

2020

Understanding Male Perpetrated Intimate Partner Violence and Women's Demands for Condom Use

Linda Musu Edwards
Walden University

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Walden University

College of Health Sciences

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Linda Musu Edwards

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Walden University

2020

Abstract

Understanding Male Perpetrated Intimate Partner Violence and Women's Demands for
Condom Use

by

Linda Musu Edwards

MN, University of Washington, 2011

BSN, University of Washington, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Care Administration

Walden University

May 2020

Abstract

Sub-Saharan Africa is host to more than 70% (25.5 million) of people with HIV/AIDS. More than half of the reported cases of people living with HIV/AIDS are women who are twice as likely to contract HIV than males in sub-Saharan Africa. The purpose of this study guided by the Theory of Planned Behavior was to determine if a relationship between female demands for male partner condom use and male perpetrated intimate partner violence (MPIPV) in opposite sex cohabitating or married couples, as well as examine the relationship between the risk factors of age, education level, socioeconomic status, history of MPIPV, and women's demands for male partner condom use. Three hundred and thirteen women between the ages of 18-35 residing in Liberia anonymously completed the Sexual Relationship Power Scale. Using multiple regression analysis, the results showed that women's demands for male partner use was related to risk for MPIPV, a history of MPIPV was related to women's decreased demands for male partner condom use, and some of the sociodemographic characteristics of age, education, socioeconomic status (employment), and history of MPIPV were related to women's decreased demands for male partner condom use. The results from this study have the potential for contributing to positive social change by guiding the development of targeted gender-based HIV programs and increase awareness of MPIPV as a contributing factor to HIV risk exposure among women. Recommendations for future research include studies examining larger population of women to include sexually active women instead of the age limitation.

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Dedication

I thank God for his merciful and gracious blessings in my life, and for giving me the strength, courage, and endurance to complete this PhD program and dissertation research study. I thank my family, especially my husband for being my solace and calming spirit in times of my distress during this academic journey. I dedicate this study to my son, Christian, for his unwavering love, support, and encouragement. I thank you for your kindness, gentleness and understanding spirit.

To my guardian angels, this one is for you too. Your presence was ever so close, lighting and guiding me to persevere and endure this journey. You all are gone but never forgotten! The dream and journey continues!

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I want to extend my sincere gratitude to my Committee Member, Dr. Eileen Fowles for her assistance and direction. You provided me insight into the value of this study when I was my own worst critic.

I want to thank everyone who embarked on this journey with me, who listened to me and shared their knowledge and expertise. I will be eternally grateful.

“It always seems impossible until it’s done.” ~Nelson Mandela

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Chapter 1: Introduction to the Study

Introduction

The sub-Saharan region of Africa, particularly in the West and Central African nations such as Liberia, Nigeria, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Ghana, Guinea, and Mali, and in East and Southern African countries such as Kenya, Burundi, Lesotho, Swaziland, and South Africa is one of the regions of the world worst affected by the HIV and AIDS epidemic. The AVERT report has estimated that 25.5 million people in this region, which is more than 70% of the global epidemic are infected. This contributes to millions of children becoming orphans, because it is not uncommon for one or both parents to have the virus and die from complications related to the disease in this region. With a population estimate of 2.1 million new HIV infections worldwide in 2015, 1.37 million (65%) occurred in sub-Saharan Africa (World Health Organization, [WHO] 2017), and 40% of all people living with HIV do not know that they have the virus (AVERT, n.d), meaning that this region is faced with a public health crisis.

The HIV/AIDS infection is far more prevalent among women, with women being at a higher exposure risk, and twice as likely to contract HIV as their male counterparts (AVERT, n.d). Women constitute more than half of the reported cases of people living with the HIV/AIDS, with the disease reportedly being the leading cause of death for women of reproductive age (15-44; AVERT, n.d). In addition, evidence has emerged that male perpetrated intimate partner violence (MPIPv) has a relationship to the disproportionate rate of HIV/AIDS infection among women (Centers for Disease Control

and Prevention [CDC], 2014; Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014). The statistics on the rate of infection, coupled with the differences in HIV infection rates in females compared to their male counterparts, indicates that promoting awareness of the importance of gender-based comprehensive education on HIV/AIDS infection and risky sexual behavior practices are important considerations for public health programs. Given the breadth of research on the HIV/AIDS infection rates in sub-Saharan Africa and progress made in many aspects of the global response to the pandemic, some of the social issues such as gender inequality and other confounding factors that limits a woman's choice to fully engage in sexual negotiation surrounding male partner protective barrier use remains to be investigated (CDC, 2014).

I conducted this study to investigate the gender inequality discourse in sub-Saharan Africa, specifically MPIP and its relationship to risky sexual behavior among women as it related to female demands for male partner condom use or condom use negotiation. The objective was to understand the relationship between the risk factors of age, education level, socioeconomic status (income) and women's demands for male partner condom use for women experiencing history of MPIP in heterosexual cohabitating or married couples.

The findings from this study may help make key recommendations to international and domestic health policy makers to ensure that HIV/AIDS prevention education programs are targeted toward at-risk populations and resources are maximized to focus on eliminating barriers and constraints to women's ability to safely engage in request for male partner condom use without fear of MPIP. In addition, findings from

this study will contribute to the body of knowledge supporting the development of strategic gender-based education to create HIV/AIDS intervention public health policies and programs promoting MPIP awareness and programs geared toward eliminating the perpetuation and tolerance of violence against women.

In this chapter, I present an introduction to the study to include the background of the problem. Specifically, I discuss why the topic is of interest and important and present the purpose of the research, the research questions and hypotheses, theoretical framework, and nature of the study. Lastly, I discuss the assumptions, delimitations and limitations for this dissertation, and significance.

Background of the Study

As the second largest continent in the world, Africa covers nearly 12 million square miles, with approximately 22% of the total land area in the world (World Population Data Sheet, 2013). Most of the continent is host to the sub-Saharan region which covers all but the northernmost countries and a population growth from 186 million to 856 million between 1950-2010 (World Population Data Sheet, 2013). Despite this growth in population, sub-Saharan Africa is one of the world's poorest regions (World Population Data Sheet, 2013) that, is also faced with numerous challenges like an increasing political and socio-economic instability, as well as an increase in the HIV/AIDS infections contributing to a major public health crisis (AVERT, n.d). The West and Central African regions are home to 6.5 million people, with reports showing a disproportionate rate of HIV/AIDS infection among women, accounting for 54% of adults living with HIV/AIDS (AVERT, n.d). According to the U.S. Department of Health

& Human Services Secretary's Minority AIDS Initiative Fund (2018), in 2016, there were 19.4 million people living with HIV (53%) in eastern and southern Africa, 6.1 million (17%) in Western and Central Africa.

Despite the availability of safe sex educational resources, the infection rates, especially among women, have created significant implications for social and economic development (Rigby & Johnson, 2017). According to the 2015 Millennium Goal Report, the disproportionate infection rates between men and women contribute to the disruption of the economic and social infrastructure as well as the basic tenet of the family structure (United Nations Millennium Development Goals Report, 2015). Adding to the limited health and social infrastructure, is the impact of the HIV/AIDS crisis that continues to place a strain on the political economy, affecting the social aspect of these disintegrated societies, many still recovering from years of civil and political unrests (United Nations Millennium Development Goals Report, 2015).

Further, despite global availability and accessibility of treatment, safe sex education and protective barrier resources, most countries in this region struggle to provide comprehensive education to at risk population. AVERT (n.d) reported that "knowledge about HIV among young people in the region is alarmingly low, with only 24% of young women and 31% of young men able to display comprehensive and correct knowledge of how to prevent HIV" (para. 11). The disproportionate knowledge on safe sex behavior practices may have an association with risky sexual behavior and HIV infection risk exposure in heterosexual couples. Although some research findings surrounding cultural norms have been tenuous, controversial, and disputable (Sovran,

2013), other findings have shown a relationship between the social construct of gender inequality, gender-based (male-female) violence, and increase in HIV vulnerability in women (AVERT, n.d; Jewkes, Dunkle, & Nduna, 2010). Furthermore, findings have shown a relationship between MPIPV and risky sexual behavior practices contributing to the high risk of contracting HIV among women in this region (CDC, 2014; Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014).

There is a large body of literature that supports the need for gender specific safe sex education that includes knowledge on risky sexual behavior practices stemming from MPIPV (Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014). However, specific strategies and or interventions that focus on the relationship of MPIPV and female demands for male partner condom use are not well represented in the literature. Research on specific topics related to a woman's demand for condom use and risk for MPIPV or history of MPIPV on a woman's demand for condom use is limited. Thus, I examined this topic by analyzing data from the survey questionnaires to determine if a relationship existed between female partner demands for condom use and MPIPV and factors that influence or prevent their demands for male partner condom use for women experiencing history of MPIPV. Findings from this study may contribute to the development of gender empowerment programs to address the differential of power dynamics among women and men as it relates to sexual negotiation power and the potential barrier of MPIPV, promoting gender-based strategies for HIV prevention, and reducing women exposure to risky sexual behavior practices.

Problem Statement

HIV/AIDS continues to be one of the deadliest diseases affecting the world. With over 35 million people living with the disease globally, the HIV/AIDS crisis has extended far beyond the reported death toll in certain regions of the world (United Nations Millennium Development Goals Report, 2015). More than 90% of all reported HIV/AIDS cases out of the world statistics identified are on the continent of Africa, with some regions of Africa reporting higher infection rates than others (AVERT, n.d). Although new global infection rates decreased by 40% from 3.5 million in 2000 to 2.1 million cases in 2013, sub-Saharan Africa is faced with the socioeconomic detriments of this disease (United Nations Millennium Development Goals Report, 2015). With reports of new infection rates rising exponentially, this region is severely affected by the HIV/AIDS pandemic (United Nations Millennium Development Goals Report, 2015). It is reported that this region hosts more than 70% of the global epidemic with approximately 25.5 million people living with the virus (AVERT n.d; CDC, 2014), and 1.5 million new infections were reported in 2013 (United Nations Millennium Development Goals Report, 2015).

Additionally, there is a higher infection rate in women than men, with women having a lower knowledge base on HIV/AIDS than men. HIV has continued to disproportionately affect women in sub-Saharan Africa compared to men with women accounting for 54% of adults living with the HIV virus (AVERT, n.d). The United Nations Millennium Development Goals (2015) reported that the disparity in higher rate of infections among women is contributing factor to disruption in the economic and

social infrastructure. Other findings have shown that a relationship between the construct of female gender inequality and MPIPV are factors contributing to risky sexual behavior and disproportionate HIV infection rates (AVERT, n.d; CDC, 2014, Kaye, 2004; Watts & Seeley, 2014). Multifactorial reasons including gender inequality have also been associated with this disproportionate rate of infection in women (WHO, 2014; Wingood & DiClemente, 1997).

Gender inequality and the associated male and female power dominance imbalance present a unique set of social dynamics between female demands for male partner condom use and male partner agreement to use condoms. In addition, the reported link between MPIPV and risky sexual behavior practices in female partner impacting safe sex barrier use (WHO, 2014; Wingood, & DiClemente, 1997) must be researched further. However, there is an identified gap in the literature showing a relationship between history of MPIPV and a woman's demands for condom use in married or cohabitating women (CDC, 2014).

The research on specific attitudes and behaviors toward gender inequality, MPIPV, and females engaging in risky sexual behavior is limited, thus supporting this study to expand knowledge on the social and structural determinants of female risk exposures.

Purpose of the Study

The purpose of this quantitative, correlational study was to determine whether there was a relationship between female partner demands for condom use and MPIPV and, whether history of MPIPV has a relationship with female partner decreased demands

for male partner condom use. I also examined whether there was a relationship among the risk factors of age, education level, socioeconomic status (income), history of MPIPv, and women's demands for male partner condom use in opposite sex cohabitating or married couples where women experienced MPIPv.

This study was aimed to address a gap in the literature on gender-based (male on female) violence, increase in female HIV vulnerability, effects of MPIPv, and risky sexual behavior practices among women while contributing to knowledge on factors that influence female demands for male partner condom use.

My selection of this research method and design was consistent with research using this method and design to show correlation or relationship among the predictor and outcome variables (Field, 2015). The predictor variables for this study were women's demands for male partner condom use and history of MPIPv. The outcome variables were risk for MPIPv and female partner decreased demands for male partner condom use. The covariates were age, education level, socioeconomic status (employment), and history of MPIPv. Maintaining the focus on statistical correlation and descriptive analysis among the variables helped to describe the relationship and made this a viable research. Using the research questions, hypotheses, and statistical analysis, findings from this study can contribute to research on the relationship between female demands for male partner condom use and risk for MPIPv and female risky sexual behavior (HIV risk exposure) practices.

Research Questions and Hypotheses

This research was guided by three research questions:

RQ1: What is the relationship between women's demands for male partner condom use to risk for MPIPv, that is, if relationship exists between female partner demands for condom use and risk for MPIPv in heterosexual cohabitating or married couples in West Africa?

H₀: There is no relationship between women's demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples West Africa.

H₁: There is a relationship between women's demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples West Africa.

RQ2: What is the relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa?

H₀: There is no relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa

H₁: There is relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

RQ3: What is the relationship between the risk factors of age, education level, socioeconomic status (employment) to women's demands for male partner condom use in women experiencing MPIPv in heterosexual cohabitating or married couples in West Africa?

H₁: There is no relationship between the risk factors of age, education level, socioeconomic status (employment) to women's demands for male partner condom use in women experiencing MPIPV in heterosexual cohabitating or married couples in West Africa.

H₁: There is a relationship between the risk factors of age, education level, socioeconomic status (employment) to women's demands for male partner condom use in women experiencing MPIPV in heterosexual cohabitating or married couples in West Africa.

The level of statistical significance was utilized to show the relationship between female partner demands for condom use and MPIPV and whether a relationship existed between MPIPV and female partner demands for male partner condom use in heterosexual cohabitating or married couples. I used descriptive analyses to analyze the demographic variables and multiple linear regression to measure and analyze the relationship between the predictor variables of women's demands for male partner condom use and history of MPIPV, the outcome variables of risk for MPIPV and female partner decreased demands for male partner condom use, and the demographic variables of history of MPIPV, age, education, socioeconomic status (employment) and demands for male partner condom use. Part of the analysis included assessing for assumptions of normality, homogeneity, and the absence of multicollinearity. A continuous numerical measurement of the covariates of age in years was measured in categories, education level in number of years, and socioeconomic status (employment) in categories was conducted for statistical analysis. I also highlighted confounding factors such as MPIPV

in heterosexual cohabitating or married couples as mitigating factors influencing safe sex practice such as condom use which contributes to higher risk for female unprotected sexual behaviors.

Theoretical Framework

The theoretical framework that guided this study is Ajzen (1991) theory of planned behavior (TPB). The theory provides an understanding of the interrelating concepts of the social norms, attitudes, beliefs (Ajzen, 1991). These concepts are subsequent contributors to behavior predictability and offer guidance on ways to facilitate behavior change interventions, while mediating the variables between the threat of disrupting social norms and attitudinal changes, and the resulting impact of behavior modification (Hackman & Knowlden, 2014).

The theoretical approach is focused on behavior change and posits that the best predictability of behavior change is a person's behavior intention. For this study, the theory relates to female request and male partner conceding to condom use, or the antecedent (what leads the individual to want to make the change), and the identifiable attitudes toward the behavior being analyzed (see Ajzen, 1991). These include behavior practices that are mediated by individual beliefs and attitudes, including behavior embedded in the social and cultural constructs of the population (Ajzen, 1991). The applicable construct of TPB emerges because of the context of behavior modification as it relates to intended and actual behavior, mitigated by individual attitude or determinants of behavior change, allowing for insight into the antecedents of behavior change.

This theory has been used in research focused on establishing relationships as well as interventional strategies because it explains attitude to behavior norms, plan behavior, actual behavior activities, and the antecedent to behavior change. TPB related to my study approach and aligned with my research questions that targeted behavior indicators and is congruent with the utilization of behavior change theory and individual perception about their environment. This theory is also congruent with exploring and developing alternative gender-based HIV/AIDS educational interventions geared towards promoting gender equality and enhancing the ability for women to safely engage in sexual negotiation surrounding the use of male partner condom use. More details on the TPB are provided in Chapter 2.

Nature of the Study

A quantitative cross-sectional correlational design was selected for this study as it aligned with and facilitated findings for this research topic. Furthermore, it was consistent with the nature of the study that sought to understand and facilitate useful findings on relationship between women's demands for male partner condom use and MPIPV. The findings from this quantitative correlational study address this gap in the literature on MPIPV, increase in female HIV vulnerability, effects of MPIPV, and risky sexual behavior practices among women while contributing to knowledge on factors that influences female demands for male partner condom use. The utilization of primary research data using survey questionnaires rather than secondary dataset was plausible for this research. The SurveyMonkey online platform was used for data collection for this study. I used the sexual relationship power scale (SRPS) survey instrument, which has

been tested and was shown to be associated with consistent condom use with good internal reliability and predictive and construct validity. The two associated subscales were shown to have good internal consistency measuring the balance of decision-making power in opposite sex relationship. There was no manipulation of the variables and no administration of treatment to participants in this study. The aim of the study was to determine if a relationship existed between the predictor and outcome variables, as opposed to explaining or predicting outcomes. Guided by the TPB constructs of attitude, subjective norms, perceived behavior control, and intentions, the survey was conducted using questionnaire to determine the relationship between female demands for male partner condom use and MPIPV.

The targeted population for my study was female population residing in a sub-Saharan African nation located on the West Coast of Africa. The participants were between the ages of 18-35 and in a heterosexual co-habiting or marital relationship. The participants were recruited using the Internet and social media platform advertisement with listed inclusion criteria.

Data types collected from the survey questionnaire included sexual behavior patterns regarding condom use, perceptions of gender power dominance related to relationship control and decision making, perceptions of relationship gender roles, history of MPIPV related to demands for condom use, and patterns of MPIPV. As part of the data analysis, I operationally defined the variables in the research questions and a method for analysis; as well as the statistical test. I used multiple linear regression as a predictive analysis to explain the relationship between history of and risk for MPIPV and women

demands for male partner condom use. Regression analysis was used to focus on describing the degree of relationship between the variables by identifying the strength of the effect that the independent variables, (history of MPIPv and demands for male partner condom use) had on the dependent variables, (demands condom use and risk for MPIPv). In addition, the regression analysis helped to understand how much the dependent variable changed when the independent variables were changed.

Definitions

This section covers the definitions of the predictor variable, outcome variables (study variables), covariates, and study specific terms.

AIDS: Defined as the transmissible disease of the immune system caused by HIV that attacks and destroys the immune system resulting in severe depletion of the body's T cells (Duesberg, 1989).

Community-based HIV/AIDS interventions: Defined as HIV/AIDS health promotion interventions developed to target specific individuals, groups, or organizations that make up the community to provide HIV/AIDS related education and awareness. Community-based HIV/AIDS interventions include knowledge on barrier use, prevention, status, treatment, addressing societal norms, and reducing discriminatory practices and stigmatization (Khumalo-Sakutukwa et al., 2008).

Gender Equality: Defined as the availability of equal chances or opportunities for women and men to access and control social, economic and political resources, including protection under the law such as health services, education and voting rights. It is also known as equality of opportunity or formal equality (WHO, 2017).

Gender Equity: Defined as the different needs, preferences and interests of women and men and the different treatment that is needed to ensure equality of opportunity for both groups. This is often referred to as substantive equality (or equality of results) and requires considering the realities of women's and men's lives. Gender equity is often used interchangeably with gender equality, but the two refer to different, complementary strategies that are needed to reduce gender-based health inequities (WHO, 2017).

Gender Norms: Defined as beliefs about women and men, boys and girls that are passed from generation to generation through the process of socialization. Gender norm changes over time and differs in different cultures and populations. Gender norms lead to inequality if they reinforce mistreatment of one group or sex over the other and differences in power and opportunities (WHO, 2017).

Gender Relations: Defined as the social relations between and among women and men that are based on gender norms and roles, which often creates hierarchies between and among groups of men and women that can lead to unequal power relations, disadvantaging one group over another (WHO, 2017).

Gender Role: Defined the set expectations that males and females are expected to do in the household, community and workplace in a given society (WHO, 2017).

Gender Unequal: Defined as the socially constructed perceptions that perpetuates gender inequality through reinforcing of unbalanced norms, roles and relations that often leads to one sex enjoying more rights or opportunities than the other (WHO, 2017).

Gender: Defined as a socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men. It varies from society to society and can be changed (WHO, 2017).

Gender-based discrimination: Defined as any unjust, unequal, and differential treatment that is derived from making a distinction towards a person based on their gender rather than on individual merit (WHO, 2017).

Gender-based violence against women: Defined as threats or acts of violence that is targeted towards a woman that results in suffering to the woman such as harm to her physical, sexual, and mental well-being to include coercion or arbitrary and capricious deprivation of basic rights and liberty. (WHO, 2014).

HIV: Defined as the retrovirus that attacks and destroys the immune system by killing the body's thymus (T) cells which gradually makes the host susceptible to opportunistic infection (Duesberg, 1989).

Intimate partner violence: The CDC (2014) defined intimate partner violence as the use of “physical violence, sexual violence, threats of physical or sexual violence, stalking and psychological aggression including coercive tactics, by a current or former intimate partner” (p. 1).

Male perpetrated intimate partner violence: Defined as the physical violence, sexual violence, threats of physical or sexual violence, stalking and psychological aggression including coercive tactics by an intimate male partner (CDC, 2014).

Assumptions

An assumption in my study was that women in this region desire to have decision-making capacity in sexual behavior practices surrounding male partner condom use.

Another assumption is that all respondents participating in the survey questionnaire and socio-demographic questionnaire would provide honest responses to questions.

Scope and Delimitations

My study was conducted to determine whether there was a relationship between female demands for male partner condom use and MPIPV as perceived by the women in heterosexual cohabiting or married couples. The decision to study women in sub-Saharan Africa is based on the high rate of HIV/AIDS infection in this population, which is higher than men. Furthermore, study findings have shown MPIPV has a relationship to the disproportionate rate of HIV/AIDS infection among women (CDC, 2014; Jones et al., 2013; Kaye, 2004; Watts & Seeley, 2014), yet studies on condom use negotiation surrounding female demands for male partner condom use and MPIPV are not well represented in the literature. The findings of the study provide knowledge on whether the request for initial condom use by the woman precipitates MPIPV, or whether existing history of MPIPV prevents or decreases women demands for male partner condom use.

The scope of my study included women between the ages of 18 to 35 years old, who were able to read and speak English and are in a heterosexual co-habiting or marital relationship. The participants were recruited via the internet and had to be residents of the Liberia. Delimitations of the study included the following: (a) exclusion of men, because men were not the focus of this study, (b) exclusion of young women

below the age of 18, since women age 18-35 were reported to have the highest rate of HVI/AIDS infection in sub-Saharan Africa; and (c) exclusion of unmarried women and women not in a cohabitating relationship, because the study focused on victimization within the context of a co-habiting or marital relationship.

This dissertation was guided by TPB (Ajzen, 1991) which has been used to study health promotion interventions and behavior towards the use of condom (Eggers et.al, 2013; Semungus, Tafese, & Semella, 2016). This theory has been widely used to understand the relationship between attitude and behavior impacted by social and personal norms influencing the immediate determinants of behavior performance (Mtenga, Exavery, Kakoko, & Geubbels, 2015). The Health Belief Model was also considered for this study, but its fundamental structure focuses on health behaviors that are based on the individuals understanding of the consequences of any given action (Tarkang & Zotor, 2015), while the fundamental structure of TPB focuses on societal norms and beliefs (Ajzen, 1991).

Consequently, TPB was selected as the guiding framework as it supports the objectives of the study.

Limitations

The study contained several limitations. One key limitation was the data collection design using the SurveyMonkey platform to gather survey responses (Roztocki, 2001). Collecting data on-line may have had problems such as multiple responses from the same participant due to the anonymity factor, blank or incomplete responses, and invalid or biased responses (Roztocki, 2001). This may have resulted in

inaccurate responses to survey questions and data results that may differed from reality.

To discourage multiple entries by the participants, I did not provide incentives or compensation to participants.

The age range (18-35) and geographical residency requirements of the study were additional limitations. The limitations of using nonprobability purposive sampling included the fact that the target population was a homogeneous sample, given the age and geographic requirements. This posed a vulnerability to severe hidden biases and the lack of generalizability from the sampled women to women outside of this population. The findings from this study are not representative of women in sub-Saharan Africa and cannot be generalized to the population beyond the age and geographical limits of the sampled population. Furthermore, the online data collection procedure did not permit for participants to be identified and or examined in any central location as they completed the questionnaires online. There was also no guarantee that the individuals who completed the questionnaires were residing in the geographical location or were forthcoming in their demographic self-reports.

Another limitation is that participants who completed the online survey questionnaire who were not technology savvy may have encountered some technical difficulties using a computer or mobile device, especially if they had insufficient online data to support the ability to load and navigate each page with ease. Additionally, online data access along with political protests that ensued during the data collection timeframe may have contributed to the 3 months it took to complete the data collection. Another limitation was the lack of meaningful comparative study findings available on women

negotiation of male partner condom use and MPIPV as a barrier to condom use negotiation. These findings could have been helpful to compare to the results of this study. Finally, the lower reliability index values for the selected items from the two subscales used in the study also presented a limitation to this study as selected items may have influenced the results.

Significance

My study is important because of its focus on the HIV/AIDS disproportionate rate of infection among women in sub-Saharan Africa and its relationship to MPIPV. Research indicates that gender inequalities along with the male and female dynamics of gender role, power, male dominance, and female disempowerment and or disenfranchisement have a significant relationship with sexual behavior practices (Jones et al., 2013). Hence, gender inequalities have been identified as a factor contributing to the unresolved disproportionate rate of HIV/AIDS infection in sub-Saharan Africa (Jewkes et al., 2010). This is affecting the social and economic structural determinants of risky behavior practices (Sovran, 2013).

By examining the data to determine whether there was a relationship between female partner demands for condom use and MPIPV and determining the relationship between the risk factors of age, education level, socioeconomic status and women's demands for male partner condom use for women experiencing history of MPIPV, findings from this study can contribute to the development of strategic gender-based programs and interventions (Sovran, 2013). Examining the contextual features of MPIPV and its relationship to the differential rate of HIV/AIDS infection among women will

provide insight and recommendations and contribute to the advancement of both policy making and processes to improve female decision-making capacity. Risk reduction strategies that transcend identification of the contours of gender power dynamics and female disenfranchisement are important to understand for policy making purposes. Enhanced knowledge of the MPIP and its correlation to demands for male partner condom use and HIV infection risk exposure can help to avoid creating a rhetorical effect of superficial constructs of cultural changes that is controversial and disputable (Sovran, 2013).

The implications for positive social change for this study include gender-based interactions to promote gender equality in sexual negotiating encounters while supporting critical evidence-based need for gender-transformative HIV prevention efforts.

Summary

The HIV/AIDS pandemic disproportionately affects women, a population segment whose roles or status are marginalized in the social construct of the environment, and who are already shouldering the burden of raising families while maintaining the household. Although a shift has been made to integrate multi-strategic plans and approaches such as gender-based education interventions, a gap exists in the disproportionate rate of infection among women. MPIP and risky sexual behavior in female partner within the context of the relationship must be examined further to determine if any confounding factor exist, and if it is associated with high risk of HIV among women in this region (CDC, 2014; Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014). The knowledge gained from describing the relationship between women's

demands for male condom use and MPIPV will facilitate understanding of confounding factors that influences risky sexual behavior and risk exposure to HIV infection.

Chapter 1 introduced the study which included the background of the problem, problem statement, purpose of the study, research question and hypotheses, theoretical framework, nature of the study, assumptions, delimitations, and limitations, definition of terms, and significance of the study. In Chapter 2, I present a review of current literature MPIPV and the HIV/AIDS infection rate that supported the study. In addition, I describe the theoretical foundation and present a review of key variables and concepts followed by the summary and conclusions.

Chapter 2: Literature Review

Introduction

Since the onset of the epidemic almost 30 years ago, an estimated 78 million people have been infected with HIV/AIDS, with the global HIV/AIDS related death estimated at 35 million (AVERT, n.d). Although the lower HIV infection rates have been reported in other parts of the world, no region of the world has a higher HIV/AIDS infection rate and the related public health burden than sub-Saharan Africa (AVERT, n.d).

Recent evidence suggests that prevalence may be starting to decline in some areas of sub-Saharan Africa, but out of the 3 million reported deaths from AIDS-related death that occurred in 2016, 2.2 million of these AIDS-related deaths were among sub-Saharan Africans, making it the leading cause of death in the region (Population Reference Bureau, 2016). Furthermore, an estimated at 25.5 million have been infected accounting for more than two thirds of the world's HIV infections (AVERT, n.d; Ramjee & Daniels, 2013). Even though sub-Saharan Africa is 11% of the world's population, it has 24% of the burden for HIV (International Finance Cooperation, 2017, para. 2).

Western and Central Africa which have a lower rate of infection still host 6.5 million of the estimated 25.5 million people living with HIV, with 310,000 AIDS related death (AVERT, n.d). Countries in such as Liberia, Nigeria, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Ghana, Guinea and Mali are countries that are reportedly worst affected by the HIV/AIDS epidemic.

Further, women in the sub-Saharan region are more severely impacted by HIV with incidence rates accounting for 59% of adults living with HIV (AVERT, n.d). Women and girls are especially vulnerable to HIV infection due to factors that include social, cultural and economic factors like social and economic inequality that contribute to the gender power imbalance and gender disparities (Sovran, 2013). The existing power imbalance between men and women and women's role, status, and subordinate position places them at a disadvantage with respect to their fundamental human right to control their own sexuality rendering women vulnerable to contracting HIV (Ramjee & Daniels, 2013). Additionally, the sub-Saharan region follows a patriarchal structure, which is oppressive to women and perpetuates discrimination against women, MPIP, and forces women into high-risk sexual situations (Durevall & Lindskog, 2015; Shi, Kouyoumdjian, & Dushoff, 2013; Watts & Seeley, 2014).

The prevalence of HIV/AIDS infection among women in this region is changing the global perspective on traditional interventions to a strategic focus this is geared toward slowing the rate of new infections and stabilization among existing cases with the goal of reducing mortality rates (WHO, 2017). Changing the traditional interventions to a global perspective that targets at risk population such as high-risk exposure resulting from MPIP is important. Because the HIV/AIDS prevalence rate is higher in urban areas than in rural areas in most of the sub-Saharan region, with the highest prevalence rates reported among the adult population, and specifically women (AVERT, n.d), developing prevention programs focusing on gender-based HIV risk exposure is important.

It is essential that knowledge of gender-based difference in risk exposure is addressed through health promotion activities requiring cooperation, collaboration, and a paradigm shift in allocation of resources relevant to the problem. Despite programs targeting women's health and promoting sexual decision-making capacity, traditional and cultural practices, and patriarchal attitudes continue to perpetuate discrimination against women, in turn forcing women into high-risk sexual encounters (AVERT, n.d).

This study addressed whether there is a relationship between female partner demands for condom use and MPIPv as well as, history of MPIPv and female partner decreased demands for male partner condom use. Additionally, I determined the relationship between the risk factors of age, education level, socioeconomic status (income) and women's demands for male partner condom use for women experiencing history of MPIPv in opposite sex cohabitating or married couples. By understanding how gender power imbalance influences and affects women passiveness and powerlessness in relation to sexual health making them more vulnerable to HIV/AIDS, public health policies and practitioners can create gender-based HIV/AIDS prevention education programs with specific focus on promoting MPIPv awareness to avoid continuing spread of HIV/AIDS (Watts & Seeley, 2014).

Chapter 2 includes a literature review of prior studies related to the epidemiology of HIV/AIDS infection in sub-Saharan Africa, HIV/AIDS infection among women in sub-Saharan Africa, and the disproportionate HIV/AIDS infection rate among women. The literature review also contains knowledge of risky sexual behavior among men and women, risky sexual behavior practices and any association with HIV infection risk

exposure in heterosexual couples, the social construct of gender inequality, gender-based (male on female) violence, increase in female HIV vulnerability, effects of MPIP, risky sexual behavior practices among women, and the public health consequences. The review emphasizes the HIV/AIDS statistics that support men and women attitudes on the differential of power, its association with women sexual negotiation power, the potential barrier of MPIP on women sexual negotiating capacity, factors associated with MPIP and risky sexual behavior, and knowledge, attitudes, perceptions towards women demands for safe sex barrier use.

Furthermore, I present an overview of the TPB that was used as the basis for this study, constructs that have been associated with HIV/AIDS risk exposure behaviors, and major themes in the literature that contributed to knowledge on gender-based strategies for HIV prevention based on risky sexual behavior practices. Lastly, I discuss the theoretical foundation that guided the survey instrument I used for data collection.

Literature Search Strategy

I conducted a systematic search of the literature using Google Scholar, ScienceDirect and Walden University databases. The review included the following Walden University databases: Academic Search Premier, Cochrane, Cumulative Index to Nursing and Allied Health Literature (CINAHL), MEDLINE, PubMed, and ProQuest. The key search terms used in the search were: *HIV incidence in sub-Saharan Africa, HIV prevention, HIV education in sub-Saharan Africa, spousal violence, intimate partner violence, gender, attitude, social norms, women's health, sexual negotiation, safe sex barrier, and theory of planned behavior.*

To identify literature on HIV/AIDS infection rate among women in sub-Saharan Africa, risky sexual behavior among women, decision making capacity among women and intimate partner violence, I also applied the following keywords: *male perpetrated intimate partner violence, sexual negotiation, and HIV risk exposure among women*. The literature search was limited to studies published between 2012 and 2017 except for searches on the original theoretical foundation that provided older more robust review of the theory. The HIV/AIDS infection report in sub-Saharan Africa reflects the current statistics. As the literature search was aimed at analyzing the relationship between MPIPV and risky sexual behavior among women in heterosexual couples, I did not consider studies concerning exclusive implications of cultural beliefs on status of women.

Theoretical Foundation

The TPB is an extension or modification of Fishbein's and Ajzen 1975 theory of reasoned action. TPB was proposed by Ajzen in 1985 to study the prediction of behavior on individuals' intention in dealing with behavior over which people have incomplete volitional control (Ajzen, 1991). The theory focuses on the relationship between attitudes and behavior, incorporating social influences and personal factors as predictors that show behavior is the direct result of a behavioral intention, immediate determinants of behavior performance (Mtenga et al., 2015). TPB suggest that individual behavior is triggered by behavioral intentions, and an individual's behavior is determined by his or her intention to perform the behavior. TPB focuses on behavior intention that is reflective of the individual's attitude, normative beliefs, and control beliefs towards the behavior being

performed, a conscious plan or decision to exert effort to enact the behavior (Mtenga et al., 2012).

Given the premise of this theory, it was important to explore how attitude towards a specific behavior, subjective belief about the behavior, and perception about their environment affects an individual's ability to maintain control over situational occurrences requiring adjustments that may influence behavior. Exploring how the motivation of the individual is according to the contribution of the opinion of other people is significant to how knowledge on HIV risk exposures, risky sexual behavior practices, and gender intervention strategies are perceived. TPB has three conceptually independent components and the extent to which the components are important in shaping behavior varies according to situations and behavior intention.

The first of three core contentions of TPB explores the individual's attitude (behavior beliefs) toward the behavior. The contention asserts that attitude is influenced by the consequences of person's belief, given how positive or negative a person feels about performing a behavior (Ajzen, 1991). An example of this would be an individual attitude towards the use of condom (using a condom is pleasant or unpleasant). TPB posits that an individual's behavior is determined by the individual intention to perform the behavior. The intention becomes a function of the individual's attitude toward the behavior and their subjective norm, with the subjective norm being perceived social pressure that is experienced from the social setting to perform or not to perform the behavior (Ajzen, 1991). If an individual's behavior is triggered by behavioral intentions then the intention which is determined by the individual's attitude toward a specific

behavior, subjective belief about the behavior, and perception about their environment is the first predictor of behavior. As such, the behavior intention represents a cognitive response that indicates readiness to engage in a given behavior. Therefore, intention is the immediate antecedent of behavior.

The second contention focuses on the subjective norm (normative beliefs) which is the individual's perception of the opinion of others and the control beliefs that lead to the perception. Although the first contention measures attitude towards the behavior to be performed, subjective norms, (i.e., the individual's beliefs about the opinion of others or how people they care about will view the behavior in question) is a key motivation to perform the behavior (Ajzen, 1991). Therefore, knowing the individual subjective norms and beliefs is as important as knowing the individual's attitude to predict behavior intentions.

The focal point of the third contention is that perceived behavioral control (control beliefs) influences behavior intentions. Perceived behavioral control refers to the individual perception of ability to perform the behavior which is a predictor to behavior intention (Ajzen, 1991). The relationship between the perceived impact of female demands for male partner condom use, risk for MPIP, and factors that influence and prevent women's demands for male partner condom use is addressed in the research questions. These predictors such as demands for condom use and factors preventing said behavior performance will lead to behavior intention. A general rule is that the more favorable the attitude and the subjective norm, and the greater the perceived control, the

person's intention to perform the behavior in will be stronger. Figure 1 is a schematic representation of the study variables and TPB constructs.

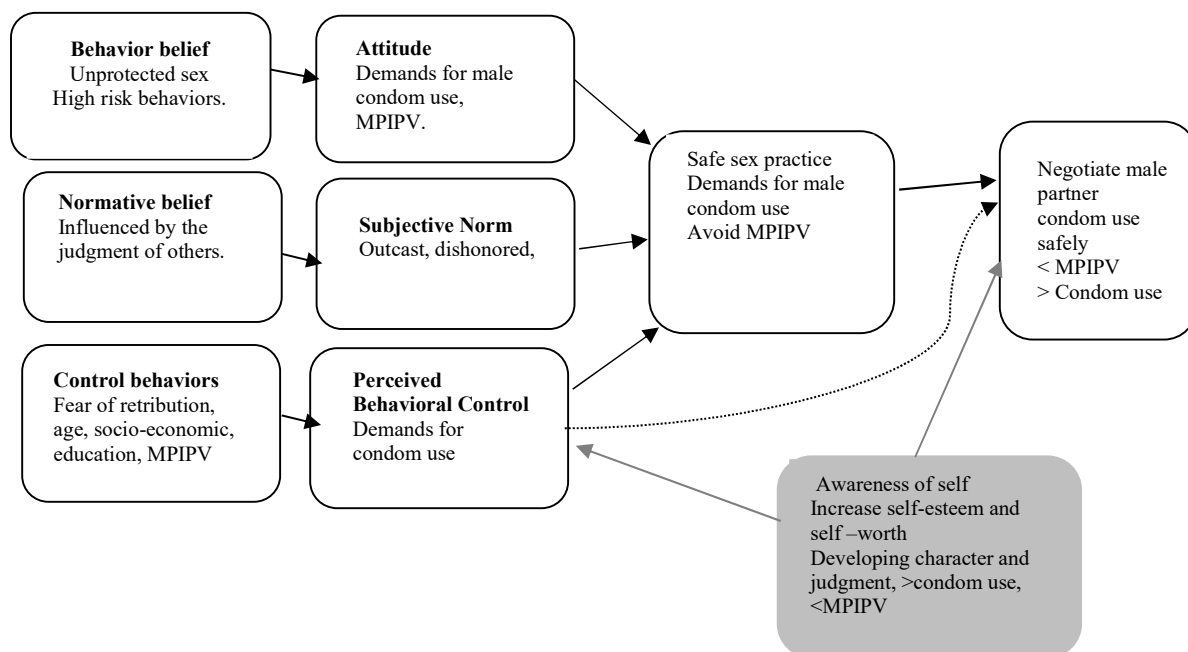


Figure 1: Graphic Model of TPB constructs; Adaptation of Ajzen TPB.

TPB has been used successfully in HIV preventive studies to understand behavior towards the use of condom to prevent AIDS or other sexually transmissible diseases, as well as other health promotion interventions (Eggers et.al, 2013; Semungus, Tafese, & Semella, 2016). For example, Eggers et.al (2013) examined attitudes, subjective norms, and perceived behavioral control by assessing the influence of individual, contextual factors, and social and environmental differences on predicting condom use, an important element in determining risk intervention strategies. The authors concluded that the use of TPB in developing strategic HIV prevention interventions such development and evaluation of condom is well founded. Ramjee and Daniels (2013) also concluded that

given the multifactorial factors contributing to women's vulnerability to HIV infection in sub-Saharan Africa, programs addressing a combination of gender power dynamics and behavior change interventions are important in mitigating women's risk exposure.

The use of TPB in predicting and explaining health-related behaviors has also been justified in population health programs to include those focused on creating physical and mental health promotions/prevention programs (Javadi et.al, 2013; Russo et.al, 2015), studies on condom use and HIV testing and risk exposure knowledge (Kalolo, & Kibusi, 2015; Meadowbrooke, Veinot, Loveluck, Hickok, & Bauermeister, 2014), smoking cessation, and across a wide range of population (Najafi, Ardalan, Akbarisari, Noorbala, Elmi, 2017; Sun, Acheampong, Lin, & Pun, 2015).

Given that behavior modification and or change is a complex and difficult process to attain, the literature review demonstrated the appropriateness of TPB as a theoretical framework guiding the research and testing of the hypotheses regarding MIPV against women and risky sexual behavior practices, that is, women's demands for condom use among cohabitating heterosexual or married couples in sub-Saharan Africa. The research questions built upon this existing theory in providing knowledge on understanding how the individual beliefs influenced by social pressure can be as important as knowing the individual attitude to predict the individual's intention.

Theory of Planned Behavior in HIV Studies

The TPB postulates that behavior is influenced not only by attitudes from the beliefs people hold, but also through an individual's ability to maintain control over situational occurrences. In general, people tend to form beliefs about an object by

associating it with certain attributes, such as with other objects, characteristics or events, which can be related to the motivation to perform the behavior (Mtenga et al., 2015). This means that when an individual forms an attitude toward the behavior to be performed, the individual first makes an evaluation of the positive and negative consequences behind the specific behavior. The consequences then become the outcome on which the individual has linked all beliefs, which then requires adjustments that may influence behavior (Kalolo & Kibusi, 2015). Therefore, TPB constructs can help to predict how far attitude or behavioral beliefs toward women's demand for condom use, along with subjective norm or normative beliefs referring to the social pressure of gender equality, and perceived behavioral control or control beliefs, will influence the male partners' intention to indulge in the use of condom during sex. Several studies have discussed in detail HIV prevention and risk exposure based on TPB.

For instance, Eggers et al. (2016) studied the role of TBP in predicting condom use and intentions in three sub-Saharan African cities; Cape Town and Mankweng in South Africa, and Dar es Salaam, Tanzania. The TPB construct of intention was an important determinant of condom use for all three sites. Demographic variables such as socioeconomic status and condom use, being older and woman, and condom use were evident.

Additionally, Sacolo et al. (2013) studied the behavior intentions of Swazi in-school youths from four different schools between the ages of 15 and 19 years to engage in protective sexual behaviors (Sacolo et al., 2013). TPB posits that normative beliefs such as social pressures from culture, peer pressure, and other societal influences are all

factors that can predict sexual behavior practices. Thus, the study aimed to test TPB for predicting factors associated with protective sexual behaviors, including sexual abstinence and condom use.

Sacolo et al. (2013) used eight different anonymous questionnaire instruments to obtain attitudes toward abstinence, attitude toward condom use, social pressure toward premarital abstinence, subjective norms of condom use, perceived behavioral control of abstinence, perceived behavioral control of condom use, and intentions to abstain from sexual intercourse. The scores for abstinence and condom use were significantly predicted by TPB constructs, especially so for premarital sex attitudes about abstinence which was the strongest as oppose to perceived abstinence controls which were the weakest predictors of abstinence intentions. Specifically, subjective norms followed by culture norms were the strongest predictors of intention to abstain. For intentions to use condoms, perceived controls were the strongest predictors, followed by subjective norms of condom use and attitudes. These results indicate the need for strategic or non-traditional gender-specific HIV educational interventions which should be targeted towards at risk population to address the sexual behavior of young people in sub-Saharan Africa (Sacolo et al., 2013).

Further, although the predictive ability of TPB has been shown to be effective and efficient in predicting health behavior based on a wide range of reviews, extending this theory beyond behavior intention to include other variables can help to further understand the extent of TPB predictability.

Turchik and Gidycz, (2012) explored an extension of TPB beyond its typical constructs' stability of behavior intention and actual behavior performance (condom use). The goal of the study was focused on predicting increase in sexual risk behavior when other variables or different risk behaviors such as past behavior, affective beliefs, personal norms, and moral beliefs were included. Given the impulsivity and complexity that often exists with unsafe sex involving another, the researchers sought to explore if personality or individual differences can affect a person's self-regulatory control during sexual encounter. Investigation into how control beliefs can lead to the perception that an individual has or does not have the capacity to perform the behavior have been conducted. However, the researchers were testing the extension of the theory in predicting sexual behavior and determine if the variables have direct effects on intentions and, or behavior by the "variables of casual sex engagement, condom use, contraception, and dual use compared to the TPB model" (p. 4). In the analysis, the anticipated effect of past behavior and moral beliefs successfully showed strong relationships with intention and behavior which are all significant determinants of behavior practices, that is, risky sexual practices (Turchik & Gidycz, 2012).

Nonetheless, the perceived behavior control variables of sexual excitation and or inhibition and sensation seeking were accounted for by the predictability of TPB construct and volitional control. The results showed that extending TPB constructs to include variables that have direct effect on intention and or behavior and mitigating understanding of any relationship in variables are beneficial to the implementation of HIV risk exposure, prevention and intervention programs. Although, TPB has its

limitations when it comes to past experience of a same behavior and repetition of a behavior, it still remains to be the most widely used theory to predict individuals' intention and behavior, the primary objective of this research.

Theoretical Framework for the Sexual Relationship Power Scale (SRPS)

The SRPS was developed by Pulerwitz, Gortmaker and DeJong (2000) and is used to measure the concept of relationship control and decision-making dominance. It is used to also investigate the role of relationship power in sexual decision-making and HIV risk. The theories of gender and power and social exchange are the theoretical framework that guided the development of the SRPS.

The Gender and Power and Social Exchange Theories

The theory of gender and power postulates that gender-based inequities existing at the structural level between men and women are one of the most persistent patterns in the distribution of power and gender (Connell, 1987). The social norms of power imbalance contributing to the disparity in women's health outcomes results in substandard health outcomes (Connell, 1987). The theory of gender and power purports that gendered relationships between men and women are characterized by three overlapping, yet distinct structures; the sexual division of labor, the sexual division of power, and the structure of cathexis.

First, the sexual division of labor construct discerns the separate and discriminatory labor market with regards to gender inequities in training, wages and professional advancement, and the creation of women's and men's jobs in performing paid and unpaid work such as housework and childcare (Connell, 1987). Second, the

sexual division of power constructs focuses on the structural elements of societal authority that set forth a hierarchical system that not only differentiate women's role, but also exclude women from participation (Connell, 1987). The social norms of gender differences that contributes to interpersonal violence against women is also a focus of the sexual division of power. Hence, women who have been exposed to intimate partner violence are vulnerable and more likely to lack a sense of decision-making power contributing to sexual behavior practices that are risky (McMahon et al, 2015).

Finally, in the gender and power theory, the social structure of cathexis follows the dominant culture that perceives women as sexual symbols, hence influencing how a woman behaves (Connell, 1987). For example, if a woman's request for male partner condom use is perceived negatively or is interpreted as promiscuous behavior, the woman may not be as likely to use condom increasing her HIV exposure risk. Hence, the societal relations of gender and power dynamics to include gender order where men are advantaged, and women are disadvantaged places women in a vulnerable state as it relates to sexual decision-making and risky sexual behavior.

Like the gender and power theory, the social exchange theory attempts to explain human behavior within the conceptual framework of an exchange process between two people, emphasizing the cost and benefits interactions of people and their social environment (Cropanzano & Mitchell, 2005). The social exchange theory shows how relationship power depends on three variables: (a) the degree to which a person feels dependent on his or her partner, (b) the amount of resources available, and (c) any alternatives that exist outside of the relationship (Emerson, 1981).

The social exchange theory postulates that relationship exchange between two people exists along the continuum of balanced-equal ratio within the distribution of giving and receiving. Essentially, a person makes the decision to stay or leave a relationship depending on their perception of the costs of being in the relationship over the profits made with each relationship interaction. With each interaction with the other person, the individual attempts to maximize the positive outcomes and minimize the negative ones based on costs-benefit analysis. The theory can be utilized to ascertain reasons for an uneven transaction between people and their environments especially in a study such as this one that focuses on the uneven transaction of female demands for male partner condom use and MPIP.V.

The SRPS is grounded in the structures of the theory of gender and power and social exchange theory, making it a valid instrument to provide empirical evidence about relationship power and its influences in women's sexual decision-making in negotiating condom use. Even though the scale was originally developed for women, it can be administered to male participants with the appropriate modifications.

Interacting Theories: Theory of Planned Behavior, Gender and Power, and Social Exchange Theory

As discussed in the previous sections, the TPB, and both gender and power and the social exchange theories illuminate the concepts of the SRPS. These theories complement each other as their core foundational concepts cite environmental, personal, and behavior characteristics as the major factors in behavior determination, which plays a

critical role in sexual decision making and the ability to influence another person's actions related to sexual behavior practice.

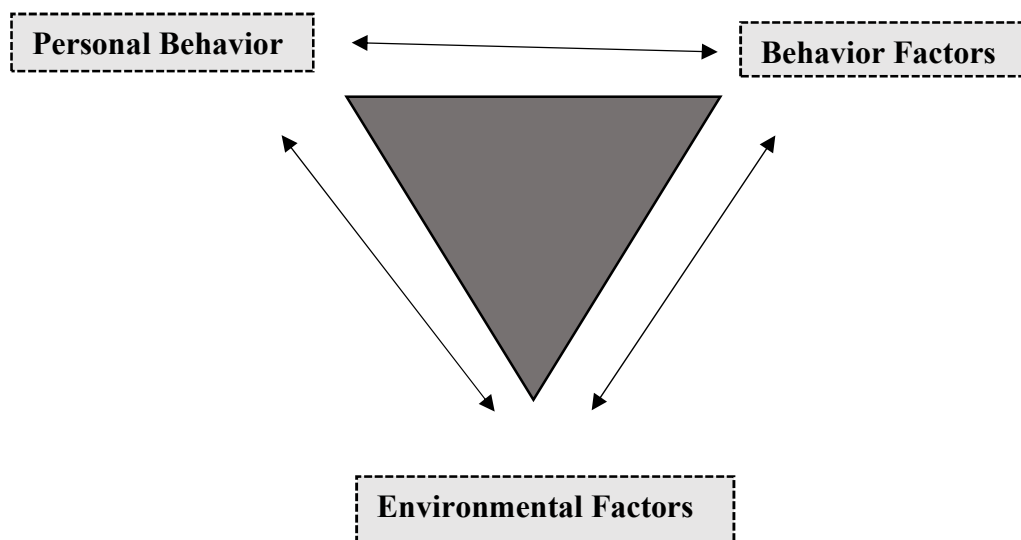


Figure 2: Interacting Theories of TPB, Gender and Power, and Social Exchange; Adaptation of Models of Behavior and Theories of Change

Even though the TPB emphasizes the role of intention in behavior performance as it relates to the amount of control the individual possesses and the strength of their behavior intention (Ajzen, 1991), gender and power focus on distribution of gender power as it relates to power strategies or power outcomes (Connell, 1987). Conversely, and social exchange theory focuses on relationship interaction that elicits approval or disapproval (Emerson, 1981). With an estimated 25.5 million people with HIV/AIDS in sub-Saharan Africa in 2015 and 40% of new HIV infections occurring in the age group 15 to 24 years, targeted intervention and prevention programs are essential in reversing the epidemic.

Although an extensive number of HIV interventions and prevention programs have been developed, implemented, and evaluated over the past decades adding to

increased knowledge, positive attitudes, and willingness to change, far-reaching changes in sexual behavior have not materialized. Strategic planning guided by a theoretical foundation is said to be an essential component of successful health promotion interventions (Kalolo & Kibusi, 2015).

Literature Review Related to Key Variables

AIDS-related illnesses remain the leading cause of death among women of reproductive age (15–49 years) globally, and they are the second leading cause of death for young women aged 15–24 years in Africa (Foundations for AIDS Research, 2017). The socio-economic impact of the HIV/AIDS infection in this region is enormous with children becoming orphans due to one or both parents having the virus and dying from complications related to the disease.

In some regions, women who are exposed to intimate partner violence are 50% more likely to acquire HIV than women who are not exposed (Foundations for AIDS Research, 2017), making this crisis one that will require a fundamental shift and a multidimensional approach to reducing women risk exposure rates. Hence, comprehensive knowledge on HIV/AIDS, in conjunction with attitudinal and behavior changes to gender-based male on female violence are key variables that must be integrated into alternative interventions promoting this fundamental shift in behavior norms.

Knowledge, Attitude, and Perception: Male Condom Use in sub-Saharan Africa

The spreading of HIV/AIDS in sub-Saharan Africa has a gendered dimension with women being affected more than their male counterparts. Findings have shown that

male condom use in sub-Saharan Africa is significantly low with gender power dynamics, beliefs, sexual norms, and attitudes about HIV condoms, gender inequality, stigma, fear, discrimination, political and socioeconomic strife posited as contributory factors to the disproportionate rate of infection among women (Remme et.al, 2014; Watts & Seeley, 2014). The gender dynamism and the associated gender disparity emanating from cultural norms, attitudes, and beliefs and the sexual abuse and exploitation of women creates a challenge in effectively reducing the alarming rates of HIV transmission (Remme et.al, 2014; Watts & Seeley, 2014).

Given the sub-Saharan trends in HIV infection demonstrating an overall increase in HIV prevalence among women, concerted and ongoing efforts are being designed to understand the importance of male knowledge about HIV/AIDS transmission. These efforts include condom use and attitude and perceptions of sexual practices in relation to HIV/AIDS and condom use among men in this region (Kharsany & Karim, 2016).

However, interventions to promote condom use are essential to slow the spread of HIV, yet not many studies have established linkages between lack of male condom use and normative beliefs, misconceptions, and attitudes surrounding usage (Maticka-Tyndale, 2012). In a HIV prevalent region with high levels of gender-based violence, sexual coercion, and HIV related stigma, Holtgrave, Qualls, Curran, Valdiserri, Guinan, and Parra, (1995) argued that successful HIV prevention messages must be design to target the needs of the audience which take into consideration confounding factors such as culture, values, beliefs, and norms.

Kharsany and Karim (2016) conducted a review focused on the epidemiology of HIV infection in sub-Saharan Africa and the continued high prevalence and strategies for optimizing limited resources for prevention activities. In the review, Kharsany and Karim (2016) identified the global and regional burden HIV infection has placed on the socioeconomic infrastructure, the AIDS related deaths with sub-Sahara Africa accounting for 74%, 1.5 million in 2013, and the gap in initiating targeted preventions specifically for women who are unable to negotiate the current HIV prevention strategies to include behavior change and condoms use in their relationships.

Although sub-Saharan Africa carries more than 65% of the global burden of infection (AVERT n.d; WHO 2017), the researchers identified several strategies of focus. These interventional strategies include a thorough understanding of the nature of HIV transmission or “knowing your epidemic” in sub-Saharan Africa and prioritizing interventions with focus on marginalized population with highest need of HIV transmission prevention such as women (Shi, Kuyoumdjian, & Dushoff, 2013; Delva & Abdool, 2014; Kharsany & Karim, 2016; Ramjee & Daniels, 2013; Stockman, Lucea, & Campbell, 2013). The findings from these reviews indicated a need for educational interventions to maximize utilization of existing cost-effective interventions such as condom use. Clearly, the task of preventing HIV infection is not simply one of providing more funds or more medicines. Apart from the economic resources that are needed for any HIV intervention program, it is imperative that innovative models of delivering interventions should focus on behavior changes, changes in beliefs, attitudes, and societal

norms that marginalized women, and the effectiveness of male partner condom use negotiation.

The task of changing the beliefs of the any community is impossible without understanding a population cultural, beliefs, norms, attitudes, and perceptions that are deeply rooted in misconceptions that serve to discourage safe sexual behaviors such as male condom use. At such, the task of HIV prevention education should not be centered towards changing the traditional belief system, but instead to build the trust of the community by developing cultural competence and culturally sensitive teaching resources relevant to gaining understanding and an informed view of the targeted population, in this case, attitudes around condoms, norms that influenced intentions and actual condom use (Appiah, Tenkorang, & Maticka-Tyndale, 2017).

Using the TPB construct as the foundation for their study, Appiah, Tenkorang, and Maticka-Tyndale, (2017) explored reasons for the low condom usage by seeking to establish linkages between lack of use and normative beliefs and attitudes around condoms among 1453 sexually active high school youths. The authors report a direct relationship between male respondents' attitudes and condom use and an indirect relationship between these two variables for female respondents as described next. For the construct of intentions to use condom and higher perceived behavioral control, male and females' respondents who convey intentions to use condom with high perceived behavior control, were significantly more likely to report consistent usage, while consistent use of condoms was significantly higher for males who had friends that used condoms. Although these findings reinforce the importance of examining attitudes

towards HIV/AIDS infection, perceptions of condom use, and misconceptions towards condom use, they were specific to youth in Kenya and exploring factors that serves to discourage safe sexual practices.

Liberia HIV/AIDS Overview: Identified Gap in Knowledge, Attitude, and Behavior

The Liberian Demographic Health Survey (2013), reported that out of a total population of approximately 3.5 million, an estimated 20,120 Liberians (adults and children) are living with the virus with one of the main routes of HIV transmission is heterosexual contact. While awareness of HIV/AIDS is practically universal in Liberia with ninety-seven percent of women and ninety-six percent of men aged 15-49 have heard of AIDS, comprehensive knowledge about HIV/AIDS to include behavior modification, condom usage, and limiting the number of sexual partners is low (Liberian Demographic Health Survey, 2013).

Even though the bulk of HIV/AIDS prevention interventions focus strategies and efforts on condom use, abstinence, limiting number of sexual partners or monogamous relationship, and abstinence, only 37% of women and 34% of men have comprehensive knowledge on the use of condoms and monogamous uninfected partner reducing the risk of getting HIV, or that a healthy-looking person can have HIV. It is important that public health programs engage in a constant needs assessment and develop a consistent approach to progress with rapid adoption of new, proven resources and interventions that are certain to address the critical gap in comprehensive knowledge on HIV/AIDS (UNAIDS, 2017). Research findings have demonstrated a relationship between risky sexual behavior among women in sub-Saharan Africa and the disproportionate

HIV/AIDS infection rate among women, with MPIP as contributory factor to sexual behavior decision-making ability. Hence, a critical part of a comprehensive approach to disseminating HIV/AIDS knowledge is making certain that young people are engaged in behavior and relational-based knowledge, strategies and interventions that are not only accurate, but will present a realistic approach to improving their perceptions from low to high HIV risk.

Gender-Based Violence: Male Perpetrated Intimate Partner Violence and Negotiating Condom Use among Women

According to WHO (2017), the correct and accurate use of condoms are highly effective in HIV sexually transmitted infections (STIs) prevention with scientific evidence showing that male latex condoms have an 80% or greater protective effect against the sexual transmission of HIV and other STIs. This is important knowledge to emphasize especially in high-prevalence settings where young women remain at an unacceptable high and heightened risk of HIV infection. Even though condom usage is a key component of a comprehensive HIV prevention program and prevention of the sexual transmission of HIV and other STIs, a combination of approach to include consistency in usage, having one faithful sexual partner, testing, counseling and other strategies are equally important to prevention and intervention.

An important part of ensuring consistency in condom usage is women having the ability to safely negotiate condom use or request for male partner condom use without the threat of intimate partner violence. There is a large body of literature that purports that the violence and the fear of violence aim at women hinders the sexual decision-making

ability of women to insist on safe sex barrier use and negotiating use of condoms (CDC, 2014; Jones et al. 2013; Kaye 2004; UNAIDS, 2017; Watts & Seeley, 2014; Wingood, & DiClemente, 1997; WHO, 2014).

UNAIDS reports that women who are subjected to intimate partner violence are also associated with weakened adherence to pre and post exposure HIV treatment and are, on average 1.5 times more likely to acquire HIV in some regions, linking this to overall poor clinical outcomes. Therefore, developing global standards and supporting countries to promote condom procurement and usage is a great vision but may not necessarily target the reality of male perpetrated intimate partner violence against women regarding negotiating condom usage. As part of a multidimensional approach to HIV/AIDS risk reduction in sub-Saharan Africa, investing in global health policies, legal reforms standards, and social intervention strategies such as gender-based relational training in a safe environment are all measures that are crucial to supporting and eliminating the violence against women and girls.

The Social Determinants of Male Perpetrated Intimate Partner Violence: Barrier to Women's Demands for Male Partner Condom and HIV

Women carry a disproportionate burden of the HIV infection rate in sub-Saharan Africa and findings have shown that women's vulnerability is a major factor in the incidence and prevalence of HIV/AIDS (Beksinska, Smit, & Mantell, 2012; Dunkle et al. 2004; Stockman, Lucea, & Campbell, 2013). Multiple factors such as gender inequity, MPIPV, and socioeconomic status of disenfranchised women frequently plays a substantial role in increasing women's HIV transmission risk exposure particularly

among women in low socioeconomic status. The HIV/AIDS epidemic in sub-Saharan Africa is aggravated by the socioeconomic inequalities between men and women, particularly MPIPv.

Numerous studies have linked intimate partner violence with increased risk of exposure to unsafe sexual practice and risk for HIV transmission (Beksinska, Smit, & Mantell, 2012; Dunkle et al. 2004; Stockman, Lucea, & Campbell, 2013). Women and girls commonly are frequently exposed to socioeconomic degradation resulting in their dependence on the men, sexual violence, and limiting their ability to engage in condom use negotiation (Beksinska, Smit, & Mantell, 2012). The gender-based stratification is a contributory factor that places women in a position of vulnerability and are at risk for HIV infection.

Dunkle et al. (2004) studied the role of gender-based violence as a risk factor for HIV after adjustment for women's own high-risk behaviors in a cross-sectional study among 1366 women presenting for antenatal care at four health centers in Soweto, South Africa. Using the South African adaptation of the SRPS and risk behaviors questionnaires, the researchers determined that MPIPv and high levels of male control in a woman's current relationship as measured by the SRPS were associated with a positive HIV serostatus. The findings further demonstrated that women with violent or controlling male partners are at increased risk of HIV infection. However, these findings indicated that the increased concerns of intimate partner violence were not associated with child sexual assault, adult sexual assault by non-partners, and sexual debut or forced first intercourse. In this study, male perpetrators of intimate partner were more likely to have

HIV and forced risky sexual practices on their partners to include preventing the ability of condom use negotiation. Even though the effects MPIPv on HIV risk exposure have been studied, more research is needed to elucidate relationship between women's demands for male partner condom use and MPIPv impacting condom use negotiation.

Summary and Conclusions

HIV/AIDS is clearly affecting the most active, social, and economically population in many regions of the world to include Liberia. This study was not only significant, but relevant and timely given the focus on reducing the barriers to women's ability to safely engage in request for male partner condom use without fear of MPIPv. This literature review presented an overview of the TPB, data on the epidemiology of HIV/AIDS infection in sub-Saharan Africa, HIV/AIDS infection among women in sub-Saharan Africa, the heightened rate of HIV/AIDS infection rate among women, and knowledge of risky sexual behavior amongst men and women, risky sexual behavior practices. The review further demonstrated the social construct of gender inequality, gender-based (male on female) violence, increase in female HIV vulnerability, effects of MPIPv, risky sexual behavior practices among men and women, and the socio-economic consequences. Even though there is basic knowledge and most young adults have "heard" about HIV/AIDS in Liberia, many are lacking in comprehensive knowledge(Liberian Demographic Health Survey, 2013).

The literature review revealed that harmful masculine gender norms are detrimental to women and can also jeopardize risk prevention strategies. Several studies have established that an important part of developing a comprehensive approach to

acquiring knowledge is ensuring that young people are empowered in engaging these risk prevention gender-based strategies. However, these are limited studies focused on determining the relationship between female negotiating condom use and MPIPv.

The findings from this study contributed to knowledge on the relationship between female demands for male partner condom use and risk for MPIPv, and the relationship between the risk factors of age, education level, socioeconomic status and women's demands for male partner condom use in women experiencing history of MPIPv in heterosexual cohabitating or married couples. Chapter 3 detailed the research design and methodology. The discussion included a description of the target population, sampling, participants' recruitment, instrumentation, and threats to validity. A detailed analysis of the research design, procedures, statistical analysis and coding was described in this chapter. Chapter 3 concluded with discussion of the ethical procedures I undertook to ensure ethical protection of the participants.

Chapter 3: Research Method

Introduction

The power imbalance between men and women in sub-Saharan Africa includes women's roles, status, and subordinate position, which places them at a disadvantage to control their own sexuality and renders women vulnerable to contracting HIV (Ramjee & Daniels, 2013). The gender power imbalance in this region perpetuates discrimination against women, and MPIPV has been shown to be a contributing factor to women engaging in high-risk sexual situations (Durevall & Lindskog, 2015; Shi, Kouyoumdjian, & Dushoff, 2013; Watts & Seeley, 2014).

The purpose of this quantitative correlational study was to describe the relationship between women's demands for male partner condom use and MPIPV and factors (age, education level, socioeconomic status) that influenced and/or prevented women's demands for male partner condom use for the woman experiencing history of MPIPV in opposite sex cohabitating or married couples. In this chapter, I present a discussion of the research design and rationale for choosing the quantitative methodology and correlational design, a description of the target population, sampling procedures, participants' recruitment, instrument, threats to validity, and discussion of the ethical procedures I undertook to ensure ethical treatment of the participants.

Research Design and Rationale

Study Variables

The study was a quantitative, correlational study that was conducted to determine whether a relationship exists between female partner demands for condom use and

MPIPv as well as the relationship between the risk factors of age, education level, socioeconomic status and women's demands for male partner condom use for women experiencing history of MPIPv in cohabitating or married opposite sex couples. I selected the quantitative correlational design because it is used to show a correlation and strength (how well the two variables align) of the relationship among the variables (Field, 2015; Frankfort-Nachmias, Nachmias, & Dewaard 2015). This research method aligned with describing the relationship or association between women's demand for male partner condom use and MPIPv, the primary focus of this research. Further, this method allows for testing theoretical objectives by examining the relationships among the variables through the supporting data and refuting if the data did not support the hypotheses (Creswell, 2009). The correlational design also assured a higher level of objectivity needed to advance knowledge in determining relationships between variables. This design type was also appropriate in consideration of practicality and feasibility of the study, given the logistical constraints such as time, fiscal impact, availability of the participants, and other resources.

Other quantitative designs such as interventional or quasi-experimental studies were deemed not appropriate for this research as these designs were not the most useful to meet the objective and the elements of a correlational study for three main reasons.

First, quantitative exploratory interventional study would have required that exposures and outcomes are observed and measured simultaneously in the sample population to examine for any associations. Second, a quasi-experimental design requires a larger sample size, which may have been difficult to accomplish given the sensitive

nature of discussions surrounding sexual behavior practices and HIV transmission rates in this population. Third, the objective of the study, which was focused on determining relationships between the variables, did not fit that of a quasi-experimental study that is focused on determining causality that is, cause and effect between the variables (Houser, 2015).

With the correlation design, three research questions guided the study, and I examined three pairs of hypotheses to answer the research questions;

RQ1: What is the relationship between women's demands for male partner condom use to risk for MPIPv that is, does a relationship exist between female partner demands for condom use and risk for MPIPv in heterosexual cohabitating or married couples in West Africa?

H₀₁: There is no relationship between women's demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples West Africa.

H₁₁: There is a relationship between women's demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples West Africa.

RQ2: What is the relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa?

H₀₂: There is no relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

H₁₂: There is relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

RQ3: What is the relationship between the risk factors of age, education level, socioeconomic status (income) to women's demands for male partner condom use in women experiencing MPIPv in heterosexual cohabitating or married couples in West Africa?

H₀₃: There is no relationship between the risk factors of age, education level, socioeconomic status (income) to women's demands for male partner condom use in women experiencing MPIPv in heterosexual cohabitating or married couples in West Africa.

H₁₃: There is a relationship between the risk factors of age, education level, socioeconomic status (income) to women's demands for male partner condom use in women experiencing MPIPv in heterosexual cohabitating or married couples in West Africa.

The predictor variables were women's demands for male partner condom use and history of MPIPv. The outcome variables were risk for MPIPv and female partner decreased demands for male partner condom use, which had been reported to be a contributing factor to the disproportionate rate of infection among women, supporting the selection of the outcomes variables. The covariates were age, education level, and socioeconomic status (employment).

A quantitative correlation study was consistent with determining if there is a correlation or relationship between two or more variables and the strength of the relationship (Frankfort-Nachmias & Nachmias, 2015; Field, 2015), which allowed me to show a relationship between the predictor and outcome variables and to measure the strength of a relationship between variables. I explored if female demands for male partner condom use served as a risk for MPIPv and risky sexual behavior (no use of condom) as well as, factors influencing the potential relationship between female partner demands for condom use and MPIPv. Furthermore, the study was focused on the statistical correlation and descriptive analysis among the variables, and I sought to describe any relationship and determining factors that influenced women's demands for male partner condom use in the woman experiencing history of MPIPv. I used a regression analysis to statistically analyze, identify, and describe the degree of dependence whether positively same directional change, or negatively opposite directional change existing between the variables. The goal was to determine if there was a relationship with women's demand for male partner condom use to initial MPIPv or if women's demand for male partner condom use correlates with increase MPIPv where there was established history of MPIPv.

The lack of strategic governmental social and public health policies and non-governmental programs targeting areas like MPIPv will result in HIV/AIDS continuing to spread at an alarming rate which will have a devastating impact on all aspects of the society (Watts & Seeley, 2014). Developing comprehensive knowledge and understanding of gender power imbalance and influences of women passiveness and

powerlessness in relation to sexual health may potentially make them more vulnerable to HIV/AIDS is crucial to developing public health gender-based policies (Watts & Seeley, 2014).

Furthermore, these public health gender-based policies and practitioner interventions should be aligned with creating gender-based HIV/AIDS prevention education programs with specific focus on promoting MPIP awareness (Watts & Seeley, 2014). Developing programs that protect women's rights, promote empowerment, educate women and men about MPIP and sexual autonomy will require proactive women-rights policies supported by public health stakeholders which may help planning for future public health interventions.

Methodology

Population: Prevalence of HIV/AIDS in Women and Men in Liberia

The target population were women residing in West Africa between the ages of 18-35 who were involved in a heterosexual co-habiting or marital relationship. The HIV&AIDS Response Progress Report (2016) reported that the West African country of Liberia documented an increase in HIV prevalence between 2007 -2013 in the population aged 15-49 despite available prevention resources. According to this report, HIV prevalence in this general population age range of 15-49 in Liberia increased from 1.5% to 2.1% with a high HIV prevalence in urban areas at 2.6 percent and particularly higher in the main capital city of Monrovia (3.2%) than in rural areas (0.8 %). A disproportionate rate of HIV prevalence exists among women 2.4% (increased from 1.8% in 2007) which is significantly higher than in men 1.9% (increased from 1.2% in 2007;

Liberian Demographic Health Survey, 2013). The report further stated that 1% of young people aged 15-24 are infected with HIV, with a prevalence infection rate of 1.4 % among women aged 15-24 compared to 0.5 % for men, with 55% of women and men who are infected with HIV not having been previously tested or have been tested but have not received the result.

Participants for this study were recruited using the Internet and online social media platforms advertisement with specific inclusion criteria to include residing capital city and suburbs of the Liberia. Participants from highly populated city environment and other risky suburbs may have different experiences compare to those in the mostly protected or secured suburbs. This selection allowed for diversity in the convenient sampling. Participant recruitment were strictly voluntary and consisted of approximately 352 women. Qualification for participation in this study included meeting the inclusion criteria.

Sampling and Sampling Procedures

Women between the ages of 18-35 involved in a heterosexual co-habiting or marital relationship were the identified target group. I used a nonprobability purposive sampling technique for participants' selection. This sampling technique was important because the participants were residents of Liberia and were available and willing to participate.

Although I used a nonprobability purposive sampling, participants were required to meet the inclusion criteria. Inclusion and exclusion criteria determined eligibility to participate in the study. I recruited participants using online and social media

advertisement with the listed inclusion criteria: women between the ages of 18-35, residing in Liberia, ability to read and write English, have access to the Internet, ability to complete the online surveys, and willingness to sign the informed consent. Exclusion criteria included women who were out of the stated age range of 18-35, non-residents of Liberia, inability to read and write English, no access to the Internet, inability to independently complete an online survey, and inability to complete the informed consent.

A power analysis was conducted to determine the sample size (Faul, Erdfelder, Buchner, & Lang, 2013). The sample size was calculated using G*Power software which produced an a priori power analysis of the required sample size. I conducted a G* power analysis employing a small effect size $f = .20$ ($f^2 = 0.04$), an alpha value of α -level=0.05, and statistical power ($1 - \beta$ err prob) =0.95 for multiple regression models which required a minimum sample size of 314 participants. Thus, a sample of approximately 314 women who residents of Liberia were needed for this study. Frankfort-Nachmias and Nachmias (2015) asserted that participants in their natural setting giving the sample size of 314 in my study, can be generalized to the larger population with a design strategy that mitigates external validity, which aligns with the focus of this study.

Procedures for Recruitment, Participation, and Data Collection

Before collecting any data from the participants, I followed the following procedural steps for recruitment, participation, and data collection. I presented my proposal to Walden University Institutional Review Board (IRB) for review and approval to proceed. The proposal included recruitment materials such as electronic Facebook notification and flyer postings, and permission to use survey questionnaire. After

obtaining proposal permission from Walden University (IRB approval # 05-16-19-0452981), I submitted my research proposal application to obtain permission from the University of Liberia IRB. The Department of Research and Ethics at the University of Liberia (UL-PIRE) was the primary government entity responsible for reviewing and granting permission for research to be completed in Liberia. The procedure in submitting research protocols to the UL-PIRE IRB for ethics review included a submission of the following documents to the Director of Research: Letter of Application, Copy of the Proposal, Informed Consent and or Assent Forms, Sample Survey Questions, Curriculum Vita of the Investigator(s), and Protocol Budget. All submissions to the UL-PIRE included the e-copies of all the required documents along with eight hard copies. After obtaining approval from Walden University and University of Liberia IRBs, I recruited participants via the Internet and online social media platforms such as Facebook. Information about the study including the purpose of the study, assuring confidentiality, requesting participation, and data collection process as well as the survey questionnaire (see Appendix B) link were posted on the flyer.

Data collection took place using a SurveyMonkey administered survey. Given time constraints and the need to facilitate ease of collecting data collection, the Internet helps with finding a large convenience sample and is relatively associated with low cost and speed with data collection (Hays, Liu, & Kapteyn, 2015). Furthermore, the online format allowed participants to complete the questionnaires at their convenience with minimal inconvenience promoting efficient data collection. All sections of the online informed consent and survey questionnaires remained anonymous and had directions for

completion. Introduction and directions for completing the informed consent, socioeconomic (see Appendix A) questionnaire, duration of the survey, and accurate completion of the questionnaires were presented upon arriving on the research website. Several questions were used to screen participants to ensure that each met the inclusion criteria. Examples of inclusion criteria screening questions included and were not limited to the following:

1. How old are you?
2. Are you currently residing in Liberia?
3. Are you currently in a monogamous heterosexual relationship such as married or living with your male partner as a couple?
4. What is the highest level of school you completed?

If the individual met the criteria and clicked on the survey link, the online informed consent was presented to participants upon accessing the survey link. This allowed participants to proceed to the questionnaires only after completion and submission of the informed consent section by clicking "I consent." Completion of the consent portion was a prerequisite to proceeding to the self-report demographic questionnaires. If they did not wish to participate in the survey, they were instructed to decline participation by clicking on the "I do not consent" button and exit the survey. Participants who consented were directed to proceed to the socio-economic self-report questionnaire. Self-reported information on the participants' age, education level, and socioeconomic status (employment) were collected on the sociodemographic questionnaire. The participants had approximately 15 minutes to complete the informed

consent, sociodemographic section, and questionnaires. Participants were prompted to proceed to the next phase of the survey after completion of the demographic section.

There was a debriefing section immediately after the last question on the survey. Participants were prompted to proceed to the debriefing section. In this section, participants were thanked for participation and similar information about the purpose of the study as in the beginning were provided. Information about other resources such as local Health and Community Services was provided. Participants were reminded to print a copy of the debriefing section for their records. Participants were given the option to stop at any time and click on exit if they decided to not participate. Participants will be prompted to exit the website once they complete all the questionnaires and debriefing section.

Instrumentation and Operationalization of Constructs

I used the SRPS (Pulerwitz, Gortmaker & DeJong, 2000) to measure participants' perceptions of MPIPv initiated by female partner demand of male partner condom use where there is no previous history of MPIPv. Self-reported sociodemographic questionnaire were used to measure the control variables of age, education level, socioeconomic status, and history of MPIPv. The SRPS (Pulerwitz, Gortmaker & DeJong, 2000) aligned with this study objectives and was used to collect data. Permission to use the SRPS tool was granted by the author for the purpose of this research and the agreement to reference appropriately and share the results of the study upon completion (see Appendix C).

The SRPS was important as it measured women power in intimate sexual relationship as it relates to the role of relationship power in sexual decision-making (Pulerwitz et al., 2000). Given the importance of examining sexual relationship power as one of the predictors for sexual decision making, implicit in decision making behaviors such as negotiating condom use between heterosexual partners, it was important for this study to understand the relationship between sexual relationship power and unsafe sexual behaviors (McMahon, Volpe, Klostermann, Trabold, & Xue, 2015).

The lack of sexual decision-making negotiating power has been identified as a contributory factor in unsafe sexual behaviors in heterosexual couples in this population (McMahon et al. 2015). Pulerwitz, Gortmaker and DeJong (2000) developed the SRPS to measure this important concept of relationship control and decision-making dominance and to investigate the role of relationship power in sexual decision-making and HIV risk. The SRPS has been consistently used to examine relationship power in research with couples. It has been translated into at least eleven languages and used in research with a diverse population of women and modified for use with men.

The SRPS was initially developed with 62 initial items in five domains; (a) decision-making dominance, (b) relationship control, (c) distribution of economic and emotional resources, (d) alternatives to the relationship, and (e) dependence on the relationship (Pulerwitz, Gortmaker, & DeJong, 2000). The types of behavior or outcomes predicted from using the SRPS to measure power with sexual relationship include sexual and physical violence, intimate partner violence, and condom use and partner infidelity.

The final model of the SRPS consists of 23 items and divided between two subscales; (a) constructs of relationship power Relationship Control Subscale (RCS) and (b) relationship dominance and decision-making Decision Making Dominance Subscale (DMDS), with questions as it relates to commitment to the relationship, condom negotiation ability, and freedom of action within the relationship (Pulerwitz et al., 2000). The SRPS was originally tested for its validity and reliability to a census of primarily Latina other minority women to collect data related to the participants' perception of relationship power.

Pulerwitz, Gortmaker, and DeJong (2000) reported that the SRPS had a reversed association with physical violence and was directly associated with education and consistent condom use ($p < .05$). The SRPS possesses good internal reliability and with an overall Cronbach's $\alpha = 0.84$ [English version] and $\alpha = 0.88$ [Spanish version] and predictive and construct validity (Pulerwitz, Gortmaker, & DeJong, 2000). The two subscales have distinct response sets and good internal consistency with RCS (fifteen items, $\alpha = 0.85$ [English version] and $\alpha = 0.89$ [Spanish version]) and the DMDS (eight items, $\alpha = 0.63$ [English version] and $\alpha = 0.60$ [Spanish version]), with good to fair internal consistency for both subscales (Pulerwitz et al., 2000). Factor analyses were completed to support two subscales of RCS and DMDS.

The RCS used a four point-Likert scale (1=strongly agree, 2=agree, 3=disagree, and 4=strongly disagree) to measure the level of agreement on item statements. An example of a question is "Most of the time, we do what my partner wants to do," "if I asked my partner to use a condom, he would get violent," if I asked my partner to use a

condom, he would get angry.” Asking such questions discern the woman’s perception about the partner’s behavior towards condom use, how much the male partner controls what the woman does, and MPIPV related to request for condom use.

The DMDS was constructed to measure the balance of decision-making power on different topics in their daily lives and has the participant select between (1=Your partner has more power; 2=Both of you have equal power; 3=You have more power) on each of the eight items, with higher scores indicating higher relationship power for the respondent (Pulerwitz et al., 2000). Given the fact that the two subscales have distinct response sets, Pulerwitz, Gortmaker, and DeJong (2000) posit that the two subscales can be administered separately or together depending on the aim of the research and or a modified version of the original scale can be used. In the modified sexual relationship power scale (SRPS-M) four items related to condom use were removed (items 1, 2 and 8 in the RCS subscale and item 22 in the DMDS) and can be used for research not pertaining to direct condom usage. In addition, the SRPS-M was tested and was shown to be associated with consistent condom use (Pulerwitz, Amaro, DeJong, Gortmaker, & Rudd, 2002; Pulerwitz et al., 2000).

Data Analysis

Upon completion of the survey questionnaires, the SurveyMonkey data were downloaded and automatically saved and available with a password-protected access. Additional safety measure included data storage on my external hard drive stored in my safe deposit location. Descriptive statistics were used to determine relationships between the sociodemographic factors and dependent variable, and I used multiple linear

regression analysis because it can model the relationships between several independent variables and a dependent variable. Using intellectus statistics software, data collected from the sociodemographic questionnaires and the SRPS instrument were presented using two types of statistical analysis, namely descriptive analysis and analysis of the covariates of age, education level, socioeconomic status, and history of MPIPv. I used components of descriptive statistics to describe findings on the measures of central tendencies, standard deviation, frequencies and percentages of participants' demographic characteristics of age, education level, socioeconomic status, and history of MPIPv. This analysis was used to show the relationship between the socio-demographic findings of the participants and the outcome variable in the study.

The predictor variables for this study were women's demands for male partner condom use and history of MPIPv. The outcome variables were risk for MPIPv and female partner decreased demands for male partner condom use. Multiple linear regression analysis was appropriate for this study and was performed because the analysis included multiple predictor variables (Chen, Li, Wu, & Liang, 2014). Multiple regression analysis allowed for the mediating variable (women's demands for condom use) to be measured on a 4-point Likert scale. Additionally, multiple linear regression provided the opportunity to assess a continuous outcome variable from a number of predictor variables helping to predict the dependent or criterion variable after controlling the previous variables (Frankfort-Nachmias & Nachmias, 2008). I used the following statistical analysis listed below to assess each research question and to examine the relationships between predictor and outcome variables.

Research Questions and Hypotheses

RSQ1:

What is the relationship between women's demands for male partner condom use to risk for MPIPv, that is, if relationship exists between female partner demands for condom use and risk for MPIPv in heterosexual cohabitating or married couples in West Africa?

H0: There is no relationship between women's demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples West Africa.

H1: There is a relationship between women's demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples West Africa.

I conducted a multiple linear regression to assess and determine the strength of a relationship between the variables of women's demands for male partner condom use to risk for MPIPv.

RSQ2:

What is the relationship between history of MPIPv to female partner decreased demand for male partner condom use in heterosexual cohabitating or married couples in West Africa?

H0: There is no relationship between history of MPIPv to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

H1: There is relationship between history of MPIPV to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

I used a multiple linear regression to assess and determine the strength of a relationship between the variables of history of MPIPV to female partner decreased demands for male partner condom, while controlling the covariates of age, educational level, socioeconomic status, and history of MPIPV.

RSQ3

What is the relationship between the risk factors of age, education level, socioeconomic status (income), and history of MPIPV to women's demands for male partner condom use in women experiencing MPIPV in heterosexual cohabitating or married couples in West Africa?

H0: There is no relationship between the risk factors of age, education level, socioeconomic status (income), and history of MPIPV to women's demands for male partner condom use in women experiencing MPIPV in heterosexual cohabitating or married couples in West Africa.

H1: There is a relationship between the risk factors of age, education level, socioeconomic status (income), and history of MPIPV to women's demands for male partner condom use in women experiencing MPIPV in heterosexual cohabitating or married couples in West Africa.

For this research question, I used multiple linear regressions to assess and determine the strength of a relationship between the variables of age, education level,

socioeconomic status (income), to history of MPIP to women's demands for male partner condom use.

Data screening and cleaning procedure were used to eliminate participants who are likely to exhibit insufficient data response. I reported the results of the study before and after employing data screening and cleaning techniques. Data screening and cleaning procedures included, not allowing participant to proceed to questionnaire if informed consent is declined, not examining responses of participants who do not fit into the inclusion criteria, removal of such dataset, removal of incomplete responses to questionnaires, and removal of outliers.

Threats to Validity

Validity in a study refers to the study measuring the intended concept if replication of the study using the same measuring instrument produces the same results (Frankfort-Nachmias & Nachmias, 2008; Kimberlin & Winterstein, 2008; & Drost, 2012). There is wide range of potential threats to external and internal validity that a research study can suffer based on the research design which must be addressed in the study. Nonetheless, achieving credibility in research and ensuring strength and validity is gained requires accurate measurement of the subject being measured which is achieved by ensuring that translation of the research objectives into specific questions occurs (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). Therefore, instrumentation selection is an important step toward making accurate measurements that will provide validity of quantitative studies (Frankfort-Nachmias, Nachmias, & DeWaard, 2015).

Threats to External Validity

External validity is a crucial requirement in quantitative research. External validity refers to the extent to which the results of a study can be generalized to people (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). That is, how representative is the sample of the population, other settings (ecological), population, or characteristics other than those used in the study (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). It is the extent to which the outcomes of a research can be generalized to other situations and to other individuals. In this instance, population, time, and environmental validity were the three main threats that were applicable to this research.

The nonprobability purposive sampling technique was used as this was the best sampling technique for this study. The nature of nonprobability purposive sampling made it not a representation of the entire population for this target population and at such, inadvertently excluded a great proportion of the population. Hence, nonprobability purposive sampling had limitations in generalization and inference making about the entire population which made this a threat to external validity. There was a threat to generalizability because the study focused on a sample of the population and the voluntary nature of participation may have influenced how they responded during the survey process. Because participants volunteered to take part in this study for specific purposes (e.g., personal reasons) which may have influenced how they responded during the survey process, this reduced homogeneity of the characteristics between my sample and the population this study was interested in. As a result, the study's findings cannot be generalized to an entire population. To reduce threat to generalizability, the size of the

sample (314), target age range of the participant population (women ages of 18-35), geographical location, and other inclusion criteria were control measures employed to make sure the sample represented the targeted population. Furthermore, the time of day when participants had access to the online survey website and access environment to include accessing the online survey portal via smart phones, tablets, and computers, and the ability to decide the order of the questionnaire completion was another measured used to reduce threats to external validity.

Threats to Internal Validity

Internal validity refers to the accuracy to which results, and inferences are attributed to the independent variable and can measure cause and effect (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). This study was a quantitative correlational design and there was no manipulation of the variables, no administration of treatment to research participants, and was focused on determining relationships between the two variables, as opposed to explaining or predicting outcomes. The noteworthy threats to internal validity in this study were selection bias and instrumentation design to accurately measure study objectives and length of the questionnaire resulting in potential response fatigue during the survey.

This correlational design was meant to determine relationship and not cause and effect. There were no administration of treatment and no difference in behavior attributed to statistical control or manipulation or administration of treatment. To reduce threats of selection bias, I used multiple linear regression analysis to control for group differences such as age, education level, socioeconomic status, and history of MPIP to minimize

selection as a threat and ensuring for similarity as much as possible for a homogeneous population. To mitigate threat to internal validity related to instrumentation, the 23 item SRPS is an established questionnaire that has been used in multiple studies to measure female – male power construct and male partner condom use in sexual relationships ensuring for construct validity. This questionnaire was administered via online SurveyMonkey in a single session. Therefore, risks to internal validity were minimal as compare to other experimental designs (Chambliss & Schutt, 2016; Schallock, Gomez, Verdugo, & Claes, 2017).

Ethical Procedures

Ethics and ethical procedures that protects the participants is an essential part of any research study. The researcher must ensure that informed consent is provided by the participants, there is no harm done to the participant, and there is respect for participant anonymity, confidentiality, and privacy (Fouka & Mantzorou, 2011). Walden University has established ethical standards that guided the study and ensured that the research complied with these ethical standards which included completion of the application and request for IRB review and approval before collection of any data (IRB # 05-16-19-0452981). I completed all training required by the IRB for human research study. I ensured that informed consent was explained and that participants demonstrated understanding of procedures such as withdrawal from the study if they chose to. Participants were informed that this was a completely anonymous process to maintain participants' identity and there were no contacts made to participants. Data collected

from the survey were password protected and stored on an external hard drive in a fireproof safe repository and will be destroyed after as per research standards.

Summary

In Chapter 3, I provided a discussion on key points to include the research methodology and rationale for this quantitative correlational research design with a description of sampling procedures, sampling size, participants' recruitment, survey design, instrument, data analysis plan, and threats to validity. The purpose of this study was to examine whether there was a relationship between MPIPV and women demands for condom use between married or cohabitating heterosexual couples in Liberia. Furthermore, I described how this study provided the data needed to show a relationship between MPIPV and female demands for condom use. I described the ethical procedures taken to ensure ethical treatment of the participants in this chapter. I presented the research findings in Chapter 4.

Chapter 4: Results

Introduction

Women in the sub-Saharan region are more severely impacted with a high HIV prevalence and incidence rates accounting for 59% of adults living with HIV (AVERT, n.d). The literature has consistently shown that women and girls are especially vulnerable to HIV infection due to social, cultural, and economic inequality contributing to the gender power imbalance and gender disparities (Sovran, 2013). These factors have been shown to impact women's decision making ability to control their own sexuality, rendering women particularly vulnerable to MPIPv and in turn forcing women into high-risk sexual situations and exposure to contracting HIV (Durevall & Lindskog, 2015; Shi, Kouyoumdjian, & Dushoff, 2013; Ramjee & Daniels, 2013; Watts & Seeley, 2014).

The purpose of this quantitative correlational study was to determine whether there was a relationship between female partner demands for condom use and MPIPv, whether history of MPIPv had a relationship to female partner decreased demands for male partner condom, and to determine the relationship between the risk factors of age, education level, socioeconomic status (employment) and women's demands for male partner condom use in women experiencing history of MPIPv in opposite sex cohabitating or married couples.

I explored three research questions related to the relationship between women's demands for male partner condom use and risk for MPIPv, the relationship between history of MPIPv and female partner decreased demands for male partner condom use, and the relationship between the risk factors of age, education level, socioeconomic status

(employment) and women's demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

In this chapter, the data collected are presented and important findings of descriptive statistics and regression analysis are discussed to determine whether a relationship exists between the following: (a) demands for male partner condom use and risk for MPIPV, (b) history of MPIPV and demands for male partner condom use, and (c) demands of male partner condom use when controlling for the demographic variables of history of MPIPV, age, education level and employment. This chapter contains a full discussion of the data collection and analysis, research tool used, presentation of the respondents' demographic details, and actual recruitment and response rates. In addition, the chapter presents a discussion of descriptive statistical test results, frequency tables, regression analysis, and assumptions in relation to the research questions and hypotheses.

Data Collection

Women meeting the research eligibility requirements were invited to participate in this study about MPIPV related to women demands for male partner condom use. Participants were recruited via the Internet over a 3-month period (April 2019 – July 2019) using social media for advertisement. The Internet advertisement contained information about the study and the listed eligibility screening question requirements with directions to access the survey link. Data collection took place using a SurveyMonkey administered survey. All the participants were recruited via the Internet and social media platforms, which may affect the generalizability of the results from this study. The inclusion criteria contained screening questions focused on: (a) ability to

complete online survey in English, (b) if participant is a heterosexual woman between the ages of 18-35, (c) married or in a co-habiting relationship with male partner, (d) living with a husband or male partner, (e) and is a resident of Liberia. The participants consisted of women meeting the inclusion criteria. A planned sample size of 314 was used to measure the effect of the predictors on women demands for male partner condom use. I conducted a G* power analysis employing a small effect size $f = 0.20$ ($f^2 = 0.04$), an alpha value of α -level=0.05, and statistical power ($1 - \beta$ err prob) =0.95 for multiple regression models requiring a minimum sample size of 314 participants. A nonprobability purposive homogeneous sampling data collection technique was used from the targeted population members who were available to participate in the study.

A total of 352 participants consented to and responded to the study, and I ultimately used the data from 352 participants. When participants accessed the survey link, they were presented with the survey which was organized to begin with the consent form. The consent form outlined the terms, conditions, and statement of consent of the survey, requiring interested participants to read and either volunteer or decline the invitation to participate in the study. The SurveyMonkey link led to the informed consent, demographic questionnaire, and the survey instrument. Only participants who clicked the “agree” button on the consent form had access to the demographic questionnaire. Additionally, participants joined the survey voluntarily and implied consent by participating in the survey after reading the screening questions and the informed consent document which accompanied the survey material distributed by SurveyMonkey. This included information on the study purpose and procedures, role of the researcher and

participants, and the directions for participants to withdraw from the study. The participants had the option to withdraw from the survey at any time during the survey. After the participants read the informed consent and agreed to participate, they were prompted to proceed to the self-report demographic questionnaire used to collect participants' age, educational level, socioeconomic status (employment), and history of MPIP.

Upon completion of the demographic questions, participants were prompted to proceed to the next phase of the study survey instrument consisting of 23 questions. Participants were prompted to click a "finish" button which revealed debriefing information. The study participants received no reimbursement for participation.

Participants were recruited using the Internet as a research tool and not from an organizational setting, as the Internet is an efficient and cost-effective tool for recruiting a large number of participants (Hays, Liu, & Kapteyn, 2015). Using the Internet was helpful with finding a large convenience sample at no cost and within the timeframe of 3 months of data collection. This study was not affected by difficulties obtaining a representative sample, limitations collecting data online, low response rate, or problems with technology. Using women who met the inclusion criteria of ability to complete online survey in English, between the ages of 18-35, married or in a co-habiting relationship with male partner, living with a husband or male partner, and residing in the geographic location as participants, provided a wide and diverse set of characteristics and cultural norms. Additionally, the participants were familiar and competent users of the Internet and were representative of the desired population.

Research Tool

I used the SRPS to measure the concept of power in relationship control and decision-making dominance as it related to exploring the relationship between female demands for condom use and MPIP. The SRPS possesses good internal reliability and with an overall Cronbach's $\alpha = 0.84$ and predictive and construct validity (Pulerwitz et al., 2000). The two subscales have distinct response sets with the 15 item RCS ($\alpha=0.85$) and the eight item DMDS ($\alpha= 0.63$) with good to fair internal consistency for both subscales (Pulerwitz, Gortmaker, & DeJong, 2000). The 23-item scale comprises two subscales: constructs of relationship power in the RCS and relationship dominance and decision-making in the DMDS. Questions in the survey instrument aligned with commitment to the relationship, ability to negotiate condom use, and decision-making capacity within the relationship. Each of the 15 items in the RCS subscale were scored on a 4-point Likert scale, with 1 = strongly agree, 2 = agree, 3 = disagree, and 4 = strongly disagree. Each of the eight items in the DMDS subscale were constructed and scored to measure the balance of decision-making power on different topics with participants selecting between "your partner has more power," "both of you have equal power," and "you have more power" with higher scores indicating higher relationship power for the participant. Some items were reverse scored if high scores reflected low sexual relationship power for the participant.

Data screening was conducted on the full sample prior to analyses to determine a final sample size. The data were checked, and 39 participants were removed for not completing the survey questionnaire. Therefore, the final analysis was conducted on a

sample size of 313 participants. A reliability analysis was conducted on the scales using the Cronbach's alpha statistics and the analyses were checked for outliers. Descriptive statistics were performed to determine trends in the demographic characteristics including frequencies and percentages. Mean and standard deviations were calculated for the RCS and DMDS subscales. Finally, the research questions were answered using linear regression before using the data in the analysis, and several diagnostic checks and tests were conducted to determine the statistical distribution of the variables.

Reliability. The reliability test, which is concerned with whether a scale indicates that it is free from random error, was conducted prior to analyses. The reliability of a measure indicates the extent to which it is without bias in ensuring consistent measurement across time and various items in the instruments. The reliability of the scales instrument used in this study was tested through the Cronbach's alpha coefficient test. Cronbach's alpha indicates whether survey questions are internally consistent. Cronbach's alpha coefficient for each variable was used to measure the internal consistency of the scales adopted in the survey. The reliability test results of the two subscales used in my data analysis are presented in Tables 1 and 2. Cronbach's alpha coefficient was calculated for the DMDS subscale used to measure demands for condom use, consisting of DMDS1 = "Who usually has more say about whether you use condoms," DMDS2 = "Who usually has more say about whose friends to go out with," DMDS3 = "Who usually has more say about whether you have sex," DMDS4 = "Who usually has more say about what you do together," DMDS5 = "Who usually has more say about how often you see one another," DMDS6 = "Who usually has more say about when

you talk about serious things,” DMDS7 = “Who usually has more say about what types of sexual acts you do,” and DMDS8 = “In general, who do you think has more power in your relationship.” The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2016) where $\alpha > .9$ excellent, $> .8$ good, $> .7$ acceptable, $> .6$ questionable, $> .5$ poor, and $\leq .5$ unacceptable. The items for DMDS had a Cronbach's alpha coefficient of 0.64, indicating good internal consistency that is consistent with the Cronbach alpha reported by the developers. All items on the DMDS were used and none deleted to assess for increase in result with individual items potentially contributing to reliability. Table 1 presents the results of the reliability analysis for DMDS.

Table 1

Cronbach Reliability Statistics for DMDS (Demands)

Scale	No. of Items	α	Lower Bound	Upper Bound
DMDS	8	0.64	0.58	0.70

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Cronbach's alpha coefficient was also calculated for the RCS overall scale, consisting of 15 items RCS1 = “If I asked my partner to use a condom, he would get violent,” RCS2 = “If I asked my partner to use a condom, he would get angry,” RCS3 = “Most of the time, we do what my partner wants to do,” RCS4 = “My partner won't let me wear certain things,” RCS5 = “When my partner and I are together, I'm pretty quiet,” RCS6 = “my partner has more say than I do about important decisions that affect us,” RCS7 = “My partner tells me who I can spend time with,” RCS8 = “If I asked my partner to use a condom, he would think I'm having sex with other people,” RCS9 = “I feel trapped or

stuck in our relationship,” RCS10 = “My partner does what he wants, even if I do not want him to,” RCS11 = “I am more committed to our relationship than my partner is,” RCS12 = “When my partner and I disagree, he gets his way most of the time,” RCS13 = “my partner gets more out of our relationship than I do,” RCS14 = “My partner always wants to know where I am,” and RCS15 = “My partner might be having sex with someone else.” The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2016) where $> .9$ excellent, $> .8$ good, $> .7$ acceptable, $> .6$ questionable, $> .5$ poor, and $\leq .5$ unacceptable. The items for RCS overall had a Cronbach's alpha coefficient of 0.66, indicating marginal internal consistency. Table 2 presents the results of the reliability analysis.

Table 2

Cronbach Reliability Statistics for RCS Overall

Scale	No. of Items	α	Lower Bound	Upper Bound
RCS overall	15	0.66	0.61	0.72

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

For my study, I split the RCS into two subscales with four out 15 items focused on calculating risk for MPIPV in RQ1, and 11 out 15 items calculating for history of MPIPV in RQ2. Cronbach's alpha coefficient was calculated for risk of MPIPV scale using four out 15 items to measure respondent's ability to assert personal desires and, in this case, demands for condom use. The four question items aligned with the risk for MPIPV category indicating that violence had not occurred, and the potential likelihood of intimate partner violence occurring pertaining to female demands for male partner condom use.

Additionally, Cronbach's alpha coefficient was calculated for history of MPIPV scale using 11 out of 15 items to measure a lack of empowerment and relationship control in respondent's ability to assert demands for male partner condom use with established history of MPIPV, that is, where intimate partner violence had occurred.

To measure risk for MPIPV, Cronbach's alpha coefficient was calculated using four out of 11 items on the RCS subscale consisting of RCS2 = "If I asked my partner to use a condom, he would get angry," RCS3 = "Most of the time, we do what my partner wants to do," RCS5 = "When my partner and I are together, I'm pretty quiet," and RCS8 = "If I asked my partner to use a condom, he would think I'm having sex with other people."

The items for risk for MPIPV had a Cronbach's alpha coefficient of 0.45, indicating unacceptable reliability. Not observing high reliability with this measure is to be expected since a part of the scale with selected items from the RCS were used to measure a form of risk for MPIPV and others for measuring history of MPIPV. Table 3 presents the results of the reliability analysis for risk for MPIPV.

Table 3

Cronbach's Reliability Statistics for Risk

Scale	No. of Items	α	Lower Bound	Upper Bound
Risk	4	0.45	0.35	0.55

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Cronbach's alpha coefficient was also calculated for history of MPIPV using 11 out of 15 items in the RCS consisting of RCS1 = "If I asked my partner to use a condom, he would get angry," RCS4 = "My partner won't let me wear certain things," RCS6 = "My partner has more say than I do about important decisions that affect us," RCS7 = "My partner

tells me who I can spend time with,” RCS9 = “I feel trapped or stuck in our relationship,” RCS10 = “My partner does what he wants, even if I do not want him to,” RCS11 = “I am more committed to our relationship than my partner is,” RCS12 = “When my partner and I disagree, he gets his way most of the time,” RCS13 = “My partner gets more out of our relationship than I do,” RCS14 = “My partner always wants to know where I am,” and RCS15 = “My partner might be having sex with someone else.” The items for history of MPIPV had a Cronbach's alpha coefficient of 0.54, indicating poor reliability. Not observing high reliability with this measure is to be expected because a part of the scale with selected items from the RCS were used to measure a history of MPIPV and others for measuring a form of risk for MPIPV. Table 4 presents the results of the reliability analysis history of MPIPV.

Table 4

Cronbach's Reliability Statistics for History of MPIPV

Scale	No. of Items	α	Lower Bound	Upper Bound
History	11	0.54	0.47	0.62

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Univariate outliers were examined using composite scores for the following variables, female demands for male partner condom use, risk for MPIPV, and history of MPIPV. An outlier was defined as any value which falls outside the range of +/- 3.29 standard deviations from the mean (Tabachnick & Fidell, 2013). There were no outliers present in demands for condom use and risk for MPIPV, one present in history of MPIPV(history_r.outliers), and participant 229 showed a higher score on history than the rest of the respondents. Narrative indicator of the outlier version removed is reported as

history of MPIPv in further tables. Table 5 presents the number of outliers in each variable.

Table 5

Number of outliers detected for Demands, Risk, and History

Variable	No. of Outliers
Demands	0
Risk	0
History	1

Results

Descriptive Statistics

This section presents the descriptive statistics of the demographic characteristics used in exploring the relationship between the demographic covariates of age, education level, socioeconomic status (employment), and history of MPIPv. Descriptive statistics were obtained including frequencies, percentages, means and standard deviations of the scales. As part of the inclusion criteria, all participants were required to be heterosexual women between the ages of 18-35, residing in Liberia, married or in a co-habiting relationship, and living with the husband or male partner. Age was collected in the following categories; under 20, 21-25, 26-30, and 31-35. The most frequently indicated categories of age, education (high school diploma), and socioeconomic status (self-employed), are presented in the frequencies and percentages results in Table 6.

Table 6

Frequency Table for Nominal (age, employment) and Ordinal (education) Variables

Variable	<i>n</i>	%
Age		

		82
Under 20	65	20.77
21-25	133	42.49
26-30	72	23.00
31-35	43	13.74
Missing	0	0
Education		
Less than high school	57	18.21
High school diploma	118	37.70
Trade technical or vocational	83	26.52
Some college	38	12.14
College graduate	17	5.43
Missing	0	0
Employed		
Employed full time	41	13.10
Employed part time	69	22.04
Self-employed full time	98	31.31
Self-employed part time	63	20.13
Unemployed	42	13.42
Missing	0	0

Note. Due to rounding errors, percentages may not equal 100%.

The frequencies and percentages were calculated for MPIPV violent act (VA) based on the participants selection indicating that they have been somehow insulted, belittled, threatened verbally, scared, or made to feel bad, pulled, punched, thrown, choked, burned, and other. Table 7 shows that most of the respondents had exposure to varying forms of MPIPV.

Table 7

Frequency Table for Nominal Variables (Violent Acts)

Variable	<i>n</i>	%
Insult		
Yes	73	23.32
Missing	240	76.68
Belittle		

			83
Yes	66		21.09
Missing	247		78.91
Scare			
Yes	70		22.36
Missing	243		77.64
Pulled			
Yes	50		15.97
Missing	263		84.03
Punched			
Yes	17		5.43
Missing	296		94.57
Thrown			
Yes	16		5.11
Missing	297		94.89
Choked			
Yes	10		3.19
Missing	303		96.81
Burned			
Yes	10		3.19
Missing	303		96.81
Other			
Yes	4		1.28
Missing	309		98.72

Note. Due to rounding errors, percentages may not equal 100%.

Statistics Table for Variables

The normality of the sample is construed from the values of the Skewness and Kurtosis tests. According to Sekaran (2003), values that fall within the range of -2 to +2 for the Skewness test, and -3 to +3 for the Kurtosis test are considered within the normal range . When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. Conversely, when the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its

tendency to produce outliers (Westfall & Henning, 2013). The summary statistics were calculated for women demands for male partner condom use, risk for and history of MPIPV (history_r.outliers). Demands were measured using the DMDS items on a 1-3 scale with 1 = “Your partner,” 2 = “Both of you,” and 3 = “You.” This related to decision making aspect about who had more “say” in the relationship with higher scores on demands for male partner condom use indicating respondent had more “say” in the decision-making in the relationship, and lower scores indicating male partner had more “say” in the decision-making. History of and risk for MPIPV were measure on a 1-4 scale, where 1 = “Strongly agree,” 2 = “Agree,” 3 = “Disagree,” and 4 = “Strongly disagree.” The results for women demands for male partner condom use had an average of 1.67, indicating that on average the respondents indicated that their male partners had more power and “say” in the decision-making in the relationship. The results for history of MPIPV had an average of 2.47 indicating that on average respondents indicated greater history of MPIPV tendencies. The results for risk for MPIPV had an average of 2.52 indicating that on average respondents indicated greater risk for MPIPV tendencies. Mean and standard deviation of resilience among the variables indicated that relationship existed between female partner demands for condom use, history of MPIPV, and risk for MPIPV. Details of the summary statistics are presented in Table 8.

Table 8

Summary Statistics Table for Interval and Ratio Variables

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	Min	Max	Skewness	Kurtosis
Demands	1.67	0.30	312	1.00	2.38	-0.75	0.06
History of MPIPV	2.47	0.41	311	1.18	3.82	0.10	0.42
Risk	2.52	0.63	313	1.00	4.00	-0.07	-0.30

Note. '-' denotes the sample size is too small to calculate statistic.

Research Question 1

What is the relationship between women's demands for male partner condom use to risk for MPIP, that is, if relationship exists between female partner demands for condom use and risk for MPIP in heterosexual cohabitating or married couples in West Africa?

H₀: There is no relationship between women's demands for male partner condom use to risk for MPIP in heterosexual cohabitating or married couples West Africa.

H₁: There is a relationship between women's demands for male partner condom use to risk for MPIP in heterosexual cohabitating or married couples West Africa.

To address research question one, I conducted a multiple linear regression on constructs of the DMDS to determine whether a relationship existed between women demands for male partner condom use (predictor variable) to risk for MPIP (outcome variable). A multiple linear regression analysis was conducted using the individual DMDS items to assess whether DMDS1, DMDS2, DMDS3, DMDS4, DMDS5, DMDS6, DMDS7, and DMDS8 selected as individual item predictors had a significant relationship to risk for MPIP. The assumptions of normality and homoscedasticity were conducted as presented in the tables. In addition, multicollinearity using variance inflation factor were conducted to ensure that the multiple predictor variables were not highly related to each other.

Assumptions. The assumption of normality was assessed by plotting the quantiles of the model residuals against the quantiles of a Chi-square distribution, also called a Q-

Q scatterplot (DeCarlo, 1997). For the assumption of normality to be met, the quantiles of the residuals must not strongly deviate from the theoretical quantiles. Strong deviations could indicate that the parameter estimates are unreliable. From the Q-Q scatterplot all the points are positioned in a reasonably diagonal line from left to top right and showed that there is no indication of a major deviation from normality. The assumption was met as data followed the normality line as indicated in Figure 3 which presents a Q-Q scatterplot of the model residuals.

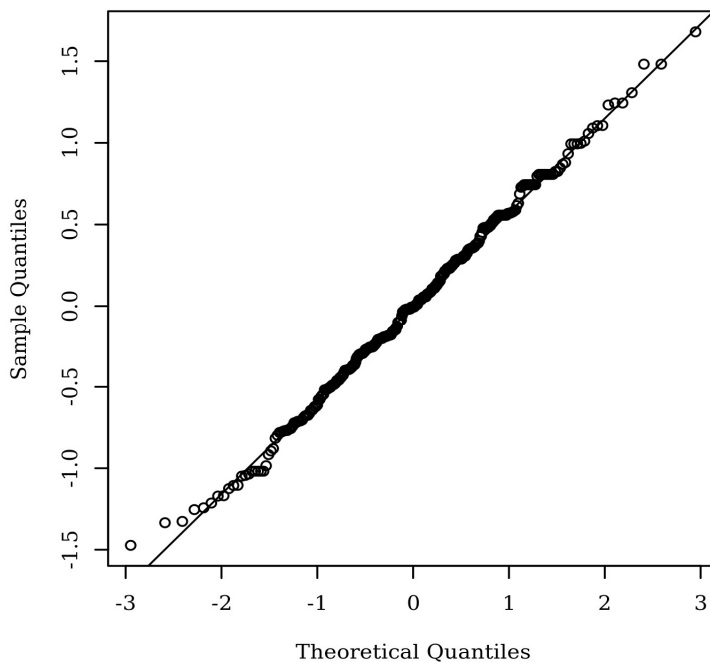


Figure 3. Q-Q Scatterplot for Normality of the Residuals for the Regression Model between demands for condom use and risk for MPIPV

Homoscedasticity. The assumption of homoscedasticity was evaluated by plotting the residuals against the predicted values (Bates et al., 2014; Field, 2013; Osborne & Walters, 2002). The assumption of homoscedasticity is met if the points

appear randomly distributed with a mean of zero and no apparent curvature. The assumption was met because the data were randomly distributed in a rectangular form with a mean of zero, and there was no distinguishable pattern and no apparent curvature which indicates this study meets the assumption of homoscedasticity. Figure 4 presents a scatterplot of predicted values and model residuals which indicates this study meets the assumption of homoscedasticity.

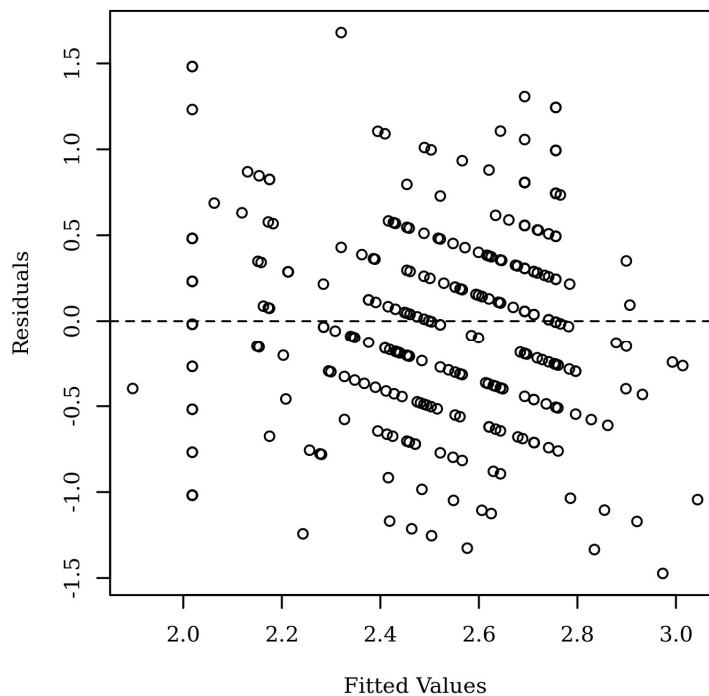


Figure 4. Residuals scatterplot testing homoscedasticity between demands for condom use and risk for MPIP

Multicollinearity. Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity or correlation between predictors (independent variables).

High VIFs indicate increased effects of multicollinearity in the model indicating less

reliable regression results. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10 indicating decrease effects of multicollinearity in the model which indicates more reliable regression results. Table 9 presents the VIF for each predictor in the model.

Table 9

Variance Inflation Factors for Demands Scale Items DMDS1, DMDS2, DMDS3, DMDS4, DMDS5, DMDS6, DMDS7, and DMDS8

Variable	VIF
DMDS1	1.18
DMDS2	1.21
DMDS3	1.17
DMDS4	1.09
DMDS5	1.15
DMDS6	1.12
DMDS7	1.27
DMDS8	1.25

Outliers. To identify influential points or outliers, studentized residuals were calculated by dividing the model residuals by the estimated residual standard deviation and the absolute values were plotted against the observation numbers (Field, 2013; Stevens, 2009). An observation with a studentized residual greater than 3.12 in absolute value, the 0.999 quartile of a t distribution with 311 degrees of freedom, was considered to have significant influence on the results of the model. Figure 5 presents the studentized residuals plot of the observations. Observation numbers are specified next to each point with a studentized residual greater than 3.12.

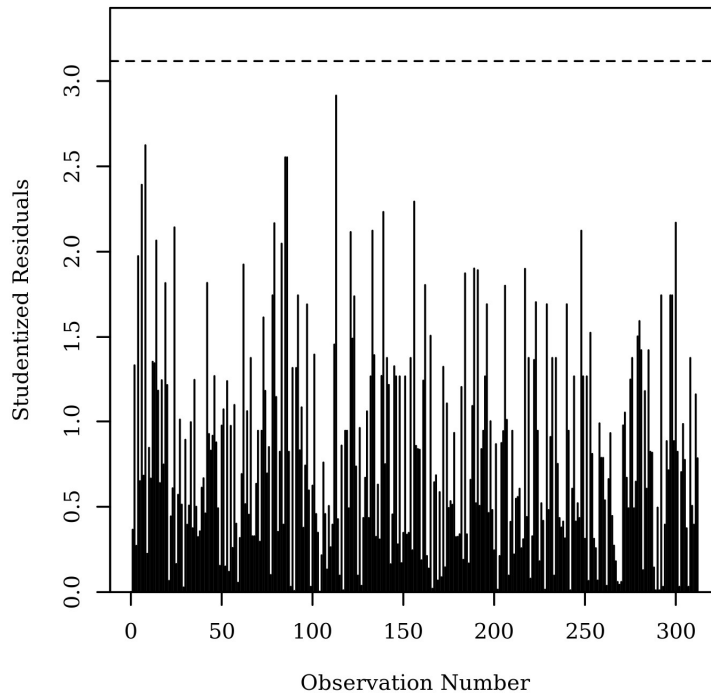


Figure 5. Studentized residuals plot for outlier detection

Autocorrelation. A Durbin-Watson test was conducted to assess the degree of autocorrelation among the residuals. The result was significant, $DW = 1.44$, $p < .001$ which suggests the results may be influenced by autocorrelation among residuals. For this study, all observations were independent of each other and one might expect participants from nested or nearby geographic and regional locations to provide more similar answers to each other than people who are more geographically distant. Thus, autocorrelation can occur if observations are dependent in aspects such as geographic location other than time.

Results. The results of the multiple linear regression model were significant, $F(8,303) = 6.52$, $p < .001$, $R^2 = 0.15$, indicating that approximately 15% of the variance

in risk is explainable by DMDS items used to measure risk for MPIPv: DMDS1-8. Both DMDS 1 and DMDS 5 were significant predictors of risk. DMDS1 “Who usually has more say about whether you use condoms,” significantly predicted risk for MPIPv, which suggests that women demands for male partner condom use significantly predicted risk for MPIPv. This indicates that on average, a one-unit increase of DMDS1 will increase the value of risk for MPIPv by 0.28 units. DMDS5 “Who usually has more say about how often you see one another,” significantly predicted risk for MPIPv, which indicates that on average, a one-unit increase of DMDS5 will increase the value of risk for MPIPv by 0.19 units. DMDS2, DMDS4 as well as DMDS 6-8 did not significantly predict risk for MPIPv. Overall, there was a positive relationship between the predictor variable, women demands for male partner condom use and the outcome variable, risk for MPIPv demonstrating that demands for condom use significantly predicted risk for MPIPv. Conversely, the positive coefficient indicated that as respondents tended to feel that they had more “say” in decision-making, their risk for violence was lower. Hence, the null hypothesis was rejected meaning that there was a significant relationship between women’s demands for male partner condom use to risk for MPIPv in heterosexual cohabitating or married couples in West Africa. Table 10 summarizes the results of the regression model.

Table 10

Results for Linear Regression with Demands Scale Items DMDS1, DMDS2, DMDS3, DMDS4, DMDS5, DMDS6, DMDS7, and DMDS8 Predicting Risk for MPIPv

Variable	<i>B</i>	<i>SE</i>	CI	β	<i>t</i>	<i>p</i>
(Intercept)	1.34	0.19	[0.97, 1.72]	0.00	7.05	< .001
DMDS1	0.28	0.07	[0.14, 0.42]	0.23	3.98	< .001

DMDS2	0.14	0.07	[-0.00, 0.27]	0.11	1.94	.053
DMDS3	0.04	0.06	[-0.08, 0.17]	0.04	0.69	.489
DMDS4	0.11	0.06	[-0.01, 0.24]	0.10	1.79	.074
DMDS5	0.19	0.06	[0.07, 0.31]	0.17	3.04	.003
DMDS6	-0.06	0.06	[-0.17, 0.05]	-0.06	-1.13	.259
DMDS7	0.01	0.06	[-0.11, 0.14]	0.01	0.22	.823
DMDS8	-0.04	0.07	[-0.17, 0.09]	-0.04	-0.61	.540

Note. CI is at the 95% confidence level. Results: $F(8,303) = 6.52, p < .001, R^2 = 0.15$
 Unstandardized Regression Equation: Risk = 1.34 + 0.28*DMDS1 + 0.14*DMDS2 +
 0.04*DMDS3 + 0.11*DMDS4 + 0.19*DMDS5 - 0.06*DMDS6 + 0.01*DMDS7 - 0.04*DMDS8

Research Question 2

What is the relationship between history of MPIPV to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa?

H₀2: There is no relationship between history of MPIPV to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

H₁2: There is relationship between history of MPIPV to female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa.

To address research question two, a multiple linear regression analysis was conducted to assess whether history of MPIPV (predictor) using the RCS selected items, RCS1, RCS4, RCS6, RCS7, RCS9, RC10, RCS11, RCS12, RCS13, RCS14, and RCS15 significantly predicted women demands for male partner condom use (outcome). The assumptions of normality, homoscedasticity, and multicollinearity variance inflation factor were conducted as presented below.

Assumptions. The assumption of normality was assessed by plotting the quantiles of the model residuals against the quantiles of a Chi-square distribution, also called a Q-Q scatterplot (DeCarlo, 1997). For the assumption of normality to be met, the quantiles of the residuals must not strongly deviate from the theoretical quantiles. Strong deviations could indicate that the parameter estimates are unreliable. From the Q-Q scatterplot all the points are positioned in a reasonably diagonal line from left to top right and showed that there is no indication of a major deviation from normality. The assumption was met as data followed the normality line as indicated in Figure 6 which presents a Q-Q scatterplot of the model residuals.

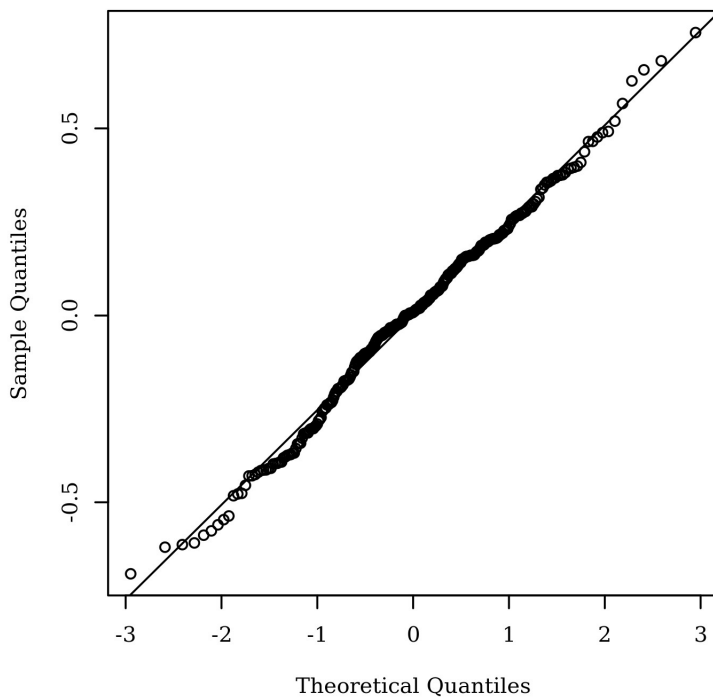


Figure 6. Q-Q scatterplot for normality of the residuals for the regression model between history of MPIPv and women demands for male partner condom use.

Homoscedasticity. Homoscedasticity was evaluated by plotting the residuals against the predicted values (Bates et al., 2014; Field, 2013; Osborne & Walters, 2002). The assumption of homoscedasticity is met if the points appear randomly distributed with a mean of zero and no apparent curvature. Figure 7 presents a scatterplot of predicted values and model residuals which are randomly distributed with a mean of zero and no apparent curvature which indicates this study meets the assumption of homoscedasticity. Figure 7 presents a scatterplot of predicted values and model residuals between history of MPIPv and women demands for male partner condom use.

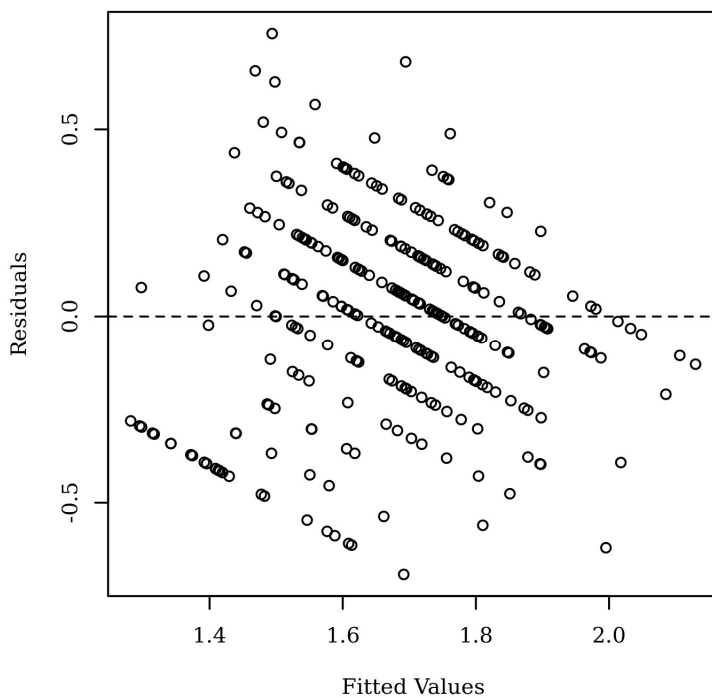


Figure 7. Residuals scatterplot testing homoscedasticity between history of MPIPV and women demands for male partner condom use.

Multicollinearity. VIFs were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10 indicating decrease effects of multicollinearity in the model which indicates more reliable regression results. Table 11 presents the VIF for each predictor in the model.

Table 11

Variance Inflation Factors for RCS1, RCS4, RCS6, RCS7, RCS9, RCS10, RCS11, RCS12, RCS13, RCS14, and RCS15

Variable	VIF
RCS1	1.15
RCS4	1.07
RCS6	1.21
RCS7	1.14
RCS9	1.15
RCS10	1.18
RCS11	1.07
RCS12	1.12
RCS13	1.11
RCS14	1.24
RCS15	1.21

Outliers. To identify influential points, studentized residuals were calculated and the absolute values were plotted against the observation numbers (Field, 2013; Stevens, 2009). Studentized residuals are calculated by dividing the model residuals by the estimated residual standard deviation. An observation with a studentized residual greater

than 3.12 in absolute value, the 0.999 quartile of a t distribution with 311 degrees of freedom, was considered to have significant influence on the results of the model. Figure 8 presents the Studentized residuals plot of the observations. Observation numbers are specified next to each point with a studentized residual greater than 3.12.

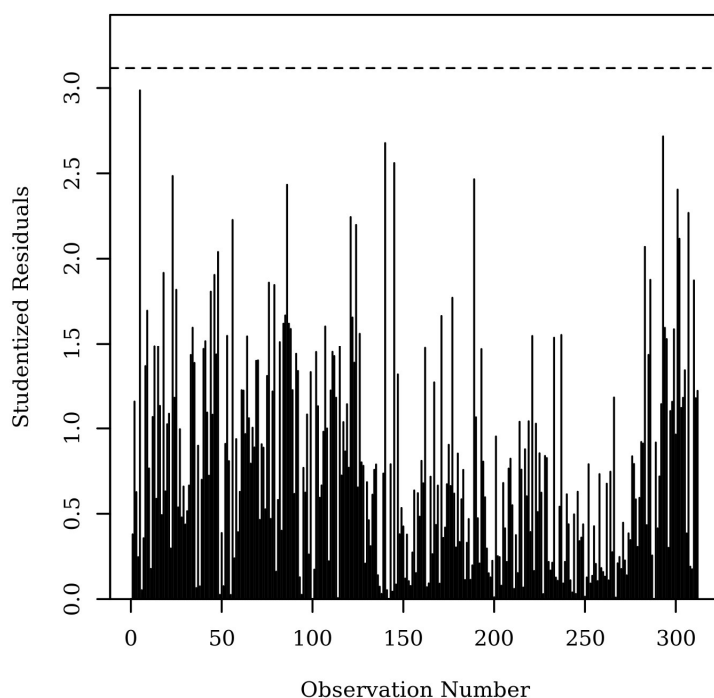


Figure 8. Studentized residuals plot for outlier detection

Autocorrelation. A Durbin-Watson test was conducted to assess the degree of autocorrelation among the residuals. The result was significant, $DW = 1.17$, $p < .001$, suggesting the results may be influenced by autocorrelation among residuals. As stated previously, one might expect participants from nearby geographic locations to provide more similar answers to each other than people who are more geographically distant.

Thus, autocorrelation can occur if observations are dependent in aspects such as geographic location other than time.

Results. The results of the linear regression model were significant, $F(11,300) = 10.26$, $p < .001$, $R^2 = 0.27$, indicating that approximately 27% of the variance in women demands for male partner condom use is explainable by history of MPIP. This suggests that history of MPIP significantly predicted demands for male partner condom use. RCS1, RCS9-13, and RCS15 did not significantly predict demands however, RCS6, RCS7, and RCS14 significantly predicted demands. RCS4 “My partner won’t let me wear certain things,” indicated that on average, a one-unit increase of RCS4 will increase the value of demands by 0.08 units. Additionally, RCS6 “My partner has more say than I do about important decisions that affect us” indicated that on average, a one-unit increase of RCS6 will increase the value of demands by 0.04 units. RCS7 “My partner tells me who I can spend time with” indicated that on average, a one-unit increase of RCS7 will increase the value of demands by 0.04 units. Finally, RCS14 “My partner always wants to know where I am,” indicated that on average, a one-unit increase of RCS14 will increase the value of demands by 0.07 units. Overall, the regression analysis showed that there was a positive relationship between the history of MPIP as the predictor variable and women decreased demands for male partner condom use demonstrating that history of MPIP significantly predicted demands. Hence, the null hypothesis was rejected meaning that there was a significant relationship between history of MPIP and women decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa. Table 12 summarizes the results of the regression model.

Table 12

Results for Linear Regression with History of MPIP Scale Items RCS1, RCS4, RCS6, RCS7, RCS9, RCS10, RCS11, RCS12, RCS13, RCS14, and RCS15 predicting Demands

Variable	<i>B</i>	<i>SE</i>	CI	β	<i>t</i>	<i>p</i>
(Intercept)	1.09	0.09	[0.91, 1.28]	0.00	11.84	< .001
RCS1	0.02	0.02	[-0.01, 0.05]	0.06	1.18	.238
RCS4	0.08	0.01	[0.06, 0.11]	0.31	6.09	< .001
RCS6	0.04	0.02	[0.01, 0.07]	0.15	2.68	.008
RCS7	0.04	0.02	[0.00, 0.07]	0.11	2.18	.030
RCS9	0.00	0.02	[-0.03, 0.03]	0.01	0.16	.875
RCS10	0.00	0.02	[-0.03, 0.03]	0.01	0.19	.853
RCS11	-0.02	0.02	[-0.05, 0.01]	-0.07	-1.28	.202
RCS12	0.02	0.02	[-0.01, 0.05]	0.06	1.09	.279
RCS13	0.02	0.02	[-0.02, 0.05]	0.05	1.05	.296
RCS14	0.07	0.02	[0.04, 0.11]	0.21	3.91	< .001
RCS15	-0.02	0.02	[-0.05, 0.01]	-0.08	-1.39	.166

Note. CI is at the 95% confidence level. Results: $F(11,300) = 10.26, p < .001, R^2 = 0.27$

Unstandardized Regression Equation: Demands = 1.09 + 0.02*RCS1 + 0.08*RCS4 + 0.04*RCS6 + 0.04*RCS7 + 0.00*RCS9 + 0.00*RCS10 - 0.02*RCS11 + 0.02*RCS12 + 0.02*RCS13 + 0.07*RCS14 - 0.02*RCS15

Research Question 3

What is the relationship between the risk factors of age, education level, socioeconomic status (employment) to women's demands for male partner condom use in women experiencing MPIP in heterosexual cohabitating or married couples in West Africa?

H₀₃: There is no relationship between the risk factors of age, education level, socioeconomic status (employment) to women's demands for male partner condom use in women experiencing MPIP in heterosexual cohabitating or married couples in West Africa.

H₁₃: There is a relationship between the risk factors of age, education level, socioeconomic status (employment) to women's demands for male partner condom use in

women experiencing MPIPv in heterosexual cohabitating or married couples in West Africa.

To address RQ3, a multiple linear regression analysis was conducted to assess whether history of MPIPv using the RCS items RCS1, RCS4, RCS6, RCS7, RCS9, RCS10, RCS11, RCS12, RCS13, RCS14, RCS15, age, education, and socioeconomic status (employment) significantly predicted women demands for male partner condom use. The assumptions of normality, homoscedasticity, and multicollinearity variance inflation factor were conducted as presented below.

Assumptions. The assumption of normality was assessed by plotting the quantiles of the model residuals against the quantiles of a Chi-square distribution, also called a Q-Q scatterplot (DeCarlo, 1997). For the assumption of normality to be met, the quantiles of the residuals must not strongly deviate from the theoretical quantiles. Strong deviations could indicate that the parameter estimates are unreliable. From the Q-Q scatterplot all the points are positioned in a reasonably diagonal line from left to top right and showed that there is no indication of a major deviation from normality. The assumption was met as data followed the normality line. Figure 9 presents a Q-Q scatterplot of the model residuals.

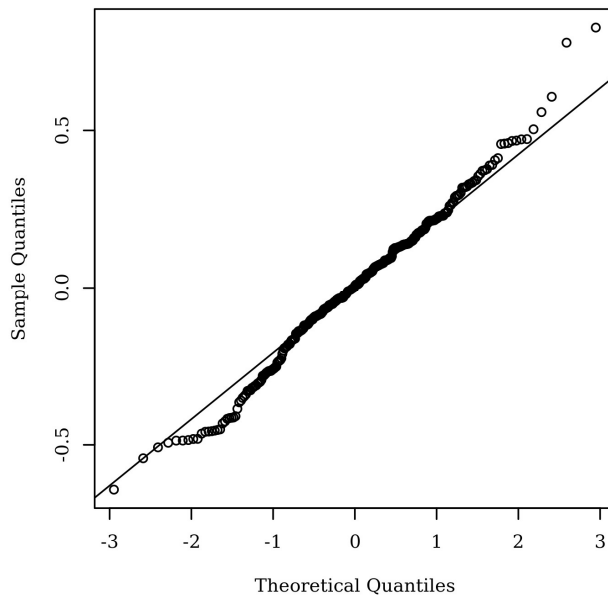


Figure 9. Q-Q scatterplot for normality of the residuals for the regression model between demographic variables of history of MPIPv, age, education, employment and demands.

Homoscedasticity. Homoscedasticity was evaluated by plotting the residuals against the predicted values (Bates et al., 2014; Field, 2013; Osborne & Walters, 2002). The assumption of homoscedasticity is met if the points appear randomly distributed with a mean of zero and no apparent curvature. The assumption of homoscedasticity is met if the points appear randomly distributed with a mean of zero and no apparent curvature. The assumption was met because the data were randomly distributed with a mean of zero, and there was no distinguishable pattern and no apparent curvature which indicates this study meets the assumption of homoscedasticity. Figure 10 presents a scatterplot of predicted values and model residuals between the demographic variables of history of MPIPv, age, education, employment and women demands for male partner condom use.

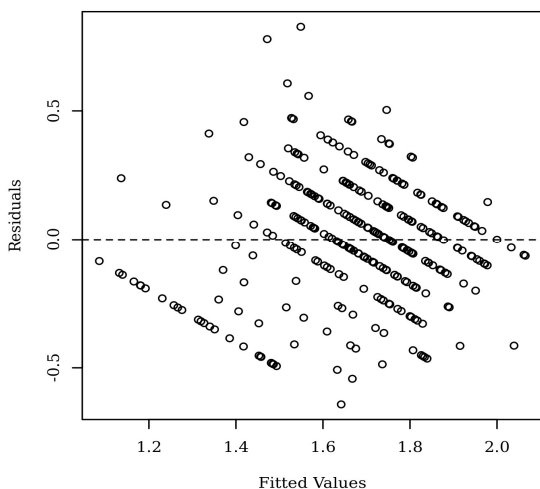


Figure 10. Residuals scatterplot testing homoscedasticity between demographic variables and women demands for male partner condom use.

Multicollinearity. VIFs were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10 indicating decrease effects of multicollinearity in the model which indicates more reliable regression results Table 13 presents the VIF for each predictor in the model.

Table 13

Variance Inflation Factors for RCS1, RCS4, RCS6, RCS7, RCS9, RCS10, RCS11, RCF12, RCS13, RCS14, RCS15, Age, Education, and Employed

Variable	VIF
RCS1	1.24
RCS4	1.13
RCS6	1.30

	101
RCS7	1.24
RCS9	1.19
RCS10	1.22
RCS11	1.16
RCS12	1.15
RCS13	1.15
RCS14	1.27
RCS15	1.23
Age	1.24
Education	1.60
Socioeconomic status (employed)	1.64

Outliers. To identify influential points, studentized residuals were calculated and the absolute values were plotted against the observation numbers (Field, 2013; Stevens, 2009). Studentized residuals are calculated by dividing the model residuals by the estimated residual standard deviation. An observation with a studentized residual greater than 3.12 in absolute value, the 0.999 quartile of a t distribution with 311 degrees of freedom, was considered to have significant influence on the results of the model. Figure 11 presents the Studentized residuals plot of the observations. Observation numbers are specified next to each point with a studentized residual greater than 3.12. There were two outliers present in history of MPIP, with a higher score on history than the rest of the respondents. Data from the outlier were included as removing two potential outliers would not have significantly affected the results from such a large dataset of over 300 participants.

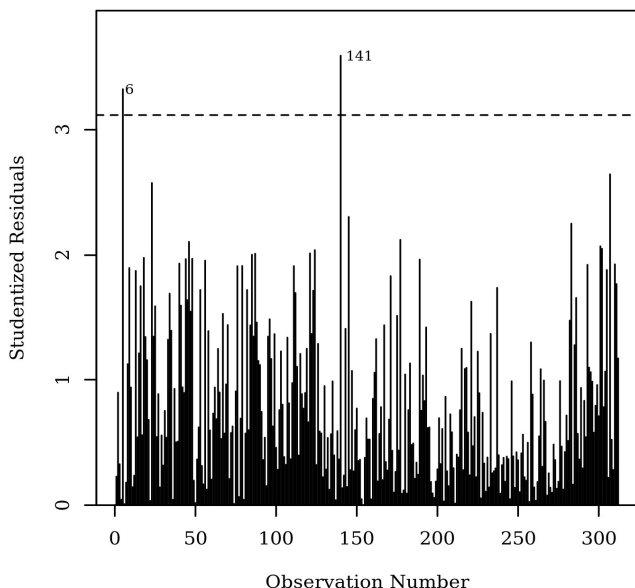


Figure 11. Studentized residuals plot for outlier detection

Autocorrelation. A Durbin-Watson test was conducted to assess the degree of autocorrelation among the residuals. The result was significant, $DW = 1.35$, $p < .001$, suggesting the results may be influenced by autocorrelation among residuals. This is concurrent with results generated from research participants from nearby geographic locations who potentially may provide more similar answers to each other than people who are more geographically distant. The inclusion criteria required participants residing in a specific geographic location. Hence, autocorrelation can occur in this instance if observation results are dependent in aspects such as geographic location.

Results. The results of the linear regression model were significant, $F(22,289) = 7.52$, $p < .001$, $R^2 = 0.36$, indicating that approximately 36% of the variance in women demands for male partner condom use is explainable by history of MPIP (11 items)

RCS1, RCS4, RCS6, RCS7, RCS9, RCS10, RCS11, RCS12, RCS13, RCS14, RCS15, age, education, and socioeconomic status (employed). RCS1, RCS7, RCS 9-13, and RCS15 did not significantly predict demands, whereas RCS4, RCS6, and RCS 14 significantly predicted demands (see Table 14).

The effect of age on women's demands for male partner condom use was examined. The 21-25 and 26-30 categories of age did not significantly predict demands, but the 31-35 category of age significantly predicted demands, $B = -0.16$, $t(289) = -3.18$, $p = .002$, which suggests that moving from the under 20 to 31-35 category of age will decrease the mean value of demands by 0.16 units on average.

Additionally, the effect of education on women's demands for male partner condom use was examined with the high school diploma category of education significantly predicting demands ($B = 0.12$, $t(289) = 2.69$, $p = .007$), which suggests that moving from the less than high school to high school diploma category of education will increase the mean value of demands by 0.12 units on average. The trade technical or vocational, some college, and college graduate category did not significantly predict demands.

Finally, the effect of socioeconomic status (employment) on women's demand for male partner condom use was examined. Employed part time and self-employed full time and part time did not significantly predict demands. Being self-employed part time did not significantly predict demands, $B = 0.03$, $t(289) = 0.56$, $p = .577$. This suggests that moving from the employed full time to self-employed part time does not have a significant effect on the mean of demands. However, being unemployed significantly

predicted demands ($B = -0.14$, $t(289) = -2.38$, $p = .018$) which suggests that moving from the employed full time to unemployed will decrease the mean value of demands by 0.14 units on average.

The overall regression model showed significant relationship between women demands for condom male partner condom use when controlling for age, education, socioeconomic status and history of MPIP. The results showed that relationship between history of MPIP and demands remained significant even after controlling for age, education, and socioeconomic status. The results also showed that the relationship between the age of the respondents (31-35) and demands, revealed a significantly negative association. That is, respondent in the 31-35 age tended to have lower demands score and tended to perceive that their male partners had more control over decision-making in the relationship. The results further showed that the education of the respondents in the category of high school diploma, had a positive relationship with demands. The results indicated that respondents who had high school graduate education were less likely to perceive themselves as having power in the decision-making in the relationship. Conversely, socioeconomic status (unemployment) showed a negative coefficient indicating that respondents reporting unemployed tended to perceive themselves as having less power in decision-making in the relationship. Therefore, the null hypothesis was rejected. Table 14 summarizes the results of the regression model.

Table 14

Results for Linear Regression with RCS1, RCS4, RCS6, RCS7, RCS9, RCS10, RCS11, RCS12, RCS13, RCS14, RCS15, Age, Education, and Employed predicting Demands

Variable	B	SE	CI	β	t	p
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(Intercept)	1.21	0.10	[1.01, 1.41]	0.00	11.97	< .001
RCF1	0.01	0.02	[-0.02, 0.04]	0.03	0.54	.592
RCF4	0.07	0.01	[0.04, 0.10]	0.27	5.37	< .001
RCF6	0.04	0.02	[0.01, 0.07]	0.13	2.38	.018
RCF7	0.01	0.02	[-0.02, 0.04]	0.04	0.78	.438
RCF9	0.00	0.02	[-0.03, 0.03]	0.01	0.27	.784
RCF10	-0.00	0.02	[-0.03, 0.03]	-0.01	-0.21	.832
RCF11	-0.02	0.02	[-0.05, 0.01]	-0.07	-1.39	.166
RCF12	0.01	0.01	[-0.02, 0.04]	0.04	0.83	.409
RCF13	0.01	0.02	[-0.02, 0.04]	0.03	0.64	.522
RCF14	0.07	0.02	[0.03, 0.10]	0.19	3.66	< .001
RCF15	-0.02	0.02	[-0.05, 0.01]	-0.06	-1.21	.226
Age21-25	-0.06	0.04	[-0.14, 0.01]	-0.10	-1.63	.103
Age26-30	-0.05	0.05	[-0.14, 0.04]	-0.07	-1.06	.290
Age31-35	-0.16	0.05	[-0.26, -0.06]	-0.19	-3.18	.002
High school diploma	0.12	0.04	[0.03, 0.21]	0.19	2.69	.007
Trade technical or vocational	0.09	0.05	[-0.00, 0.18]	0.13	1.87	.063
Some college	0.05	0.05	[-0.05, 0.16]	0.06	1.00	.318
College graduate	0.09	0.07	[-0.05, 0.24]	0.07	1.30	.194
Employed part time	0.07	0.05	[-0.03, 0.17]	0.10	1.38	.167
Self-employed full time	0.10	0.05	[-0.00, 0.19]	0.15	1.91	.057
Self-employed part time	0.03	0.05	[-0.07, 0.13]	0.04	0.56	.577
Unemployed	-0.14	0.06	[-0.25, -0.02]	-0.16	-2.38	.018

Note. CI is at the 95% confidence level. Results: $F(22,289) = 7.52, p < .001, R^2 = 0.36$
 Unstandardized Regression Equation: Demands = 1.21 + 0.01*RCS1 + 0.07*RCS4 + 0.04*RCS6 + 0.01*RCS7 + 0.00*RCS9 - 0.00*RCS10 - 0.02*RCS11 + 0.01*RCS12 + 0.01*RCS13 + 0.07*RCS14 - 0.02*RCS15 - 0.06*Age21-25 - 0.05*Age26-30 - 0.16*Age31-35 + 0.12*High school diploma + 0.09*Trade technical or vocational + 0.05*Some college + 0.09*College graduate + 0.07*Employed part time + 0.10*Self-employed full time + 0.03*Self-employed part time - 0.14*Unemployed

Summary

The purpose of this study was to determine whether there was a relationship between female partner demands for condom use and MPIPV, whether history of MPIPV had a relationship to female partner decreased demands for male partner condom, and to determine the relationship between the risk factors of age, education level,

socioeconomic status (employment) and women's demands for male partner condom use where there is a history of MPIPV in opposite sex cohabitating or married couples. It is important that female demands for male partner condom use, an essential component of risky sexual behavior associated with high prevalence of HIV among women in this region be examined further to determine whether a relationship exist between female demands for male partner condom use and MPIPV (CDC, 2014; Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014).

In this chapter, I presented the data collected to explore the three research questions and hypotheses. Descriptive statistics and multiple regression models were used to determine whether there was a relationship the between women's demands for male partner condom use and MPIVP, and to conduct a statistical analysis of factors that influence women demands for male partner condom use where there is a history of MPIPV.

It was determined that there was a positive relationship between women's demands for male partner condom use to risk for MPIPV in heterosexual cohabitating or married couples. The regression was significant for RQ1 showing that there was a positive relationship between demands and the risk, hence the null hypothesis was rejected. The results for RSQ2 showed that there was a positive relationship between history of MPIPV to female partner decreased demands for male partner condom use. Therefore, the null hypothesis was rejected. For RSQ3, the results showed that the sociodemographic characteristics of the participants had a relationship with female demands for male partner condom use and MPIPV. The results showed that the

relationship between the age of the respondents (31-35) and demands had a significantly negative association, with respondent in the 31-35 age shown to have lower demands score and perceptions of male partners having more control over decision-making in the relationship. Therefore, the null hypothesis was rejected. High school diploma had a positive relationship with demands indicating that respondents who had high school graduate education were less likely to perceive themselves as having power in the decision-making in the relationship. Therefore, the null hypothesis was rejected. Socioeconomic status (unemployment) showed a negative coefficient indicating that respondents reporting unemployed tended to perceive themselves as having less power in decision-making in the relationship. Therefore, the null hypothesis was rejected.

The interpretation of the findings will be discussed in Chapter 5. The fifth and final chapter of this study will contain a review of the summary, conclusion, the study's strengths and limitations as well as the implications for social change. The chapter will end with recommendations for further research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

I conducted this study to examine whether there were any relationships between female partner decreased demands for male partner condom use and history of MPIPv with the risk factors of age, education level, socioeconomic status (employment). In addition, I conducted this study to examine additional factors that support the need for more studies to help address the relationship between the construct of female gender inequality and MPIPv, all factors contributing to risky sexual behavior and disproportionate HIV infection rates among women in the sub-Saharan region (AVERT, n.d; CDC, 2014; Jewkes, Dunkle, Nduna, 2010; Jones et al., 2013; Kaye 2004; Watts & Seeley, 2014). The dynamics of gender inequality and the associated male and female power dominance imbalance has complicated HIV prevention efforts surrounding care and prevention impacting female decision-making capacity between female demands for male partner condom use and male partner agreement to use condoms. Using a quantitative descriptive study design allowed for an effective and expeditious analysis of the study results, which is discussed in this chapter

Interpretation of the Findings

There were three research questions addressed in this study.

The key findings for RQ1 showed that a relationship existed between women's demands for male partner condom use and risk for MPIPv and female decrease demands for condom use in heterosexual cohabitating or married couples in West Africa. Findings revealed that 15% of the variance in risk for MPIPv is explainable by women's demands

for male partner condom use. Therefore, the null hypothesis for RQ1 was rejected. These findings are consistent with prior studies. For example, Swan and O'Connell (2012) found that the intimate partner violence experiences among women significantly decreases their confidence in negotiating condom use with a male partner, putting them at a higher risk of HIV infection than women who do not report having exposure to intimate partner violence.

This indicates that there are a number of social structural and cultural factors that empower men, giving them power over interpersonal decision making in social situations, including sexual relationships (AVERT, n.d; Jewkes et al.,2010). Although the results do not relate directly to the rates in sub-Saharan Africa, they do suggest that there is a correlation in other areas, which means that the results from the current study may be relevant to other populations.

These findings for the second research question revealed a relationship existed between history of MPIPV and female partner decreased demands for male partner condom use in heterosexual cohabitating or married couples in West Africa, with 27% of the variance in women demands for condom use is history of MPIPV and relationship power. Therefore, the null hypothesis was rejected.

These findings are similar to findings from previous research by Mittal, Senn, and Carey (2013), who found that MPIPV was associated with demands for condom use contributing to inconsistency with condom use. Despite HIV prevention and sexual risk reduction interventions, women who reported MPIPV also reported significant barriers including fear of violence in negotiating safer sex behaviors with their male perpetrators,

thereby hindering their decision-making ability to self-protect against HIV infection, increasing HIV risk exposure. This supports the idea that it is not only inconsistent condom use that poses a challenge to female HIV vulnerability, but also the fear of violent consequences to women demands for male partner condom use plays a major role in condom use negotiation and safe sexual behavior practices. My study highlights the need for further research on the relationship variables such as MPIPV as a mediator to women demands for condom use and risky sexual behavior practices.

Results for RQ3 showed a significant negative relationship between the age category of the respondents and MPIPV indicating that women in the 31-35 category tended to have lower demands score and tended to perceive that their male partners had more control over decision-making in the relationship. Therefore, the null hypothesis was rejected. Additional results for RQ3 showed a significant relationship between MPIPV, education, and socioeconomic status (employment), indicating that some of the sociodemographic characteristics of the participants were shown to be related to demands for male partner condom use and MPIPV.

The results from this study lend support for the hypothesis that women's risk for MPIPV, history of MPIV, age, education, and socioeconomic status (employment) is related to lower levels of women's demands for male partner condom use. The findings are consistent with previous theoretical and empirical studies on the relationship between intimate partner violence and condom use negotiation, suggesting a relationship between violence and low male partner condom use demands among women. For instance, Eggers et.al (2013) argued for the unique HIV prevention needs of women, especially women

who experience MPIPV due to the interpersonal nature of relationship power and control that significantly impacts women condom use negotiation with male partner. Eggers et al called for greater emphasis on HIV interventions that target attitude toward relationship power because of its potential ability to empower women to engage in safe condom use negotiations with male partner. Daniels (2013) addressed the combination of gender power dynamics and behavior change impacting female condom use negotiation ability as factors contributing to women's vulnerability to HIV infection in sub-Saharan Africa, which must be mitigated to reduce women's HIV risk exposure.

These findings for RQ3 and from the literature are consistent with use of TPB in developing strategic HIV prevention interventions that targets the contextual features of examining not only the social and environmental influences predicting condom use, but also examining attitudes, beliefs, and behavior norms that impacts women's ability to demand male partner condom use. Though the findings showed that age and income did not mediate women's demand for condom use and MPIPV, incorporating risk factors like age, education, and socioeconomic status (employment) provided more support for TPB constructs in helping to predict how far attitude toward women's demand for condom use, along with the social pressure of gender equality and behavioral beliefs will influence the male partners' intention to use condoms during sex (see Eggers et al., 2013). Incorporating social influences and personal factors as predictors that contribute to behavioral intention, (Mtenga, Exavery, Kakoko, & Geubbels, 2015) and how this impacts women condom negotiation ability and demands for male partner condom use without fear of MPIPV is important to a successful implementation of gender-based

program outcomes among women in sub-Saharan Africa. Understanding the relationship between a history MPIPV to women demands for condom use and HIV risk exposure among women is important in developing programs addressing a combination of gender power dynamics and behavior change interventions to mitigating women's risk exposure.

There is a large body of literature that supports the need for gender-specific safe sex education to include knowledge on risky sexual behavior practices stemming from MPIPV (Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014). A number of studies have established the impact of risky sexual behavior practices on HIV risk exposure and the disproportionate rate of infection among women in sub-Saharan Africa (Anderson, Campbell, & Farley, 2013). However, there is limited research on exploring MPIPV as a mediating variable to the TPB constructs which focuses on the relationship between attitudes and behavior. My study tested the relationship between women at risk for MPIPV, women experiencing MPIPV and women's confidence in their ability to negotiate condom use as well as the relationship between women's age, education, and socioeconomic status (employment) to demands for male partner condom use.

The results of the study provide a justification for beginning to explore the promotion of condom use negotiation particularly for women who are at risk for MPIPV and have experienced MPIPV and do not feel empowered to negotiate condom use with their cohabitating or married male partners. This study will contribute knowledge to bridge the gap in the literature as it pertains to specific strategies and or gender targeted interventions in heterosexual cohabitating or married couples in West Africa. Such gender-based interventions that focuses on exploring the relationship of MPIPV and

female demands for male partner condom use are not well represented in the literature in heterosexual cohabitating or married couples in West Africa.

My results will add to an increased understanding of specific attitudes and behaviors toward gender inequality, MPIP, females engaging in risky sexual behavior and knowledge on the social and structural determinants of female risk exposures. Knowledge on the unprecedented challenges organizations faced can help to design adequate interventions that will meet the needs of this population.

Limitations of Study

This study had some limitations. Recruitment of all the participants from Liberia limits generalizability. But the decision to conduct this study on women in sub-Saharan Africa, particularly from Liberia, was based on the high and disproportionate incidence of HIV infection despite the progress made in many aspects of the global response to the pandemic and the influx of “comprehensive” HIV education programs (CDC, 2014). Additionally, although there were studies on MPIP and decision-making ability regarding women condom use negotiation, it was challenging to locate a study on the relationship between women’s demands for male partner condom use and MPIP as well as the relationship between female partner decreased demands for male partner condom and history of MPIP with the risk factors of age, education level, socioeconomic status (employment) in this population. Thus, the lack of supporting studies presented a limitation to this study’s finding.

Another limitation is that the results may be restricted to participants meeting the inclusion criteria. Furthermore, I used a nonprobability purposive homogeneous sampling

data collection technique targeting population members who were available to participate in the study. Participants were recruited using the internet making this a convenience sample for this study and inadvertently excluding some qualified participants from participating in the study which reduces the generalizability of the study. The online survey was the only means to complete this study, hence, more studies will be needed to establish the generalization of the findings.

Using selected items of the DMDS and RCS subscales presented another limitation. Without using the entire DMDS and RCS subscales, the study findings may also be restricted to the selected items used in the study which reduces the generalizability of the study results. The low Cronbach's alpha reliability values for the four items measuring risk for MPIPv and the low reliability values for the 11 items measuring history of MPIPv can influence the results limiting generalizability. Hence, more studies utilizing both subscales in its entirety to measure similar constructs will be needed to support the generalization of the findings.

Finally, the self-reported format for participants sociodemographic report presented a limitation to the study. Because the sociodemographic data and the survey responses collected were self-reported, it is not possible to fully assert that all the responses to the survey questions asked during the survey period reflected the true understanding or interpretation of women demands for condom use and MPIPv, and women decision-making capacity and condom use negotiation. It is worth noting that participants may not have accurately reported their actual understanding or interpretation of the constructs describe above, which may have affected the validity of this study.

Recommendations

I conducted this study using the online SurveyMonkey platform for data collection which contained information about the study, consent disclosure, and the demographic and survey instruments. I had a robust participant pool and responses to achieve the study sample size given the political climate and multiple civil protests occurring in the geographic location during the timeframe the survey was launched. I believe this contributed to a longer data collection timeframe that spanned over three months, two months longer than initially planned.

The recruitment and data collection procedures presented a limitation to this study. Participants were recruited via the internet and social media and were invited to participate using the SurveyMonkey link to the study which presented a limitation to this study. The online platform used to recruit participants and gathered surveyed responses came from individuals who had access to computers, cell phones with the internet, and social media. Responses from only individuals with online access presented a limitation to the participant pools, because not all participants were technologically astute or had access to the internet, impeding the ability to generalize the study results. Conducting further studies using a paper survey format with a greater sample size, from a wider geographical region representative of sub-Saharan women, could capture more informative data and provide further insights on women HIV risk exposure as it relates to women's demands for male partner condom use and risk for MPIPV in this population.

While this study had a robust sample size, the nature of the nonprobability purposive convenience sampling procedure requiring participants meeting the inclusion

criteria presented another limitation to generalization to the overall population of sub-Saharan women. To help overcome this limitation in future studies, it is recommended that this study be repeated in a broader cross section of sub-Saharan African women where the possibility of recruiting a larger number of women to participate would be increased. Larger studies with a greater sample size, and broader inclusion criteria to capture a wider age range and geographical region might strengthen the generalization of the results from this study, to the overall population of sub-Saharan African women.

Furthermore, studies looking at larger population of women to include sexually active women instead of the age limitation is warranted. Distinguishing women history of MPIPV or previous exposure to MPIPV as a precipitating factor to decreased demands for male partner condom use from initial condom usage negotiation could also help to explain the results and provide supporting data to this study. A study conducted specifically on history of MPIPV and its relationship to risky sexual behavior among women as it relates to female demands for male partner condom use or condom use negotiation could improve maximization of resources focused on decreasing barriers and constraints to women's ability to safely engage in request for male partner condom use without fear of MPIPV.

Furthermore, a study focused on MPIPV as direct result of female condom use negotiation or demands for male partner condom use utilizing the entire DMDS and RCS subscales could help provide insight into the role of community working to address gender inequality diaspora and to improve and supplement HIV prevention education. Additionally, other studies could focused on examining strategic gender-based

intervention education as part of HIV/AIDS intervention public health policies and programs promoting MPIPv awareness and programs geared towards eliminating the perpetuation and tolerance of violence against women.

Finally, I recommend further research to understand differences in how male partners perceived female partner condom use negotiation as part of understanding the social and structural determinants of female HIV risk exposures. The results of the study showed that there is a significant relationship between MPIPv, and level of education completed. This may indicate that other factors such as lack of comprehensive knowledge on HIV prevention education have a greater impact on women's HIV risk exposure and a major factor in the disparity and the higher rate of HIV infection reported among women in this population (AVERT, n.d).

I recommend facilitating targeted MPIPv screenings as it relates to women condom use negotiation education as part of HIV prevention education resources being provided at community health centers providing HIV education. Anderson, Campbell, Farley (2014) found that community health outreach workers can address MPIPv as a risk reduction strategy and such educational information could be conveniently provided by adequate and well-trained community health outreach workers in high-risk population as in this study. Community-based targeted MPIPv education and women condom use negotiation ability as a risk reduction strategy can also can become a part of the education to improve women demands for male partner condom use, while providing an opportunity to incorporate sustainable efforts in further reducing women HIV risk exposure (Anderson, Campbell, & Farley, 2014).

Implications

The relevance of this study aligns with the goals of UNAIDS strategy 2016-2021 which proposes an end to the AIDS epidemic as a public health threat by 2030 (UNAIDS, 2020). The findings from other studies have shown that a relationship between the construct of female gender inequality and MPIPV are known contributors to risky sexual behavior and disproportionate HIV infection rates among women (AVERT, n.d; CDC, 2014; Jewkes, Dunkle, Nduna, 2010; Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014). The findings of this study suggest that the variables tested such as women demands for male partner condom use relationship to MPIPV are contributory factors to HIV risk exposures to women inability to engage in condom usage negotiation skills among women in the population of this study.

The results of this study revealed that interventions to prevent MPIPV may have a dual role in HIV prevention. As the effects of MPIPV and women demands for male partner condom use or ability to negotiate condom use is being studied in women in sub-Saharan Africa, HIV vulnerability and risk exposure among women continues to increase, contributing to the disproportionate and higher rate of HIV infection (Swan & O'Connell, 2015). Hence, a level of urgency is required to evaluate traditional HIV prevention education and develop interventions that targets at-risk population such as women high-risk exposure with MPIPV as a contributing factor. The potential implications for positive social change from the study findings include contribution to knowledge on programs and policies strengthening HIV prevention education and

interventions with targeted strategies that addresses the unique challenges for women who have limited power in relationships.

The results of the study showed that there is a significant relationship between MPIPV, and level of high school completed. Hence, targeted strategies for health promotion activities and community health outreach workers engagement of the community should be designed with relevance to the problem of MPIPV and women demands for male partner condom use. Findings from this study will contribute to the discussion on attitudes and perceptions of men and women differential of power, its association with women sexual negotiation power, and the impact of MPIPV on women condom negotiating ability and risky sexual behavior in sub-Saharan Africa. Sharing this study through global organization and international networking to include non-governmental organizations, community stakeholders including organizations in Liberia, academic publications, presentations at seminars, grant writing initiatives, and a posted copy of the abstract on social media platforms will help disseminate the study findings to a broader community.

Conclusion

The sub-Saharan region of Africa is host to 25.5 million people infected with the HIV/AIDS virus, which is more than 70% of the global epidemic (AVERT, n.d). Countries in this region, particularly in the West and Central African nations such as Liberia, Nigeria, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Ghana, Guinea, and Mali, are regions worst affected by the virus (AVERT, n.d). Women constitute more than half of the reported cases of people living with HIV/AIDS and is the

leading cause of death for women of reproductive age 15-44 years (AVERT, n.d). The West and Central African regions are home to 6.5 million people with reports showing a disproportionate rate of HIV/AIDS infection among women, accounting for 54% of adults living with HIV/AIDS (AVERT, n.d).

There is compelling evidence that MPIPv has a relationship to the disproportionate rate of HIV/AIDS infection among women (CDC, 2014; Jones et al. 2013; Kaye 2004; Watts & Seeley, 2014). According to the Foundation for AIDS Research (2017), AIDS-related illnesses remain the second leading cause of death for young women aged 15–24 years in Africa. The socio-economic impact of the HIV/AIDS infection in this region has become a public health crisis. In some regions, women who are exposed to intimate partner violence are 50% more likely to acquire HIV than women who are not exposed (Foundation for AIDS Research, 2017), making this crisis one that will require a multidimensional approach to reducing women risk exposure rates. Given the breadth of research on the HIV/AIDS infection rates in sub-Saharan Africa and progress made in many aspects of the global response to the pandemic in this region, some of the social issues such as the unique challenges for women who have limited power in relationships limiting a woman's choice to fully engage in condom negotiation remains to be investigated (CDC, 2014). It is important that female demands for male partner condom use, an essential component of risky sexual behavior associated with high prevalence of HIV among women in this region be examined further.

This study examined whether there was a relationship between female partner demands for condom use and MPIPv, whether history of MPIPv had a relationship to

female partner decreased demands for male partner condom, and to determine the relationship between the risk factors of age, education level, socioeconomic status (employment) and women's demands for male partner condom use in women experiencing history of MPIPv in opposite sex cohabitating or married. Because, my study was conducted to address a gap in the literature, findings from this quantitative study provided preliminary and significant information relating to knowledge of the challenges of women who have limited power in relationships as it relates to women's demands for male partner condom use and exposure to MPIPv.

Findings from the study may possibly aid in promoting targeted community strategies focused on the unique HIV prevention needs of women. History of MPIPv was found to be significantly related to women's decreased demand for male partner condom use with a significant relationship shown between MPIPv, age and level of education completed, and socioeconomic status. The findings from this study support the need for community health outreach worker's role in combating HIV risk exposure among women and MPIPv through targeted educational and prevention programs incorporating gender related interventions to address relationship power and a better understanding of the needs of women.

Although the results revealed a significant relationship between risk for MPIPv, history of MPIPv and women's decreased demand for male partner condom, it should be noted that history of MPIPv had a relationship to demands for condom use even after controlling, for the sociodemographic variables. This study produced significant and important findings to demonstrate the importance of HIV prevention programs focusing

on reinforcement of positive behaviors that promote interventions to address women relationship power, women demands for male partner condom use and MPIP.V.

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Appendix A: Demographic Questionnaire

Instructions: Please respond accurately to all the below question items by clicking on the radio button next to the items and write in the answer to the box indicating your correct response.

1. How old are you?
 - Under 20 years old
 - 21-25 years old
 - 26-30 years old
 - 31-35 years olds

2. Please give the years of high school education (grade) completed:
 - Less than a high school diploma
 - High school diploma or equivalent
 - Trade/technical/vocational training
 - Some college, no degree
 - College graduate

3. Are you employed at a paid job?
 - Yes, employed full time (40 or more hours per week)
 - Yes, employed part time (up to 39 hours per week)
 - Yes, I am self-employed full time (40 or more hours per week)
 - Yes, I am self-employed part time (up to 39 hours per week)
 - No, I am unemployed

4. What is your annual (yearly) income in U.S dollar?
 - Less than \$10,000 US
 - \$10,000 to \$19,999 US
 - \$20,000 to \$29,999 US
 - \$30,000 to \$39,999 US
 - Over \$ 40,000 US

5. Since you were married or living with your partner, has you husband/partner:
 - Insulted, threatened you verbally, or made you feel bad about yourself?
 - Belittled or humiliated you in front of others?
 - Done things to scare or intimidate you on purpose?
 - Pulled your hair, slapped you, or thrown something that could hurt you?
 - Punched or hit you with his fists?
 - Thrown you to the ground or kicked you with his feet?
 - Choked or attacked you with a knife or other weapon?
 - Burned you or poured hot liquid onto you?

Appendix B: Research Survey Questions

Relationship Control Factor/Subscale

Each of the following items was scored on a 4-point Likert scale, where 1 = Strongly Agree, 2 = Agree, 3 =Disagree, and 4 = Strongly Disagree.

1. If I asked my partner to use a condom, he would get violent.
2. If I asked my partner to use a condom, he would get angry.
3. Most of the time, we do what my partner wants to do.
4. My partner won't let me wear certain things.
5. When my partner and I are together, I'm pretty quiet.
6. My partner has more say than I do about important decisions that affect us.
7. My partner tells me who I can spend time with.
8. If I asked my partner to use a condom, he would think I'm having sex with other people.
9. I feel trapped or stuck in our relationship.
10. My partner does what he wants, even if I do not want him to.
11. I am more committed to our relationship than my partner is.
12. When my partner and I disagree, he gets his way most of the time.
13. My partner gets more out of our relationship than I do.
14. My partner always wants to know where I am.
15. My partner might be having sex with someone else.

Decision-Making Dominance Factor/Subscale

Each of the following items was scored in the following manner:
1 = Your Partner, 2 =Both of You Equally, and 3 =You.

16. Who usually has more say about whose friends to go out with?
17. Who usually has more say about whether you have sex?
18. Who usually has more say about what you do together?
19. Who usually has more say about how often you see one another?
20. Who usually has more say about when you talk about serious things?
21. In general, who do you think has more power in your relationship?
22. Who usually has more say about whether you use condoms?
23. Who usually has more say about what types of sexual acts you do?

Appendix C: SRPS Permission Request Letter and Response

Greetings Linda,

Thank you for your note and your interest in the SRPS. Part of my interest in developing the measure was to be of use to / available to the field. So, there is no copy-right per se, but I would ask you to reference me appropriately in your work, and I would appreciate hearing about results from your study.

As you request that I state... I grant permission requested on the terms stated in this letter.

I have attached the original paper, which includes the items in the scale and recommended scoring instructions (in the appendix), a 2015 systematic review of scale uses and psychometric properties, and a book chapter that will be coming out shortly (which includes an overview of the scale and lessons learned)...

Good luck with your research, and please keep in touch!

Best wishes,

A handwritten signature in black ink that reads "Julie". The script is cursive and elegant.

Julie Pulerwitz, ScD

To: Dr. Julie Pulerwitz, ScD

August 23, 2018

Re: Permission: to Use an Existing Survey Questionnaires

Dear Dr. Pulwewitz,

I am a doctoral student from Walden University writing my dissertation titled "Understanding Male Perpetrated Intimate Partner Violence and Women's Demands for Condom Use" under the directions of my dissertation committee chaired by Dr. Leslie Hussey. The objective of my research study is to explore if female demands for male partner condom use serves as a risk for male perpetrated intimate partner violence (MPIPv) and risky sexual behavior. I am also exploring factors influencing the relationship between female partner demands for condom use and MPIPv. I will be using the online SurveyMonkey web format to administer the survey questionnaires.

I am writing to ask for your written permission to use the sexual relationship power scale (SRPS) in my research study and. I would like to use and print your survey questionnaires under the following conditions:

I will use this survey instrument only for my research study and will not sell or use it for any compensated or curriculum development activities.

I will include a statement of attribution and copyright statement on all copies of the instrument. If you have a specific statement of attribution that you would like for me to include, please provide it in your response.

At your request, I will send my research study upon completion of the study and/or will provide a hyperlink to the final manuscript. I will also at your request send a copy of reports and articles that make use of these survey data promptly to your attention.

I would also appreciate receiving copies of any supplemental material that will help me administer the test and analyze the results such as the test questionnaire, standard instructions for administering the test, and scoring procedures, if available. If these are acceptable terms and conditions, please indicate responding to this email with a confirmation granting me permission to use.

Please state the following in your response; "I grant permission requested on the terms stated in this letter."

Please include your name, title, organization address, and contact information.

If you do not control the copyright for these materials, I would appreciate any information you can provide concerning the proper person or organization I should contact.

I thank you for your assistance in this matter.
Sincerely,

Linda M. Edwards

Linda M. Edwards

Doctoral (PhD in Nursing-Healthcare Administration) Candidate

Expected Date of Completion: March 2019
