engage in sexual activity with men (Agenor et al., 2016; Avert, 2016). Some may not perceive there is a risk for HIV when having sex with women and feel there is no need to communicate their sexual activity with their partners (Agenor et al., 2016; Avert, 2016). However, HIV transmission can occur among lesbians through fingering/fisting, oral sex, and sex toys (Avert, 2016). Therefore, this population is in need of receiving health education regarding safer sex practices; as well in being sexually assertive to reduce HIV transmission (GMCH, 2009). These findings support the need to evaluate Black female's self-efficacy and self-esteem when teaching sexual assertiveness skills. As well, training may need to be tailored to meet the needs of Black women's according to their age and sexual orientation.

Limitations of the Study

There are several limitations to this study. Firstly, the study sample consisted of a convenience sample of 117 Black females 18 years of age and older. I did attempt to

recruit a diverse study sample of Black females who varied on ages, income, educational level, relationship status, and sexual orientation, and for the most part, I succeeded in my recruitment aims. Notably, this study included percentages of Black women who identified as homosexual (6.8%) or bisexual (18.8%) that were larger than the Black female lesbian and bisexual percentage of 3.7% (Human Rights Campaign, 2018). Study participants were, however, more likely to be single, have a college degree, and be of middle- and upper-middle-income status. The majority (78.6%) of women with a partner reported being happy with the relationship.

Secondly, another limitation of this study was that the sample was recruited from only three urban communities in Virginia (Richmond, Chesterfield, and Midlothian). Recruitment for study participants occurred at a Black-owned beauty salon and barbershop located in Richmond and Midlothian. Other study participants were recruited at a health and wellness event at a Baptist church in Chesterfield. HIV incidence rates are climbing among Black communities throughout Virginia. Researchers who have recruited from HIV health clinics were able to demonstrate that heterosexual Black females who were considered at high risk for HIV transmission, still did not perceive their risk for the disease despite having knowledge about HIV transmission and low condom use (Khawcharoenporn et al., 2012). Recruiting from a healthcare clinic may have provided access to study participants, who were aware of their HIV status, it would have been interesting to see how this factor does impact sexual assertiveness, self-esteem,

self-efficacy, and perceived HIV risk compared to those who are unaware of their HIV status.

Thirdly, there is a potential for self-selection bias in this study, which makes it difficult to generalize study findings to the population of Black women in Virginia. Self-selection bias is a concern in studies that use self-report questionnaires and pertain to sensitive topics (Schroder, Carey, & Vanable, 2003; Pai, 2017), as this study did. The study participants may have differed on key demographic and sexual attitudes and behaviors in comparison to those who declined to participate. Persons with higher versus lower education attainment and income status tend to volunteer for studies (Dunne, Martin, Bailey, Heath, Bucholz, Madden, & Statham, 1997; Bender, Jorgenson, & Pising, 2015; Pahwa, Karunanayake, Hagel, Janzen, Rennie, Lawson & Dosman, 2012; Pai, 2017; Tripepi, Jager, Dekker, & Zoccali, 2010). Almost half of the participants in this study were college graduates and over half were of middle-income or upper-middle-income status. Research has further shown that heterosexual female participants as compared to non-participants have more positive attitudes toward and comfort with sexuality, are more open-minded regarding sexual identities, attitudes, and behaviors, and may have more sexual partners (Dunne et al., 1997; Fenton, Johnson, McManus, & Erens, 2001; Schroder et al., 2003). These participants' factors may have influenced results in this study, especially regarding the self-esteem measure, which had a high mean score; however, all study questionnaires were normally distributed.

Fourthly, because the data were gathered using self-reports, there is the possibility of recall bias in the data (Creswell, 2009). Participants could have reported information that was not true. Since this study asked about sensitive sexual information, the participants may not have been honest about their risky sexual behaviors in fear of being not socially accepted and even fear of revealing their own HIV status. While the consent form did include the contact information of a HIV organization just in case participants felt the need to speak with someone about their concern for HIV, some participants could have been fearful of being honest about their HIV risk and reported data they thought that was the most acceptable answer. As well, research has revealed that some Black women do not have accurate perceptions of their risk for HIV (Smit & Larson, 2015; Theall et.al, 2003). Some older Black women believe since they cannot get pregnant, they cannot be infected with HIV (Mallory et al., 2009). Despite age, education, and income status, some Black females in committed relationships believe their partners are faithful and perceive they cannot be infected with HIV (Collins et.al, 2003). Evidence suggests that homosexual black females perceive themselves to be at low risk for HIV, which may lead to their increased likelihood of engaging in unsafe sexual practices (Agenor et al., 2016; Khawcharoenporn, et al., Kendrick, & Smith 2012; Smith & Larson, 2015).

Lastly, a limitation in this study was that I was not able to include the covariate variable of HIV status. I did not receive approval from Walden IRB to include this variable in my demographic questionnaire. This limitation did limit the ability to analyze

if there was a significant difference in sexual assertiveness according to HIV status. However, I do not think sexual orientation is necessarily related to HIV status, among homosexual or bisexual women, as it is association among men who have sex with men. Researchers may not study this population due to the low number of cases reported of HIV transmission (Reddy et al., 2009). In 2012, the Houston Department of Health contacted the CDC regarding the confirmation of a HIV transmission likely caused by sexual contact between two women (CDC, 2014). Researchers must understand that women who engage in high-risk sexual behavior are at high risk for HIV, regardless of their sexual identity (Reddy et al., 2009). This study did reveal that women who identified as homosexual did have significantly higher levels of HIV, AIDS, and STD communication assertiveness and self-esteem as compared to bisexual women and higher contraception and STD prevention assertiveness in comparison to heterosexual women, There is empirical evidence in this study that self-esteem plays a substantial role in sexual assertiveness, a finding that is consonant with those in prior studies (Geshnizjani et al., 2011; Smith & Larson, 2015). However, the population for homosexuals in this study was very small ($N=8$); as well for bi-sexual participants ($N=22$). However, research has discovered that bisexual and homosexual women still engage in risky sexual behaviors, which increase the likelihood of HIV infection (CDC, 2015; Logie et, al, 2012; VDH, 2013).

Recommendations

The results of this study revealed some excellent findings and discoveries. The findings were that participants who were single, in the higher income bracket, with college education, and heterosexual had higher levels of sexual assertiveness. As well, self-esteem was significantly associated with sexual assertiveness. As the participants' self-esteem scores went up, so did their sexual assertiveness. This study examined sexual characteristics using sexual orientation as a covariate. The results revealed that bi-sexual women do struggle with being sexually assertive. While the participants who were homosexual did have higher levels of sexual assertiveness and higher contraception and STD prevention assertiveness, then bi-sexual participants, both groups had lower overall self-esteem, and HIV, AIDS, and STD communication assertiveness than heterosexual participants.

This study has revealed that sexual orientation is an important factor to study when it comes to measuring sexual assertiveness. As well, researchers should consider including measuring self-esteem and self-efficacy because this study has found that as Black women's self-esteem scores went higher, so did their sexual assertiveness skills. In addition, because there is a limited amount of research being done on WSW, researchers should consider comparative studies that could compare sexual assertiveness and self-esteem scores among WSW and heterosexual women. By doing so, researchers can begin to collect important data to better understand why WSW may not engage in being sexually assertive so that training can be provided to educate them in doing so.

My study sample was small, especially for WSW. Additionally, it would be interesting to see if women who are aware of their known HIV status, do practice being sexually assertive or not. Therefore, I recommend more quantitative studies that could gather sexual assertiveness skills among the variable known HIV status. I also recommend continuing my study in a larger sample of participants from other community locations such as HIV health clinics to ensure recruitment of women who may have been tested and who may be aware of their HIV status.

This study revealed that when measuring sexual assertiveness, self-esteem, self-efficacy, and perceived risk for HIV among a diversified group of Black females, all the independent variables used in this study are significant factors to consider except for sexual initiation. While this study did support Bandura's SCT regarding how self-esteem and self-efficacy are important in explaining and predicting human behavior, it did not include other factors Bandura uses to explain human behavior. Bandura believed that human behavior is also determined by situational and personal reason (Wulfert, 2014). Therefore, I would recommend continuing this study using a quantitative study design that could collect data about personal and situational events that could impact being sexual assertive. Some other factors that have been found to impact sexual assertiveness include being homeless, drug use, and lack of social support (Alleyne & Wodarksi, 2009; Fleming et al., 2013). However, I did not collect information related to these factors in this study. Research that focuses on better understanding of multiple factors that could

impact being sexually assertive would benefit HIV prevention research among Black females.

Implications for Positive Social Changes

Due to the overwhelming HIV incidence rates among Black females living in Virginia, there is a need to implement an evidence-based strategy that could improve Black females' sexual health outcomes; as well decrease the risk for HIV among Black women and the Black communities they live in (Smith & Larson, 2015). Black women in the United States and Virginia are at increased risk for HIV in comparison to their peers of other ethnicities (CDC, 2015; VDH, 2013, 2016). Health education initiatives regarding sexual assertiveness, decision-making, and communication have been shown to reduce risk for HIV (Human Rights Campaign, 2018; National HIV/AIDS Strategy, 2015; VDH, 2013). The goals of *Healthy People 2020* include preventing HIV-related morbidity and mortality while also reducing HIV/AIDS- related health disparities (National HIV/AIDS Strategy, 2015).

It is hoped that this study can raise awareness of HIV in Black women, prompt additional research that examines sexual assertiveness in Black women, and lead to increases in health and mental health provider collaboration with those in Black communities in Virginia to help eradicate this epidemic, analogous to be a parasite that wants to continue to feed and destroy its' host. Results from this study can inform the development and implementation of initiatives that instruct Black women how to take

control of their sexual behavior and make positive choices when considering sexual relationships with another person.

Conclusions

State data have indicated that Black women have the highest rate of HIV (VDH, 2015). Of the HIV cases reported in 2015, almost 30% were Black women (VDH, 2016). It has been documented that being sexually assertive could help prevent STDs/HIV (Sales et.al. 2013). Because HIV rates are high among Black females in Virginia, being sexually assertive could help decrease their risk for HIV infection, as well help eradicate HIV in the Black community. According to the SCT, changing risky sexual behavior is achievable by increasing an individual's self-efficacy and self-esteem while providing social support.

This study addressed topics that have received minimal attention in the empirical literature, especially regarding sexual minority Black women. The purpose of this cross-sectional quantitative study was to conduct HIV prevention research that would measure and compare sexual assertiveness skills among a diversified group of Black women living in Virginia due to the overwhelming HIV incidence among this population. This study examined associations between the theoretically derived independent variables of age, income, education level, sexual orientation, and relationship status and the dependent variables of sexual assertiveness, perceived HIV/AIDS susceptibility, global self-esteem, and self-efficacy in being sexually assertive. The results did reveal that sexual

orientation, age, income, relationship status, and self-esteem are important factors to consider when conducting research that measures sexual assertiveness among Black females. Additionally, the results revealed that as the participant's self-esteem increased, so did their sexual assertiveness. Self-esteem was also related to having higher levels of self-efficacy in being sexually assertive. This study provided needed information regarding demographic and self-esteem predictors of sexual assertiveness outcomes. It is hoped that this study will act as a catalyst to prompt additional investigation with Black women. A growing body of literature on the antecedents of sexual assertiveness in Black women may, over time, lead to increased awareness of and interventions dedicated to the serious epidemic of HIV that is disproportionately affecting Black women.

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Appendix A: Demographic Characteristics of Sample

Age. Q: What is your age?

18-24 years old

25-34 years old

35-44 years old

45-54 years old

55-64 years old

65-74 years old

75 years or older

Ethnicity origin (or Race). Q: Please specify your ethnicity.

African American

Caribbean American

Multi-Racial

Other

Education: Q: What is the highest level of education you have?

Elementary school

High school

Some college

College graduate

Relationship Status. Q: What is your current relationship status?

Single, never married

Married or domestic partner relationship

Widowed

Divorced

Separated

Relationship Satisfaction. Q: Please state how you feel about your current relationship?

Happy

Not Happy

Sexual Orientation. Q: Please specify your sexual preference.

Heterosexual

Homosexual

Bi-Sexual

Sexual Activity. Q: In the past 6 months, please state how many sexual partners you have been with.

None

One

Two

Three or more

Not reported

Income. Q: What was your annual income for 2016? If you were supported by someone else such as being a college student, please include their income.

Less than\$5,000

\$5000-\$9,999

\$10,000-\$14,999

\$15,000-\$19,999

\$20,000-29,999

\$30,000-\$39,999

\$40,000-\$59,999

\$60,000-\$99,999 >\$100,000

Not reported

Appendix B: Flyer Example

HIV prevention research is important in the Black community. Share your knowledge and assist in helping Black communities decrease the number of individuals with HIV. This study is seeking Black females 18 years of age and older who live in Virginia to help gather knowledge about HIV prevention behaviors among Black women. This is not a treatment study and no medications are involved. A paper survey will be used with several questions to help understand sexual behaviors among Black females. The benefit of participating in this survey includes helping researchers better understand why HIV is high in Virginia's Black communities; as well to help identify how they can assist in decreasing HIV in the Black community.

This study is anonymous, meaning that you are not required to provide any contact information such as your name or mailing address. Therefore, there is no way of knowing who participated in the study. This study is voluntary only. The answers that you provide will only be used to assist the researcher in their attempt to help decrease HIV among Black women. You will be provided with a consent form that will provide further details on how to complete the study.

If you are interested in participating in this anonymous study, you can contact the researcher below.

Thanks for your assistance in this study.

Sharon Lewis-Keith, MSN, RN, PhD Student at Walden University

Appendix C: Community Partnership Agreements

Dear Sharon Lewis-Keith,

Based on my review of your research proposal, I give permission for you to conduct the study entitled Predicting Sexual Assertiveness among Black women within the (business goes here). As part of this study, I authorize you to post your recruitment flyer; recruit participants; as well for data collection, and to share your results when the study is completed. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: Posting the recruitment flyer, providing a private room for data collection, allowing the researcher to collect completed surveys, be present to answer participant's questions, and supervision that the researcher will not be in the same room during data collection. We reserve the right to withdraw from the study at any time if our circumstances change. The researcher will be allowed to return to the named organization once the study is completed to share the study results. The researcher could provide a poster board, a detailed speech about the findings of the study, or share the study results by participating in a community health and wellness event.

I understand that the student will not be naming our organization in the doctoral project report that is published in ProQuest.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.