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The Relationship Between Limited Partner Availability, Masculine Ideologies, and Condom Use

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2019

Abstract

The Relationship Between Limited Partner Availability, Masculine Ideologies, and Condom Use

by

Diakima Y. Thomas

MPH, Walden University, 2011

BS, Florida A&M University, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

June 2019

Abstract

One in every 4 people living with the Human Immunodeficiency Virus (HIV) are women. The leading cause of infection is heterosexual contact. The purpose of this quantitative, correlational study was to examine the relationship between gender ratio perception and masculine ideology and a woman's decision to use condoms during her sexual activity. The theory of gender and power and the theory of planned behavior served as the theoretical frameworks for this study. The perceptions of gender ratios, as measured by the Gender Ratio Imbalance Beliefs and Behaviors Scale (GRIBBS) subscale, GRIBeliefs, and masculine ideologies, as measured by the Gender Role Beliefs Scale (GRBS), served as independent variables, while condom use behaviors, as measured by the Gender Ratio Imbalance Beliefs and Behaviors Scale (GRIBBS) subscale, GRIBehaviors, served as the dependent variable. Covariates included demographic factors, as well as behavioral factors. A purposeful, convenience sample (n=55) via the Walden University research pool was utilized, enabling researchers to use readily available data that represented college educated women. Descriptive statistics, independent t-tests, correlational analysis, as well as multiple linear regression were used to examine the aforementioned perceptions of study participants. Correlation analyses and multiple regression indicated no statistically significant correlations between gender ratio imbalance, masculine ideology, and condom use, while controlling for race, employment status, religion, religious devoutness, sexual orientation, relationship status, STD history (self), and partner STD history. Social change is indicated via the results illustrating the possible empowerment of women regarding their sexual health.

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Dedication

This research is dedicated to my Lord and Savior, Jesus Christ, because I would not have made to through without him. To my parents for asking me, "When is graduation?" almost every time I spoke to them during this journey. Motivating me to just keep going…no matter how long it takes. To my extended family, friends, and my love, for putting up with my crazy during this entire process…this is for you all. Thank you. I would NOT have made it without you.

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Chapter 1: Introduction to the Study

Introduction

This quantitative research seeks to explore the relationship between limited partner availability (gender ratio imbalance), masculine ideology, and condom use. The sexually transmitted disease/infection rates among women are higher than their male counterparts. This study uses previous research as a foundation to explore factors that may contribute to the prevalence of sexually contracted illnesses among women. Current research could add more information to what is already known to enhance educational and promotional materials targeting women specifically, and ultimately positively influence social change.

Chapter 1 will serve as the introduction to this study. It will include background for this research, as well as the study's problem statement, research questions, the theoretical framework, and the study's limitations, among other elements. The review of the literature will make up chapter 2. The chapter explains the literature search strategy used and the theoretical foundation, and identifies trends within the reviewed literature. Chapter 3 illustrates the research methods used for this study, including the research design and rationale, the methodology, the data analysis plan, and the threats to validity. Chapter 4 showcases the results, while chapter 5 provides an interpretation of the findings and recommendations for future research efforts.

Background

The United States Census Bureau estimated there were over 308 million people living in the United States (US), and of that number approximately 151 million were males and 156 million were females (US Census Bureau, 2011). The Centers for Disease

Control and Prevention (CDC, 2014) estimated there were nearly 20 million new sexually transmitted infections (STIs) occurring within the US each year. This includes syphilis, chlamydia, gonorrhea, and the Human Immunodeficiency Virus (HIV). In 2014, there were approximately 1,006,441 cases of chlamydia among women reported to the CDC and an estimated 101.3 cases of gonorrhea per 100, 000 (CDC, 2015a, 2015b). Approximately 47,500 people were newly infected with HIV (CDC, 2015). Women made up 20% (9,500) of those being newly diagnosed, with approximately 17% (8,000) being infected via heterosexual contact (CDC, 2015).

When used correctly and consistently, male condoms reduce the risk of transmission of HIV, gonorrhea, syphilis, chlamydia, trichomoniasis, HPV, and pregnancy (CDC, 2013). Female condoms can assist with STD/STI protection as well (CDC, 2011). With the exception of HIV and HPV, STDs and STIs are curable (CDC, 2016). If not treated, women could experience complications and long-term ailments such as pelvic pain, infertility, ectopic pregnancy, scar tissue that could block fallopian tubes, damage to internal organs, paralysis, blindness, dementia, and often making it easier to acquire HIV (CDC, 2014). Being unaware of a partner's status, having higher frequency of unprotected vaginal and/or anal sex, being afraid to converse with a partner about sexual health status, and lack of general knowledge about STI/STD are all contributing factors for the contracting of HIV among women (CDC, 2015c).

Previous research efforts have focused exclusively on the African American population. Findings suggest that inconsistent condom use in men is sometimes due to the challenge of the woman to get her partner to buy into the idea of using condoms (Bird & Harvey, 2001). A number of factors were found to support this behavior including

gender ratio imbalance beliefs, female to male ratios within the African American community (Corneile, Zyznieski & Belgrave, 2008; Jarama, Belgrave, Bradford, Young, & Honnold, 2007) and unequal distribution of power within a relationship (Bird & Harvey, 2001; Bogart & Thoburn, 2005; Bruhin, 2003; Corneile, Tademy, Reid, & Belgrave, 2008; Ferguson, Quinn, Eng, & Sandelowski, 2006; Harvey, Bird, Galavotti, Duncan, & Greenberg, 2002; Pulerwitz, Gortmaker, & DeJong, 2000; Wingood & DiClemente, 2000). Gaps in current research exist between STI risk transmission knowledge and the effects STI risk transmission has on partner availability among women that link racial variables and sexual risk (Bowleg, Burkholder, Massie, Wahome, Teti, Malebranche, & Tschann, 2012), among women of various races and/or ethnicities. There are also gaps of knowledge in understanding the ways masculinity and ethnic identity influence sexually protective behaviors and health relationships (Corneille, Fife, Belgrave, & Carey-Sims (2012).

Statistics indicate women leading their male counterparts in STDs/STIs. This research seeks to provide information on influencing factors that are related to a woman's decision to use condoms.   The possible influence of limited partner availability (gender ratio imbalance) and masculine ideology are explored in this study.

Problem Statement

The Centers for Disease Control and Prevention (CDC, 2015c) estimated that one out of every four people living with the Human Immunodeficiency Virus (HIV) are women, with the leading cause of infection being heterosexual contact. Being unaware of a partner's status, having higher frequencies of unprotected vaginal and/or anal sex, being afraid to communicate with partner about status, and lack of knowledge about this disease

are all contributing factors to the contracting of HIV by women (CDC, 2015c). African American women account for 61% of the total number of newly diagnosed HIV cases in the United States, Caucasian women account for 19%, and Hispanic women follow at 15% (CDC, 2017).

Another contributing factor to HIV vulnerability, specifically among Black women, involves gender-ratio imbalance and masculine ideology, which may be due to the shortage of men eligible for a relationship within the African American population (Newsome & Airhihenbuwa, 2013). Men may choose to be in a sexual relationship with multiple women when the available gender ratio is imbalanced with more women than men. This could be due to factors such as incarceration, death, or the ideal partner does not meet personal prerequisites or qualifications (Senn, Scott-Sheldon, Seward, Wright, & Carey, 2011). A man's acceptance and/or internalization of a culture's definition of masculinity, and beliefs about adherence to culturally defined standards on how a man should behave is called masculine ideology (Coughlin & Wade, 2012; Pleck, 1993). This may be an indicator of man's inability to decline sexual opportunities when presented, partnered with the belief that birth control/STD protection is a woman's responsibility if she is concerned about those risks (Bowleg et al, 2012). While a woman may know safe sex practices should be followed, she may not know how to communicate this need/information to her partner effectively (Noar, Webb, VanStee, Feist-Price, Crosby, Fitts-Willoughby, & Troutman, 2012). The problem that will be explored in this study is whether masculine ideology and gender ratio imbalance influence condom use among varying groups of women age 18 and older.

Previous researchers have been very specific about the minority (Blacks and Hispanic) populations and their rate of acquiring STIs and diseases as a result of sexual relationships with men (Abraham et al., 2011; Bowleg et al., 2011; Davila & Brackley, 1999). They have also suggested that rates of infection might be a result of a lack of suitable partners for these women to choose from, as well as a man's nature to have a sexual relationship with more than one woman at a time within these ethnic groups (Adimora et al., 2005; Ferguson et al., 2006; Jolly et al., 2016).

While there are a number of studies that have been conducted pertaining specifically to women of color, there is a lack of research regarding the influence of masculine ideology and partner availability on condom use among women of varying nationalities and/or ethnicities.

Purpose of the Study

The purpose of this quantitative study is to assess the influence of gender ratio imbalance and masculine ideologies on condom use among women of various ethnicities age 18 and older. The independent variables include the perception of gender ratio (PGR) and the perception of masculine ideologies (MI). Condom use (CU) serves as the dependent variable. Race, employment status, religion, religious devoutness, sexual orientation, relationship status, STD history (self), and STD history of partner serve as covariates.

The Gender Roles and Beliefs Scales (GRBS) and the Gender Ratio Imbalances Beliefs and Behaviors Scale (GRIBBS), will be used to assess influencing factors on a woman's sexual health decisions. The GRBS will be utilized to explore appropriate

behaviors for women. The GRIBBS will measure gender ratio imbalances, as well as gender ratio imbalance beliefs among sexually active women.

Research Questions and Hypotheses

Research Question (RQ1): Is there a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (H01): There is no statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (HA1): There is a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Research Question (RQ2): Is there a statistically relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status,

STD history of self, and partner STD history?

Null Hypothesis (H_o2): There is no statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (H_A2): There is a statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Theoretical Framework for the Study

The theory of gender and power (TGP) and the theory of planned behavior (TPB) are used to explore the perceptions of limited partner availability and masculine ideologies on condom use among women.

Theory of Gender and Power

Developed in 1987 by Robert Connell, the TGP validates the natural imbalance of gender, power, and sexual inequities. As illustrated in Table 1, Wingood and DiClemente (2000) identified the sexual division of labor, the sexual division of power, and the structure of cathexis (investment of energy) as the three main structures of the theory. Each structure is divided into a societal level and an institutional level.

The TGP suggests women serve a set role within the workplace, in relationships, and within a family (Connell, 1987). This role is inferior to that of her male counterpart.

Examples include her work in the employment industry and being paid less than a male colleague (sexual division of labor), minimal to no decision-making power within a romantic relationship (sexual division of power) and adhering to a role society labels as normal. This theory specifically mentions the role of women in a relationship. Its constructs illustrate a man's power and/or control, and a woman's lack thereof.

Table 1

Theory of Gender and Power

Societal Level	Institutional Level	Social Implications
Sexual division of labor	Work, school, family	Manifested as unequal pay produces economic inequities for women
Sexual division of power	Relationships, medical system, media	Manifested as imbalances in control produce inequities in power for women
Cathexis: social norms and affective attachments	Relationships, family, church	Manifested as constraints in expectations produce disparities in norms for women

Theory of Planned Behaviors

Ajzen's (1985) TPB consists of behavioral beliefs, normative beliefs, and control beliefs. These beliefs predict specific behaviors and provide explanations. Derived from the theory of reasoned action (TRA), TPB constructs, illustrated in Figure 1, contain several assumptions to include the belief that there is a chance that there will be consequences for one's actions, defined as behavioral beliefs. Normative beliefs involve the expectation of other people, including what is determined normal by society. Factors

that may further hinder performance of a specific behavior are identified as control

beliefs (Ajzen, 2002).

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                        ┌──────────────┐      ┌────────────────────┐
                        │              │      │  Behavior Beliefs  │
                        │   Attitudes  │──────│        and         │
                        │              │      │ Outcome Evaluations│
                        └──────────────┘      └────────────────────┘

┌──────────────┐        ┌──────────────┐      ┌────────────────────┐
│              │        │              │      │  Normative Beliefs │
│  Intentions  │────────│ Subjective   │──────│  and Motivation to │
│              │        │    Norms     │      │      Comply        │
└──────────────┘        └──────────────┘      └────────────────────┘

┌──────────────┐        ┌──────────────┐      ┌────────────────────┐
│              │        │   Perceived  │      │  Controls Beliefs  │
│  Behaviors   │        │  Behavioral  │──────│        and         │
│              │        │   Controls   │      │     Perceived      │
└──────────────┘        └──────────────┘      │    Facilitation    │
                                              └────────────────────┘
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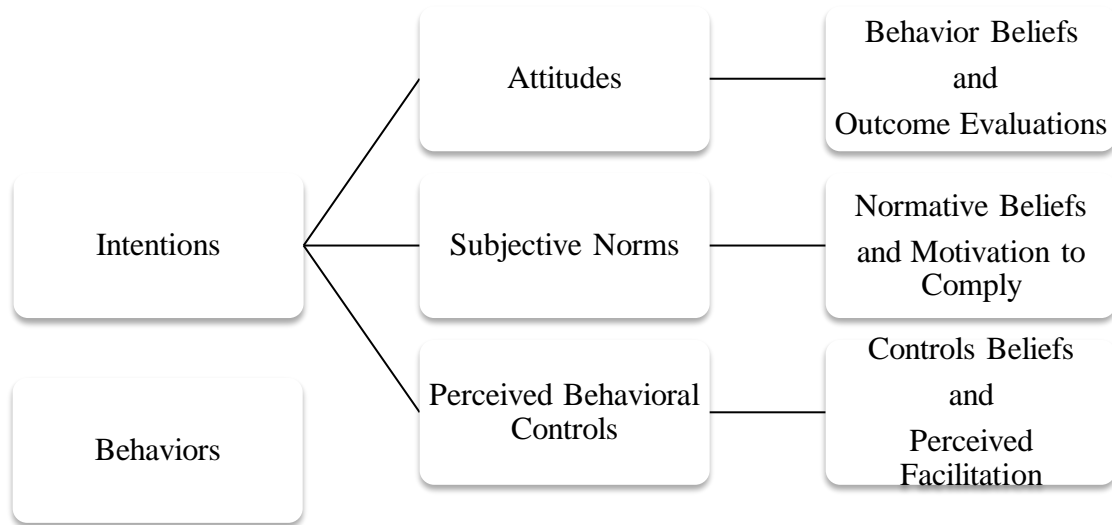
Figure 1. Theory of Planned Behavior

Historically, a woman's natural place was in the home, with minimal to no role in

the economic and/or the decision-making process within the home, other than taking care

of the domestic responsibilities (Alesina, Giuliano, & Nunn, 2013). Within an intimate

relationship, the traditional gender role continues with the woman taking the submissive

role. Current research validates the existence of power imbalance among American men

and women, with men being the leaders/initiators of sexual activities more so than

women in intimate relationships (Bowleg, Lucas, & Tschann, 2004; Clark, Shaver, &

Abraham, 1999; Laner & Ventrone, 1998; Morgan & Zurbriggen, 2007; Ortiz-Torres,

Williams, & Ehrhardt, 2003; Vannier & O'Sullivan, 2011; Wiederman, 2005; Wingood

& DiClemente, 2000). These behaviors among men and women are taught and

developed at a young age, and are transferred into their adult lives (Sanchez, Fetterolf, &

Rudman, 2012).

The TPB constructs recognize the reality of what causes a person's behavior. It provides a foundation to understand why condoms are not used, despite the possibility of acquiring an STD/STI (behavioral beliefs); the influence of society on what is deemed normal within intimate relationships (normative beliefs); as well as, the lack of suitable partners for women to be involved in intimate relationships with, and their ability to negotiate the use of condoms (Ajzen, 2002).

Nature of the Study

This study will be a correlation, quantitative design. The variables used are:

- Independent variables (IV): 1) Perceptions of gender ratio (PGR); 2) Perception of masculine ideologies (MI)

- Dependent variables (DV): Condom use (CU, 0=never, 1=sometimes, 2=always)

- Covariates: race, employment status, religion, religious devoutness, sexual orientation, relationship status, STD history (self), and partner STD history.

Quantitative research methods are ideal for identifying factors that are related to outcomes (Creswell, 2009; Sim & Wright, 2002). I am attempting to find out what the relationships are between gender ratio and masculine ideologies and condom use among women, if any. Surveys will be used to obtain data pertaining to gender ratio, masculine ideologies, and condom use. Surveys enable researchers to collect numerical data, which makes it easier to generalize information about a specific population (Babbie, 1990; Creswell, 2009).

This study will depend on the responses of women of all race/ethnicities, varying in age, to a series of survey questions. These women will have the opportunity to

respond to questions about their backgrounds, as well as past experiences, and attitudes to better determine the relationship between variables (Frankfort-Nachmias & Nachmias, 2008)

Definitions

Communication: an open exchange of feelings, affects, and intentions (Jenkins & Roberts-Kennedy, 2013).

Concurrent partnerships: multiple simultaneous relationships that overlap in time (Morris, Kurth, Hamilton, Moody, & Wakefield, 2009; Newsome & Airhihenbuwa, 2013)

Condom negotiation: the ability to incorporate the use of condoms during sexual activity as a mode of protection against STIs (Cook-Lindsay, 2013).

Control Beliefs: perception of the availability of skills, resources, and opportunities (Mathieson, 1991)

Decision making dominance: one person's ability to make decisions on behalf of another person (Zukoski, Harvey, Oakley, & Branch, 2011)

Gender imbalance: one sex outnumbering another (e.g. more men than women or vice versa) (Ferguson, Quinn, Eng, & Sandelowski, 2006)

Machismo dominance: male dominance (Cook-Lindsay, 2013)

Masculine ideology: refers to men's acceptance/internalization of a culture's definition of masculinity, and beliefs about adherence to culturally defined standards of male behaviors (Coughlin & Wade, 2012; Pleck, 1993)

Normative belief: the individual's perception of a referent other's opinion about the individual's performance of the behavior (Mathieson, 1991).

Perceived behavioral control (PBC): refers to the individual's perception of the presence or absence of a vital resource/opportunity necessary to perform a specific behavior (Mathieson, 1991)

Power in a relationship: the ability of one person to direct or exercise authority in a relationship

Sex ratio: the number of men relative to the number of women (Fossett & Kiecolt, 1990; Warner, Manning, Giordono, & Langmore, 2011)

Sexual concurrency: sexual relationships that overlap in time (Carey, Senn, Seward, & Vanable, 2010)

Sexual network: group of individuals that are connected directly or indirectly through sexual contact (Newsome & Airhihenbuwa, 2013; Adimora et al 2003)

Sexual Relationship Power: a construct that characterizes power differentials between intimate partners, encompassing relationship [dynamics such as trust, commitment, infidelity, decision-making, and condom-use negotiation (Bonacquisti & Geller, 2013; DePadilla, Windle, Wingood, Cooper, & DiClemente, 2011; Pulerwitz, Amaro, DeJong, Gortmaker & Rudd, 2002; Pulerwitz, Gortmaker, & DeJong, 2000).

Sexual scripts: culturally shared directives for sexual behavior that influence all aspects of sexual behaviors such as beliefs about appropriate partners, relationships, appropriate for sex, and emotions (Bowleg, Lucas, & Tschann, 2004; Hynie, Lydon, Cote, & Weiner, 1998; Simon and Gagnon, 1986)

Subjective norm: perceived opinions of people/groups whose beliefs may be important to an individual (Mathieson, 1991)

Submissive Sexual Script: for women, it entails the women submitting to her male partner and his desires and waiting for the man to initiate sexual activity (Gagnon, 1990; O'Sullivan and Byers, 1992; Schwartz and Rutter, 2000; Sanchez, Phlan, Mos-Racusin, and Good, 2012)

Theory of Gender and Power: a social, structural theory based on previous works about sexual inequity and imbalance in regard to gender and power; the theory consists of three subcategories including: sexual division of labor, sexual division of power, and cathexis (social norms and affective attachment) (Connell, 1987).

Theory of Planned Behavior: the belief that human behavior is guided by three considerations including: the likelihood of consequences occurring as a result of a specific behavior (behavioral beliefs), beliefs that others determine how one should behave (normative beliefs), and the belief that there are hindrances present in regard to executing desired behaviors (control beliefs) (Ajzen, 2002).

Traditional gender norms: encourage women to deem sex appropriate only when it occurs with someone involved in an emotionally committed relationship; repress their own sexual needs to please their male partners (Bowleg, Lucas, and Tschann, 2004; Holland, Ramazanoglu, Scott, Sharpe, and Thomson, 1990; Hynie et al 1998).

Traditional sexual scripts: prescribe heterosexual men to take on a more dominant role in sexual interactions; heterosexual women are more submissive (Gagnon, 1990; Kiefer & Sanchez, 2007; O'Sullivan & Byers, 1992; Sanchez, Phlan, Mos-Racusin, and Good, 2012; Schartz & Rutter, 2000; Sprecher & McKinney, 1993).

Vulnerability Paradigm: women are more susceptible to HIV because of biological differences in susceptibility, reduced sexual autonomy, and men's sexual power and privilege (Higgins, Houghman, & Dworkin, 2010).

Assumptions

The following assumptions were made about the study:

- 80% of participants will answer and cooperate with research efforts to the best of their ability.

- The data collection tools used for the research effort will provide valid and reliable data.

- The women who choose to participate in this study will have an opinion about the influence of masculine ideology and gender ratio imbalance on their ability to use condoms.

It is assumed that bias was not created as a result of a woman's willingness to participate in this research effort by her act to volunteer. They were not coerced, forced, or bribed to participate in this research at any time. It is also assumed that participants understand what is being asked, enabling them to answer each question honestly. The use of a computer, as well as the internet, to administer the survey tool assumes that each participant is computer literate and is able to use the computer with ease (Fricker, 2008).

Experimental study designs are stronger than nonexperimental designs when examining internal validity (Frankfort-Nachmias & Nachmias, 2008). Due to the nonexperimental, correlational nature of this research, causation determination cannot be examined or assumed.

Scope and Delimitations

The study is delimited due to the respondents being women, who have access to the Walden University research participant pool (e.g. Walden University students), varying in age. This research will not reflect the perceptions of women outside of Walden University, nor will it reflect the perceptions of women outside of the specified age range.

Limitations

Because this research only includes women who attend Walden University and those who are a part of my social media outlet, the results limit generalizability. Women outside of the Walden University participant network and my social media outlets did not have access to participate in this research effort. Lower response rates have been associated with the use of electronic surveys, limiting response rates and their generalizability (Roberts, 2007; Ye, 2007).

Significance of Study

This project is unique because it will examine the role of gender ratios and masculine ideologies perceptions and the influence they have on condom use in heterosexual relationships. The research will be inclusive of women of various ethnicities and races. The sexual script of men predicts what a man's response/action will be when potential sexual encounters and conversations about condom use and STD history present. Their female partners make assumptions as to whether or not the man will agree to the use of condoms during sex (e.g. she assumes he will be offended, be angry, or insist a condom NOT be used) (Edwards & Barber, 2010). Traditional roles surrounding condom use (men should initiate) may exist in relationships where men are

dominant (initiate sexual intentions) and women are submissive (wait to be approached and fulfill the need of their man) (Sanchez, Phelan, Moss-Racusin, & Good, 2012). This may place both partners in a situation where sexual safety is not discussed and safe sex practices are ignored due to fear about how the other partner may perceive these conversations and/or actions.

It is hoped that the results of this study will aid in the enhancement of existing programs to, not only inform men and women about these perceptions in the effort to increase the use of condoms and decrease the spread of STDs ,but empower women to take control of their sexual health when engaged in intimate relationships. A better understanding of roles within relationships is integral in targeting this group with beneficial programs to influence positive social change within public health programs that look to target behavioral change among men and women, positively influencing the prevention of transmission of STD's.

Summary

Women are being disproportionately infected with STIs/STDs. Through this research, I will utilize two measurement instruments, GRBS and GRIBBS, to examine influencing factors on the perceptions of women. Independent variables will include the perception of gender ratios and the perception of masculine ideologies, while condom use will serve as the dependent variable. Chapter 2 includes the detailed literature review, while Chapter 3 includes research methodology.

Chapter 2: Literature Review

Introduction

The purpose of this study is to assess the relationship between the perceptions of gender ratio imbalance and masculine ideologies and condom use among women of various ethnicities ages 18 and older. The review of literature provides insight and a rationale behind the use of the TGP as well as the TPB to understand the woman's perception of condom use. It provides an analysis based on the literature of TGP and TPB, as well as insight on partner availability, masculine ideology, and condom negotiation. The literature review provides a look into a woman's ability to negotiate safer sex practices, as well as elements of gender norms. This includes gender norms, gender power, gender-ratio imbalance, and sexual scripts.

Literature Search Strategy

A literature review was completed to include subjects such as partner availability, masculine ideologies, and condom use, as well as communication, societal and cultural norms, gender imbalance and its contribution to risk, biological vulnerability, and the role income plays on masculine ideology and relationships. Articles were searched for using online databases, including Medline and CINAHL simultaneous search, Google Scholar (synced with Walden University library, and ProQuest Health and Medical Complete, with searches varying across all disciplines). From this search, over 100 articles were identified as relevant to this review of literature. Search engine key terms included: *STD, women, men, ideologies (masculine/feminine), HIV, traditional relationships, social norms, communication within relationships, income and relationships, condom use, relationship power, sexual behaviors, condom use, partner availability, sex perceptions,*

sex, men, women, gender imbalance, and *sexual behaviors*. The search yielded

categories including partner availability, the influence of gender and culture,

communication among men and women about condom use, social norms, the influence of

income and gender roles, gender imbalance, and the role these elements have on women

susceptibility to STIs.

The search for the literature review included original peer-reviewed articles and

seminal literature. Boolean phrases included, but were not limited to, perception of

women and condoms, men and condoms, masculine ideologies and sex, TPB, TGP, TGP

and sex/power, TPB and sex, and attitudes towards the use of condoms.

Theoretical Foundation

Behaviors and power among people vary by gender. Connell (1987) recognized

the presence of gender and power imbalances in the workplace, in heterosexual

relationships, and within society and created the TGP. Wingood and DiClemente (2000)

added another element to this theory to illustrate the influence society has on the

behaviors of men and women. Designed to understand what causes behaviors, the TPB

provides insight on behavior predictions, behavior modification, and behavior promotion

(Ajzen, 1985). My study integrates the TGP, as well as the TPB, to examine gender

beliefs, gauge the perceptions of peers on relationship power, and examine the effects of

suitable partners**.**

Theory of Gender and Power (TGP)

According to Connell (1987), abstract (remove from), historical (not the present),

and sociopolitical (societal and political factors) predetermine the roles of men and

women. Used throughout TGP's inception to gain a better understanding of the

correlation between HIV among African American women and abusive relationships,

these roles serve as the foundation for the TGP through its subcategories of sexual

division of power, sexual division of labor, and the structure of social norms (cathexis).

The sexual division of power illustrates how power influences control in a relationship,

while the sexual division of labor manifests via economic inequities among women

specifically within the workplace. Social norms dictate what is considered normal,

gender appropriate behavior. Each subcategory can be broken down further into an

institutional level and a societal level (Connell, 1987).

Sexual division of power. Power is defined as the ability to act or change in a

desired direction (Moser & Dracup, 1995). The sexual division of power coincides

directly with the sexual division of labor but speaks specifically about the power that

exists in relationships between men and women at the societal level. The institutional

level addresses the power imbalance that may occur in a relationship in favor of the male.

The woman may experience abuse or lack control in the relationship, forcing her

to depend heavily on the male due to his bringing in the majority of the financial

resources (Wingood & DiClemente, 2000). It is within this division that the media

influences gender roles by degrading women and making them believe they are not

empowered enough to make their own decisions within a relationship.

Sexual division of labor. The societal level of this subcategory suggests that

men and women should only be able to perform certain jobs as deemed appropriate for

their gender (Wingood & DiClemente, 2000). The institutional level provides some

clarity, with the belief that women should be responsible for unpaid (underpaid) nurturing

work, which involves jobs such as childcare, taking care of the elderly, and providing

oversight for the home (i.e. laundry, cleaning the home, taking care of the children, and ensuring the male is taken care of as the head of household). Men are compensated fairly and are recognized for their work, while women receive limited recognition as well as have less value placed on the work they do on a day-to-day basis. This division of the theory limits the economic advancement and career paths of women, indicating a woman's dependency on the man in the relationship (Wingood & DiClemente, 2000).

   Structure of social norms (cathexis). The structure of social norms, also known as cathexis, element of TGP dictates what is sexually appropriate for women as deemed by society (Wingood & DiClemente, 2000). The newest subcategory of this theory, cathexis, which means that bias is created via what is normal within respective cultures, enforces strict rules for genders, as well as stereotypical beliefs. Stereotypical beliefs include the idea that women were only made to procreate, must maintain monogamy (men are not held to the same expectation), and should not express themselves through self-exploration (Wingood & DiClemente, 2002). This subcategory focuses on what an "ideal" woman should be, such as being pure, being moral, and being "clean". Men are not held to the same standard and are not expected to act as such.

   Asian culture demonstrates elements of TGP in that its gender roles are hierarchical/patriarchal,leaving women at the bottom of the totem pole (Hahm, Lee, Rough, & Strathdee, 2012). Women are expected to serve as caretakers within families with minimal to no compensation and are expected to abstain from engaging in open conversations about sex (Hahm et al, 2012). Contrarily, men serve as heads of household and control the household finances (Hahm et al, 2012).

Limited or no health insurance also poses an issue in the sexual division of labor. No insurance means that women, in this instance, are less likely to seek medical treatment for an STD due to cost. Limited medical coverage is an issue in that some clinicians only accept above subprime insurance, and not Medicaid and/or Medicare. Not only does this make it unattractive for some women to seek medical care, but the cost of deductibles and/or copays may deter them as well (Wingood & DiClemente, 2002).

Iranian culture makes a man the sole decision maker in whether or not a condom will be used during sex (Lofti, Tehrani, Khoei, Yaghmai, & Dworkin, 2013). Men are allowed to have multiple wives at any given time, involve themselves in temporary marriages, and/or leave a woman at any given time if she does not give in to his decision to abstain from the use of condoms. Women are more inclined to succumb to the men's decision to ensure her family remains together, to be financially secure, and to ensure the man receives pleasure (Lofti et al, 2013).

As a result of contributing factors such as gender roles and the order of power within their cultures, African American and Latino women are less likely to use condoms than white women (Wingood & DiClemente, 2000). This makes them susceptible to exposure to not only HIV, but also to other STDs as well. Wingood and DiClemente (2000) indicated that being young is a contributing factor to not using condoms. Young women, defined as being younger than the age of 18, are not able to effectively negotiate the use of condoms, thereby making them vulnerable to STD exposure. The TGP provides detail to the risk women face socioeconomically, physically, behaviorally, and socially within each division of the theory. Table 2 provides an in-depth illustration of what happens during each phase of the theory.

Table 2

Theory of Gender and Power: Exposures, Risk Factors, and Biological Properties

Sexual Division of Labor

Economic Exposures-Women Who Have:
-Living at the poverty level
- Less than a high school education
-No employment/underemployed
-High demand and low control of work environment
-Limited to no health insurance
-No permanent home (homeless)

Socioeconomic Risk Factors: Women Who Are:
-Ethnic minority
-Young (<18)

Sexual Division of Power

Physical Exposures-Women Who Have:
-History of sexual abuse
-Partner uncooperative with safe sex practices
-High-risk steady partner
-Greater exposure to sexually explicit media

Behavioral Risk Factors: Women Who Have:
-History of alcohol and drug use
-Poor assertive communication skills
-Poor condom use skills
-Low self-efficacy
-Limited perceived control over condom use

Structure of Social Norms

Behavioral Risk Factors-Women Who Have:
-Limited knowledge
-Negative beliefs; not supportive of safer sex
-Perceived invulnerability to HIV/AIDS
-History of depression/psychological distress

Social Exposures: Women Who Have:
-Older partner
-Conservative culture/gender norms
-Religious affiliation forbids contraception
-Mistrust in medical system

Note: Adapted from "Applications of the Theory of Gender and Power to examine HIV related exposures, risk factors, and effective interventions for women,' by G.M. Wingood & R.J. DiClemente, 200, *Health Education Behavior*, 27, p. 559.

Power is the ability to act and/or change in a desired direction (Moser & Dracup, 1995). The sexual division of power consists of physical exposures and behavioral risk factors. The physical exposures include history of sexual abuse, partner being

uncooperative with safe sex practices, having a high-risk steady partner, and having a greater exposure to sexually explicit media. Having a history of alcohol and drug use, poor assertive communication skills, poor condom skills, low self-efficacy, and limited perceived control over the use of condoms make up the social exposure elements of the behavioral risk factor components of the sexual division of power (Moser & Dracup, 1995).

The TGP is appropriate for this study in that it can be used to explain why men are put in dominant roles by women and society, which may then be carried over into their sexual relationships (Wingood & DiClemente, 2002). It serves as the foundation for understanding the lack of eligible partners, the role of masculine ideologies, and condom use among women. The foundation provides more insight to researchers and women about why some men make the choice to be with more than one woman at a time, knowing their action will increase the chance of contracting from and/or transmitting STDs to their respective partners. It will also enable women to learn more about the various options available to protect themselves against the contraction of such infections (DePadilla, Windle, Wingood, Cooper, & DiClemente, 2011).

Theory of Planned Behaviors (TPB)

Ajzen (1991) identified three basic sets of beliefs to form the TPB. Beliefs about the existence of impeding or facilitating factors that may affect the performance of a given behavior and the perceived influence of these factors make up the control belief element of the TPB. Normative beliefs formulate the second component of the TPB. It is generated from the expectations of what others deem normal, as well as motivating

factors contributing to adherence expectations (Ajzen, 1991). Beliefs about the possible consequences make up the final component of the TPB through behavioral beliefs.

Control belief. The control belief element of TPB suggests there is a perceived control of one's behavior. Control belief also includes actual behavioral control which means a person should have access to certain skills, resources, and tools to follow through with a specific behavior (McKenzie, Neiger, & Thackeray, 2012). This element of the theory suggests it can be situational, as well as personal (Mathieson, 1991). It is up to the individual to assess whether or not the needed resources are available, as well as if he/she is competent enough to execute the proposed behavior (Ajzen, 2012). Ideally, control should be uniform so that anyone would be able to perform a specific behavior if so inclined (Ajzen, 2012).

Normative Belief. Adjusting one's behavior according to what society views as normal defines the normative belief component of the TPB (Ajzen, 2002). It suggests that despite a person's personal opinions, ethics, religion, etc., behaviors can be deemed acceptable (or normal) per the majority. For example, traditionally men are associated with being strong, while women assume the nurturer role and are often seen as being weak (Blaine, 2007). In the instance marriage occurs between a man and woman, the woman is proposed to by the man, and she takes his last name (Robert & Leapers, 2013; Scheuble & Johnson, 2005). Culture determines what normal behavior looks like for boys and girls (Bowleg et al, 2011; Pleck, Sonestein, & Ku, 1993). This includes males having sex with more than one woman at a time, thinking negatively towards gay/bisexual men, and holding the female solely responsible for the use of contraception (Bowleg et al, 2011; Pleck, Sonestein, & Ku, 1993).

Behavioral belief. The behavioral belief component of the TPB sheds light on a person's ability to control his or her behavior. This belief alludes to the idea that a person is aware of the pros and cons of a proposed behavior, therefore, determining if executing the behavior is worth the effort (Ajzen, 2002). Figure 2 provides a depiction of predetermining factors that could influence one's behavior. The beliefs comprising this theory all link to the intention to execute a specific behavior. Intentions are influenced by personal attitudes towards the behavior at hand (i.e. individual beliefs about the outcome of the targeted behavior), subjective norms pertaining to the beliefs held by an individual about a significant others' attitude towards the behavior, as well as perceived behavioral control (McKinlay & Cowan, 2003). This refers to a persons' perception of how easy or hard it will be to follow through with a specific behavior. Perceived behavioral control is based on the individual's self-efficacy, meaning the confidence one feels about performing the behavior at hand (Bandura, 1986), as well as controllability. Controllability is an indication as to whether or not the individual will follow through/perform a specific behavior (Ajzen, 2002). Perceived behavioral control can be influenced by external factors, therefore, presenting the possibility of whether or not a person follows through with a specific behavior.
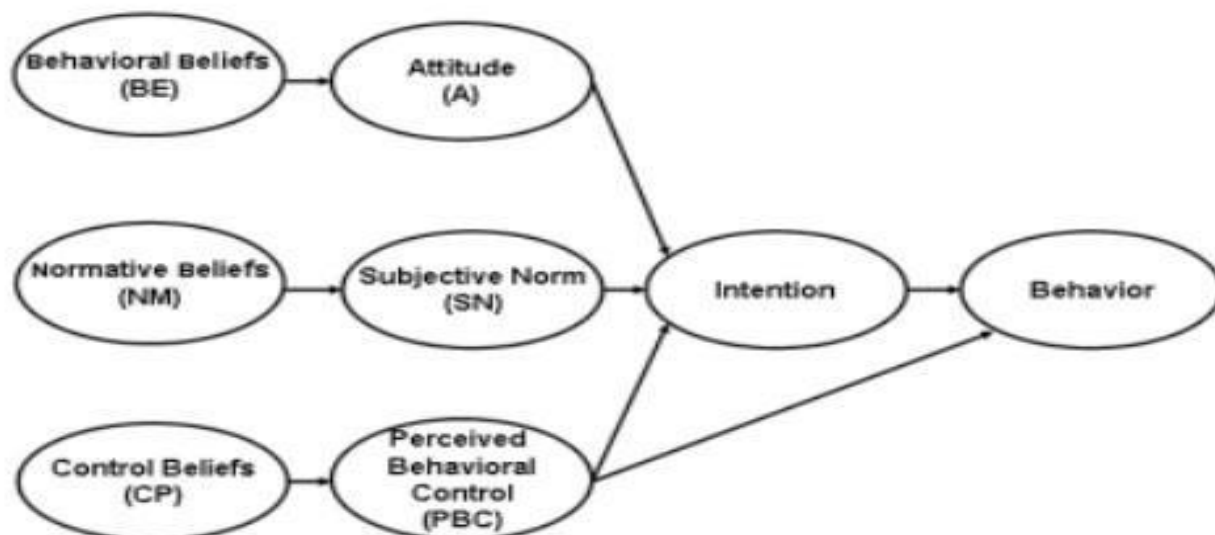
Figure 2. Theory of Planned Behavior 1985. Adapted from "From intentions to actions: A theory of planned behavior," by I. Ajzen, 1985, *Action-control: From cognition to behavior, p.* 11-39

This theory sheds light on why people make the decisions they make. It can be used when referencing the use of condoms and their ability to decrease the chances of contracting and/or transmitting an STD. The TPB takes into account how society and one's upbringing influence how he/she will conduct themselves when involved in a romantic relationship. The TPB also provides a better understanding of how partner availability influences the perception of women on the use of condoms (Ajzen, 2000)

Kopelowicz, Zarate, Wallace, Liberman, Lopez, and Mintz (2015) evaluated the use of multi-family groups and whether or not it positively influenced medication adherence among Mexican American patients suffering from schizophrenia. These researchers used TPB to predict and positively influence medication adherence among these patients (Kopelowicz et al. 2015). Attitudes (i.e. the patient chooses not to take prescribed medication because he/she doesn't think they are useful), perceived behavioral control (i.e. the patient believes that he/she has all of the resources needed to take and comply with prescribed medications), and subjective norms (i.e. my family thinks this

medication does not help me) were the key elements the researchers chose to incorporate into their intervention (Kopelowicz et al. 2015). The authors indicated that treatment for these individuals increased subjective norms and perceived behavioral control and scores increased for attitudes and subjective norms for medication adherence (Kopelowicz et al. 2015).

Literature Review Related to Key Variables

This study seeks to examine the relationship between perceptions of gender ratio imbalance and masculine ideology and condom use in women, while controlling for demographic variables. The literature review includes the following topics: prevalence of STDs, partner availability/multiple sex partners/gender ratio imbalance, masculine ideology, condom negotiation, communication, gender roles (gender norms/gender power), and other influential factors, such as cultural norms, economic resources, societal norms.

Prevalence of STDs

In 2013 there were over 151 million males and nearly 157 million females residing in the United States (US Census Bureau, 2014). Approximately one in four people living with HIV in the United States were women (CDC, 2014a). One in every twenty sexually active females, ages 14 to 24, had Chlamydia (CDC, 2015) and for every 100,000 people 109 men and 102 women had gonorrhea (CDC, 2014b). Status awareness is an integral piece in practicing safe sex. Unawareness of status is a leading cause of spread of STDs (Reid et al. 2013). Associated risks of contracting an STD include: sex at a young age and engaging in unprotected sex (DiClemente, Crosby, Wingood, & Lang, 2005; Kaestle, Halpern, Miller, & Ford, 2005; Robertson, Thomas, St.

Lawrence, & Pack, 2005), previous diagnosis of an STD (Crosby et al. 2004; DiClemente et al. 2002; Kershaw at al. 2004), and a reinfection occurring from a relationship where the infected partner does not receive treatment (DiClemente at al. 2002; Whittington et al. 2001).

Partner Availability, Gender Ratio Imbalance, and Multiple Sex Partners

Fossett and Kiecolt (1991) defined sex ratio as the number of men relative to the number of women. Table 3 illustrates the male to female ratio, per one hundred men, specific for age 15 to 49. With the exception of Hispanic men, women outnumber men in every listed category within each racial identification class.

Table 3

Men to Women Ratio among Ethnicity

	Males	Females
Non-Hispanic, Black	90.1	100
Non-Hispanic, White	96.3	100
Hispanic	105.1	100
Native American	98.7	100
Asian	92.8	100

Note: Adapted from "Male-female ratio by race alone or in combination and Hispanic or Latino origin for the United States: 2000 (PHC-T-11)".2000, US Census Bureau. Retrieved from http://www.census.gov/population/ www/cen2000/briefs/phc-t11/index.html

Contributing factors for the lack of eligible non-Hispanic Black men include low sex ratios at birth, internal migration, regional differences, excessive male mortality, and incarceration (Pouget, Kershaw, Niccolai, Ickovics, & Blankenship, 2010) and Black men are in high demand (Newsome & Airhihenbuwa, 2013). This gives these men the

power to negotiate the types of relationships to be involved in as well as the decision-making power within the relationship (Newsome & Airhihenbuwa, 2013).

Competition among women develops as a result of the imbalance of men to women in regard to economic stability and interest in marital/familial progression, specifically within the Black community (Wyatt, Forge, & Guthrie, 1998). With this competition comes the possibility of partner (relationship) concurrency. Senn et al. (2011) identified several contributing factors that lead to partner concurrency to include: lack of sexual satisfaction with just one partner, lack of trust due to infidelity in previous relationships, different partners fulfill different needs, more than one partner because the primary partner has more than one partner (retaliation), continuous sexual relationship with child's mother/father, familial modeling, a man's nature to have more than one partner, and the idea that there are more available women than there are men.

In the instance where a man is married, he may expect his spouse to not only be physically attractive, but she should also be supportive, trustworthy, and warm (Fletcher et al, 1999; Fletcher et al, 2004; Meltzer et al, 2014). If she is not all of these things, the man may drift to a woman who fulfills those needs at that time (Meltzer et al, 2014). When more than one partner is utilized to fulfill a need, it is known as a polyamorous relationship (Mitchell, Bartholomew, & Cobb, 2014). For example, a man involved with a woman who cooks, may have another partner he turns to for sexual favors and comfort, and another woman with whom he only confides in is an example of a polyamorous relationship (Mitchell et al. 2014).

Infidelity is the end result of a man drifting to another woman to fulfill a need, but in a number of instances reconciliation between parties does take place. Researchers who

studied infidelity and reconciliation among Mexican American girls showed girls

reconciling relationships with their cheating mate because she loved her mate, both

parties being committed to working on their relationship, the girl experiencing pressure to

reconcile, and sometimes violence even occurring (Lopez, 2015). While reconciliation

occurred, the reality that there was infidelity remained in the girl's thoughts throughout

the duration of the relationship, as well as carried on to future relationships (Lopez,

2015). The "hook-up" culture in today's society and infidelity are synonymous (Bogle,

2008; Heldman & Wade, 2010; Paul et al. 2000; Walters & Burger, 2013), and influenced

by the immersion into social media (Ward, 2002), discussions with friends about

perceived benefits of casual sex (Hughes et al. 2005), and relational infidelity

(Pennington, 2007). Infidelity is a contributing factor to partner retaliation, as well as

revenge (Brewer, Hunt, James, & Abell, 2015). A woman may forgive a man for his

infidelity, but there are instances where she sets out to go after the other woman directly

and/or indirectly. The motivation behind this behavior by the primary woman are

thoughts leading her to believe that her male partner would never act this way without

coercion (Brewer et al. 2015). Revengeful behaviors lead to a number of negative

consequences such as guilt, reputational damage, and threats to personal safety (Boon,

Alibai, & Deveau, 2011; Cota-McKinley, Woody, & Bell, 2001; Fitness, 2001).

As illustrated in Table 3, partner availability may be an issue among races, as with

the exception of Hispanics, women outnumber men. (US Census Bureau, 2000). This

holds especially true among the African American population. If an African American

man is economically challenged, he may be less desirable to an African American woman

(Newsome & Airhihenbuwa, 2013). This lessens the availability pool within this

particular population for an ideal relationship, especially since most men and women tend to want to date someone in the same sexual network (Newsome & Airhihrnbuwa, 2013), that is partners who are connected directly or indirectly through sexual contact (Adirmora et al. 2003)

Sex ratios represent the availability of opportunities for individuals to form relationships (Fossett & Kiecolt, 1990; South, Trent, & Shen, 2001). In the instance where an imbalanced sex ratio occurs among men, a man is more inclined to be in a relationship with little or no commitment because he does not feel the need to commit (Albrecht &Albrecht, 2001; Uecker & Regnerus, 2010). Commitment hinders a man from having more than one sex partner (Warner et al. 2011). The shortage of men relative to women is associated with lower marriage rates, high divorce rates, and high numbers of children born out of wedlock (Lichter, McLaughin, Kephart, & Landry, 1992; Souths & Lloyd, 1992). Gender ratio imbalances also give way to those who see the potential partner as an opportunity to gain something they would not ordinarily be able to obtain (i.e. economic/financial security, social status, etc.) (Ferguson et al. 2006).

Masculine Ideology

Masculinity ideologies are developed throughout the duration of a man's life (Pleck, Sonenstein, & Ku 1993). Adolescence is an especially significant time within a male's life, as this is the period in which a male learns social norms about romantic relationships within the heavily gendered peer culture (Bell, Rosenberger, & Ott, 2015; Eisenhart & Holland, 1983; Maccoby, 1990; Schwartz, 1972). Researchers have found that boys are often pressured to act as if they are always on a sexual prowl, as well as establish and maintain hegemonic relationships with the opposite sex through coercion

and possessiveness (Epstein et al. 2009; Kimmel, 2008; Tolman, Davis, & Bowman, 2016; Tolman et al. 2003; Way, 2011).

Traditional masculine ideology sees women as a weakness of men (Jackson & Lyons, 2012). This leads men to believe women should be solely responsible for enforcing the use of condoms if and when engaging in sexual encounters due to the man's inability to think clearly due to sexual force (Bowleg, et al. 2011). During adolescence, males long for relationships involving trust, intimacy, and a partner who illustrates genuine love (Bell et al. 2015). Researchers suggest that throughout the course of his life, a male learns hegemonic masculinity (Bell et al. 2015). This legitimizes a males' dominance over females in society and via the workplace (Bell et al. 2015).

Boys have natural tendencies to be dominant, competitive, and emotionally detached, which extends into sexuality due to the influence of male models and society (Edder, 1995; Mac and Ghaill, 1999; Walker, 1994; Walker and Kushner, 1999). These expectations/behaviors push men to be the dominant figures within the relationship through sexual control and avoiding a display of emotion (Bowleg, Lucas, & Tschann, 2004; Noar & Morokoff, 2002; Spencer, Fegley, Harpalani, & Seaton, 2004). It is based on the belief that men should be tough, avoid femininity, stray away from the use of condoms, and take less responsibility in the prevention of pregnancy (Pleck, Sonenstein, & Ku, 1993). Men should also always be ready to have sex, view sex as primarily recreational/pleasurable, perceive penetration as the goal of sex, and have multiple sex partners (Campbell, 1995; Holland, Pleck, Sonenstein, & Ku, 1993; Ramazanoglu, & Thomson, 1994;). Cultures influence masculine ideologies on standards and expectations that yield negative consequences such as anti-feminity, homophobia, emotional

restrictiveness, competitiveness, toughness, and aggressiveness (Pleck, Sonenstein, & Ku, 1995).

Among non-Hispanic Blacks (NHB), age, (Cazenave, 1984; Hunter & Davis 1992), socioeconomic class (Hunter and Davis, 1992), racial and ethnic identity (Abreu, Goodyear, Campos, & Newcomb, 2000; Wade, 1996), and geographic location (Levant & Majors, 1997; Levant, Majors, & Kelly, 1998) can influence masculine ideologies. The effects of institutionalized racism yield alternate forms of masculinity in the form of sexual promiscuity, aggressiveness, violence, and thrill seeking (Franklin, 1984; Majors & Billson, 1992; Staples, 1982; West, 1993; White & Cones, 1999). It is Hispanic tradition for men to have "machismos" (male dominance) (Cook-Lindsay, 2013). The norm within the culture expects men to have relationships with more than one female partner (Cook-Lindsay, 2013)

Condom Use and Negotiation

Consistent condom use has long been identified as the most effective prevention practice in decreasing STDs and the onset of pregnancy (Weller & Davis-Beaty, 2002). There are a number of factors that influence the ability to negotiate the use of condoms within a sexual relationship. A woman's inability or confidence to request condom use from a partner are influenced by economic disparities, fear of abuse, difference in age, and the social setting/context in which she requests the use of these items (Cook-Lindsay, 2013). The more women perceive their partner as dominant, the less likely she will be successful at condom negotiation (Buysse & Van Osst, 1992). A woman's inability to negotiate the use of condoms includes factors such as economic disparities, fears of physical/verbal abuse, age differences, and societal settings where the woman is

attempting to negotiate condom use (Bauermeister et al. 2009; Logan et al. 2002; Wingood & DiClemente, 1997). Women and men may opt to not use condoms due to the desire to increase intimacy (Flood, 2003; Higgins & Hirsch, 2008), hopes for the formation of a loving relationship, the desire to express affection (Kirkman et al 1998), and their perceived (monogamous) relationship status (Bralock & Koniak-Griffin, 2007; Juarez & Castro-Martin, 2006). In the event a woman does not find pleasure in the use of condoms, she will be less likely to use them as a barrier of protection (Higgins et al. 2008; Nesoff, Dunkle, & Lang, 2016; Randolph et al. 2007; Williamson, Buston, & Sweeting, 2009). What she perceives as a benefit or convenience of using a condom may vary depending upon sexual patterns with partners. In the instance where a female condom is not available, a woman would only truly benefit from the use of a male condom if the male partner agrees to its use (Peters, Jansen, & van Driel, 2010).

Traditional attitudes among men toward the use of condoms are associated with negative attitudes towards their use, as well as the belief that men are less responsible for the prevention of pregnancy and the onset of STIs (Pleck, Sonenstein, & Ku, 1993). Men label condom negotiation as a "woman issue," because in the event that they (men) want to use a condom, they just put it on whether or not there be an objection from the woman (Noar et al, 2012). Some studies conclude that women perceive condoms as a primary tool for pregnancy prevention, as opposed to preventing the contraction of an STI (Cassel et al. 2006; Sterk, Klein, & Elfson, 2004; Strachman & Impett, 2009). The more power a man exerts/possesses within a relationship, the more condom use may be hindered (East et al. 2007; Wingood & DiClemente, 1998).

Culture has an important role on power within a relationship. In South Africa, men have unlimited power within relationships (Cook-Lindsay, 2013; MacPhil & Campbell, 2001). Within the Hispanic culture "machismo" (male dominance) is the norm within relationships between men and women, making women feel powerless in sexual decision-making (Harvey et al. 2002). With abuse being a reality in some relationships, it influences the use of condoms or a lack thereof. Women who are physically and verbally abused may be less likely to find their voice to negotiate the use of condoms within their relationship (Wingood & DiClemente, 1997). This especially holds true in relationships where the female is younger than her male counterpart. DiClemente and fellow researchers (2002b) conducted a study with African American girls involved in relationships with older men and noted that these females felt powerless; therefore, they were less likely to use condoms. Similar results were noted with men involved in relationships with younger women in that condoms were used inconsistently (Bauermeister et al. 2009). In a relationship where the female views the male partner as an authoritarian figure, or more sexually experienced, she is more likely to defer to him for sexual decisions, creating variances in sexual decision making (Bauermeister et al. 2009; Wingood & DiClemente, 2000).

Economically empowered women tend to have higher bargaining power in the decision to use condoms (Pollack, 2005). Low self-efficacy among women influences their inability to negotiate the use of condoms (East, Jackson, O'Brien, & Peters, 2010). This is especially true if the male in the relationship has more economic resources than his partner. Sexual relationship power is a construct that characterizes power differences between intimate partners, encompassing relationship dynamics such as trust,

commitment, infidelity, decision-making, and condom-use negotiation (Crosby et al.,

2008; Pulerwitz et al., 2000, 2002). Resource disparities may be an influencing factor of

power within a relationship and a woman's ability to make safe sex choices (East et al.,

2010). Women may lack the ability to engage in conversation about condom use due to

biological, cultural, contextual, and psychosocial factors (Logan, Cole, & Leukefeld,

2002). Some women want to use condoms, but this may not transition to action in real

life for a number of reasons (Blanc, 2001; Pulerwitz et al., 2000, 2002). Intimate partner

violence (IPV) cause power imbalances within relationships and also can make condom

negotiation challenging (Blanc, 2001; Coker, 2007; Davilla & Brackley, 1999; Gielen et

al., 2007; Teitelman et al., 2008).

Sexual Scripts and Gender Roles

Scripts are defined as cognitive representations of events that guide expectations

for similar events. There are cultural scripts (developed from media//social outlets,

which shape the appropriate perceptions of sexual choices at the societal level),

interpersonal scripts (shared expectations/interpretations of cultural scripts), and

intrapsychic scripts (combine internalizations of cultural and interpersonal scripts with

actors' own desires/preferences) (Morrison et al. 2015). There are also male and female

scripts. Male scripts are more directive, proactive, and highly sex driven with the

intention always to acquire sex, while the female script is more indirect, reactive, and less

sex driven, with the intent to avoid sex in most instances (Byers, 1996, LaPlante,

McCormick, & Brannigan, 1980; Rose & Frieze, 1989, 1993).

Traditional scripts for men imply that men always desire sex, do not have to be

necessarily desired by a woman to engage in the act, encompass strong sex drives, are the

initiator of sex, have the need to be sexually skilled, have preference for recreational sex, have a preference for sex rather than being involved in a relationship, as well as gravitate towards sexual encounters with no strings attached, and seek multiple partners (Masters, Casey, Wells, & Morrison, 2013). Via traditional scripts, men are more likely to determine their sexual behaviors based off of the pressure from peers, as well as what is expected from society (Smith, Guthrie, & Oakley, 2005). Keeping this in mind, men are supposed to always be the initiator/pursuer of sex and aren't interested in monogamy or commitment (Beadnell et al. 2008; Byers, 1996; Flood & Pease, 2009; O'Sullivan & Byers, 1993; Santana et al. 2006; Seal & Ehrhardt, 2003; Tolman et al. 2003). The traditional scripts for women include the need to feel desired, a weak sex drive, the ability to resist advances, being highly more valued if they are not sexually experienced, preference for relational sex, wanting commitment/monogamy, and seeking emotional intimacy and trust with sex (Masters et al. 2013). Researchers revealed that women who follow traditional scripts believe it is their responsibility to sustain the intimate relationship with their partner, as well as be sexually passive to their own needs (Bowleg, Lucas, &Tschann, 2004).

As a result of these traditional gender norms, men tend to have more sexual partners, more casual partners, as well as more concurrent relationships more often than women (Adimora & Achoenbach, 2005; O'Sullivan, Hoffman, Harrison, & Dolezal, 2006). In addition, men have liberal sex values, an acceptance of premarital sex, consider sex as a positive part of self, and receive positive messages of approval from peers (Smith, Guthrie, & Oakly, 2005). Table 4 provides an illustration of the three types of sexual scripts according to the sexual script theory. Cultural scenarios suggest that men

are dominant, and they should initiate the act of sex. This element of the script

recognizes the effects mass media have on the objectification of women and how they are

to be pursued by men. Mass media may also result in an illusion regarding the events

leading up to the act of sex, creating the interpersonal script. The theory recognizes the

effect drugs and alcohol, as well as the transition between "hanging out" to foreplay, have

on behavior patterns (Simon & Gagnon, 1984). The intrapsychic script addresses the

need for a man to conquer more than one woman for sex, as well as uses the emotional

connection as indication for sex among partners. These three levels of sexual scripts

comprise sexual behaviors (Bowleg et al., 2015).

Table 4

Three Levels of Sexual Scripts

Sexual Script	Definition	Example
Cultural Scenarios	A reflection of what is normal within a culture among norms and values as it relates to sexual behavior communication through gender role norms, mass, media, etc.	The belief that men should initiate sex Music video images portraying women as object pursued by men
Interpersonal scripts	A reflection of how people believe they should act regarding sexual behaviors according to their cultural standard	Mass media images of marijuana and/or alcohol as a prelude to sex. Behavior patterns from "hanging out" to foreplay as the order of operations leading up to sex
Intrapsychic scripts	A reflection of individuals' sexual motives for engaging in sexual behaviors	Engaging in sex as an emotional intimacy indication with a partner.

Having sex with multiple women to indicate sexual conquest.

Note: Adapted from Simon, W. & Gagnon, J.H. (1984). Sexual scripts. Society, 22, 53-60. doi:10.1007/BF02701260

Women are identified as relationship sustainers, which include tolerating emotionally distant partners, enduring workaholic partners, enduring emotional/verbal abuse, ignoring partner infidelity, accepting cheating under specific conditions, and placing male partner sexual needs in front of their own to keep the peace within the relationship (Bowleg et al. 2004). Women often fall into the submissive roles, with feelings of less freedom and choice within the relationship (Kiefer & Sanchez, 2007; Sanchez et al. 2006), these submissive behaviors are often determined by the male partners' interests and/or behaviors (Sanchez et al. 2012). This implies that the woman should see sex as an emotional connection to be performed in a committed relationship (Bowleg, Lucas, & Tschann, 2004).

Traditional gender roles expect women to play the care-taking roles, while men are expected to be the laborer/provider for his family (Hahm, Lee, Rough, & Strathdee, 2012). In Asian cultures, women are expected to abstain from engaging in open conversations about sex, while men have the liberty to sleep with multiple women and control the finances, as well as the sex (Hahm et al. 2012). Women are expected to work inside and outside of the house, completing household chores as well as participate in manual labor activities (i.e. farming, clearing away trees, etc.) within Vietnamese culture (Pham, Doneys, & Doane, 2016). Men are still the sole decision-maker (financially and sexually) within the relationship due to women not having assets or property of their own.

Communication

Conversations among sexual partners, among parents and their children, and among healthcare providers exchanging sexual information, as well as negotiating the use of condoms, is known as sexual communication (Byers, 2011; Noar, Carlyle, & Cole, 2006; Xia et al., 2013; Zamboni, Crawford, & Williams, 2000). Verbal communication about sex is positively associated with consistent condom use among men and women but is based on relationship dynamics as to whether or not that type of communication takes place (Alvarez, Bauermeister, & Villarruel, 2014). Traditional gender roles give men the dominant role within a relationship, with the control over when to have sex, sex type, and what conversations take place regarding the subject (Bowleg et al., 2010).

Verbal and nonverbal are forms of communication which people use to express themselves to their partners. Verbal communication about condoms consists of verbal requests for the use of condoms, condom use declarations, as well as in-depth conversations about the use of condoms (Bowleg et al., 2010). Non-verbal communication involves presenting a condom without the use of words or mutual non-verbal communication via gestures or eye contact (Bowleg et al., 2010).

Communication with a partner about sexual history and risk behavior can be difficult and uncomfortable within relationships (Alvarez et al., 2014; Faulkner & Lannutti, 2010; Noar et al., 2012; Teitelman, Tennile, Bohinski, Jemmott, & Jemmott, 2011; Umphrey & Sherblom, 2007). Individuals may be less likely to discuss the use of condoms, or practice using them, if the relationship is established (Abraham, Macauda, Erickson, & Singer, 2011). Women are ordinarily more prone to openly communicate about sex, while men are less apt to do so (Alvarez et al., 2014). Black men may believe

condoms are no longer needed once they are in an established relationship, while Black women tend to not use condoms with their "main" partners but tend to use condoms with casual partners (Abraham et al., 2011). Puerto Rican women have adopted the "my way or the highway attitude," involving both partners getting tested and a mutual understanding being established to determine if unprotected sex is an option both agree upon (Abraham et al., 2011).

There are a number of underlying issues contributing to the reality of women being disproportionately affected and infected with STDs due to the lack of condom use. The lack of available partners, the gender ratio imbalance, and the reality of multiple sex partners all play a role in the ability to negotiate the use of condoms among women. They outnumber men within a number of different ethnicities, presenting men with more options for partners and giving women less opportunity for the negotiation of condom use. Sexual scripts vary among races and ethnicities, as do roles among genders and the communication within these relationships. Traditional scripts, gender roles, and communication are controlled by males, giving them the power to decide what protection measures are used, if any, for each sexual encounter. This leaves little to no room for a woman to negotiate the use of a condom.

Summary and Conclusions

Chapter 2 provides a summation of studies regarding the theoretical frameworks in which the study's foundation lies (i.e. Theory of Planned Behaviors and Theory of Gender and Power). It also includes literature providing an in-depth look into partner availability, masculine ideology, condom negotiation, as well as the impact of multiple sex partners and the elements of gender roles. Chapter 3 will provide specifics as to how

data will be collected, as well as the sample population, anticipated sample size, sampling strategy, and data collection process.

Chapter 3: Research Method

Introduction

Consistent and correct use of male condoms have proven to reduce the risk of pregnancy and the transmission of HIV, gonorrhea, syphilis, chlamydia, trichomoniasis, and HPV (CDC, 2013). According to the CDC (2011a), women have a higher vulnerability to these infections and diseases. It is important to determine their perceptions of masculine ideology and partner availability and their relationship to the use of condoms within relationships. Variables that will be controlled for in this study include age and gender. This chapter provides the methodology, as well as the research hypothesis. A description of the population, study sample size, instrumentation, and procedures will be discussed as well.

Research Design and Rationale

This correlational, quantitative study is designed to examine the relationship between gender ratio perception and masculine ideology and the male dominance of the decision to integrate condoms into sexual activities. Independent variables are the perception of gender ratio and the perception of masculine ideologies, and the dependent variable is condom use behavior. Covariates include demographic factors (race, ethnicity, age, education level, and socioeconomic status) and behavioral factors (religion, dating within race/ethnicity, and STD status of self/partner(s)). This study will include women living in the United States, age 18 and above.

The quantitative research approach was chosen because it aligns with the purpose of the study which is to statistically calculate the relationships between variables. This approach enabled me to collect and provide an analysis of collected data at a faster rate

(Creswell, 2013). The decision to use the quantitative approach, versus mixed methods or qualitative, is due to its ability to generalize findings, test theories, and directly link the relationships between research questions and research variables (Creswell, 2013). The correlation aspect of this research enables the ability to examine the association between the variables and the degrees in which one variable predicts another variable (Frankfort-Nachmias & Nachmias, 2008). This research will hopefully contribute more knowledge to previous research efforts.

Methodology

Population

Researchers have suggested targeting specific risk groups, such as age groupings, specific genders, or age grouping specific races (Choi & Catania, 1996). The target population for this study includes women residing in the United States, age 18 and older, in an effort to provide a better understanding of what influences condom use among women within this specific age group within this country. These women were students at Walden University, as well as members of my social media outlet, and have access to the survey tool via the data collection tool Qualtrics.

Sample and Sampling Procedure

A purposeful convenience sampling method was used for this study. This allowed me to utilize potential participants that were more easily accessible, but who also have the characteristics that were being looked for in the sample (Frankfort-Nachmias & Nachmias, 2008). The target population for this study included women ages 18 and older who can speak, read, and comprehend the English language in order to understand and complete the survey tool. While there are a number of authors who have generalized the

perceptions of women and their use of condoms overall (DePadilla et al., 2011; East, Jackson, O'Brien, & Peters, 2010; Lofti et al., 2013; Rosenthal & Levy, 2010), this study focused specifically on this age group because it includes the age group transitioning into adulthood, as well as women who are at different stages in their lives personally and professionally.

The Walden University study participant pool was utilized to access the sample needed for this research effort, as well as my personal social media outlet (e.g. Instagram). Inclusion criteria included individuals who identified as women, were heterosexual, have been/are in a heterosexual relationship and were/are engaging in sexual intercourse, were age 18 and over, and spoke/read the English language. Women who were unable to read/speak English and men were excluded.

Nonprobability sampling, also known as convenience sampling, involves participants who are not only willing to participate, but are also available to participate in the research effort (Leedy & Ormrod, 2010).   There are no restrictions on ethnicity or income level. G*Power 3.1.7 software was used to calculate the necessary sample size for this research effort. Multiple linear regression was used with two predictors (IVs were perception of masculine ideology and perception of gender ratio) and their influence on condom use (DV). For the G*Power 3.1.7 statistical test, a power of 0.80, the medium effect size of 0.15 and a level of significance of 0.05 were used as parameters for the sample size computation (Faul, Erdfelder, Lang, & Buchner, 2009; Gravetter & Wallnau, 2009). The computed minimum sample size was $N = 55$ to achieve at least 80% power. To increase the strength of the research effort, the goal was for 200 women to participate in the study.

Procedures for Recruitment, Participation, and Data Collection

Participants were recruited for this study through the Walden University research participant pool, as well as my personal social media outlet (e.g. Instagram). General information regarding some specifics about my study was provided to each participant via the introductory section within the Qualtrics system. Before a participant could move forward with completing the survey, she needed to answer criterion questions pertaining to her age and whether or not she was involved in a same sex relationship. Based on her responses to these questions, she was either advanced to the informed consent portion of the survey tool or was withdrawn from the study. Potential participants who did not consent to participate, were also withdrawn. If the participant agreed to the informed consent, she advanced to the next part of the electronic survey that collected demographic information. When she clicked the button to advance, she was sent into the other portions of the survey. At the end of the survey, when she submitted the final page, she was provided with information on safer sex options and STD testing sites in the United States. The information consisted of a link redirecting her to Planned Parenthood ([www.plannedparenthood.org.)](www.plannedparenthood.org.) as well as to the CDC's website for national testing sites (https://gettested.cdc.gov.)

Instrumentation and Operationalization of Constructs

Data pertaining to the independent variable of masculine ideology were gathered using the Gender Role Belief Scale (GRBS) (Kerr & Holden, 1996). *The* Gender Ratio Imbalance Beliefs and Behavior Scale (GRIBBS) was used to determine the perception of gender ratio influence on condom use. The dependent variable, condom use, was collected via the demographic data section of the assessment tool. The demographic data

section also collected information on age, race/ethnicity, socioeconomic status, highest educational achievement, religion, relationship status, and dating preference (specific pertaining to race/ethnicity), and STD status (self/current or previous partner) was also collected at the start of the data collection process. See Appendices for permission to use measurement tools, copies of the published tools, and the demographic form.

The researcher used Qualtrics (https://www.qualtrics.com) which is an electronic survey system to develop and manage research data. Participants answered questions via a Likert-type scale (e.g. strongly agree, agree, neutral, disagree, strongly disagree) or via dichotomous/categorical responses (e.g. yes or no).

The survey was divided into three sections:

- Demographic information (age, gender, race, education level, and socioeconomic status)

- Measures of women perceptions of masculine ideology and condom use.

- Measures of women perceptions of gender ratio influence on condom use

The literature review influenced the choices for survey tools used (Brown & Gladstone, 2012: Bontempi et al., 2008; Corneille et al., 2008; Ferguson et al., 2006; Gakumo et al., 2012; Hall & Pichon, 2014; Jarama et al., 2007; Kerr & Holden, 1996; Lanier, 2013; Mallory et al., 2009; Waltz et al, 2005; Warner et al., 2011; Zhang et al., 2012.

The survey tool included items mentioned via the literature review. The developed survey consisted of questions derived from their original source, as granted by

the survey developers. To ensure content validity, the tool was reviewed by the

committee survey expert.

      Gender Role and Belief Scale (GRBS*).* The independent variable, perception of

masculine ideology, was measured using the GRBS. Developed in 1996 by Kerr and

Holder, the scale is a psychometrically sound measure that differentiates between gender

role ideology and gender stereotypes (Kerr & Holden, 1996). This tool identifies the

distinctive roles of men and women, without the beliefs that men and women must

conduct themselves as such (Brown & Gladstone, 2012). The GRBS is a 20-item

questionnaire with a seven-point Likert scale response scheme ranging from 1 (strongly

agree) to 7 (strongly disagree). The value of the IV, masculine ideology perception, was

calculated using the total score of this tool, which can range from 20 to 140. A higher

score indicated more feminist gender role beliefs, while a lower score indicated more

traditional gender role beliefs.

      Kerr and Holden (1996) reported good reliability and validity of the GRBS. The

scale was validated using an undifferentiated group of participants with Pearson's

correlation to calculate the difference between the vignette criterion and GRBS (Kerr &

Holden, 1996). The correlation between the aforementioned variables was statistically

significant, $r(102) = .68$, $p < .001$, making the scale one-dimensional after parallel analysis

(Brown & Gladstone, 2012; Kerr & Holden, 1996). Cohen's large effect standard of .40

was exceeded at .64. Strong test, retest was evident at .86, validating the reliability of the

scale (Kerr & Holden, 1996).

The influence and/or effects of masculine ideology were operationally defined using

Likert-scale responses for questions 1 through 20 (Appendix F).

Gender Role Belief Scale Item Example Questions

1. It is disrespectful for a man to swear in the presence of a lady.

2. Women should not expect men to offer them seats on buses.

3. Homosexual relationships should be as socially accepted as heterosexual

relationships.

4. The initiative in courtship should usually come from the man.

5. It bothers me more to see a woman who is pushy than a man who is pushy.

6. When sitting down at the table, proper respect demands that the gentleman hold

the lady's chair.

7. Women should have as much sexual freedom as men.

8. Women should appreciate the protection and support that men have

traditionally given them.

9. Women with children should not work outside the home if they don't have to

financially.

10. I see nothing wrong with a woman who doesn't like to wear skirts or dresses.

Gender Role Beliefs Scale Response

A. Strongly Agree

B. Agree

C. Somewhat Agree

D. Undecided

E. Somewhat Disagree

F. Disagree

G. Strongly Disagree

Gender Role Beliefs Scale Score Key

Items are scored using the sum of the responses given. The sum of the total score ranges from 20 to 140, with lower scores indicating the strong presence of masculine ideology influence.

Strongly Agree=1

Agree=2

Somewhat Agree=3

Undecided=4

Somewhat Disagree=5

Disagree=6

Strongly Disagree=7

Gender Ratio Imbalance Beliefs and Behaviors Scale (GRIBBS). The GRIBBS was used to assess the independent variable gender ratio perception. Researchers have conducted studies on gender ratio imbalance beliefs (Gakumo et al., 2012; Hall & Pichon, 2014; Warner et al., 2011; Zhang et al. 2012), but few researchers have focused on the development of a collection tool to measure for this variable specifically (Bontempi et al., 2008; Corneille, Zyzniewski et al., 2008; Ferguson et al., 2006; Jarama et al., 2007; Mallory et al., 2009). Developed by then Georgia State University nursing doctoral student, now PhD, Latrona R. Lanier, the scale was originally designed to measure gender ratio imbalance beliefs that influenced sexual behaviors among women (Lanier, 2013). It is divided into two, 10- question subscales, GRIBelefs and GRIBehaviors, scored using a 5-point Likert scale (1-strongly disagree and 5-strongly agree). Scores were calculated using the sum of each subscale and could range

from 10 to 50. A high score indicated the presence of gender ratio imbalance and suggested there is a difference in gender influence decisions pertaining to condom use (Lanier, 2013).

There are very few documented research efforts that utilized this collection tool; however, the developer did make an effort to ensure its validity and reliability. Using a group of ten African American women, via a focus group, the developer conducted a pilot study using the scale. The women ranged in age from 21 to 60. The initial alpha coefficient for the GRIBBS overall valued .71; GRIBelief valued .82; while GRIBehaviors valued .56 (which was thought to be a result of the short data collection scale (Lanier, 2013). Two experts in HIV/AIDS research measured content validity. They evaluated and assessed the scale's question relevance and overall tool objective to complete the content validity index (CVI). The CVI was calculated based on the researcher's ability to quantify scale ratings (Waltz et al., 2005) and was deemed valid based on these elements. The Likert-scale responses from the Gender Ratio Imbalance Beliefs and Behavior Scale defines the influence of gender ratio on the use of condoms within a relationship. The survey tool is divided into two subscales (GRIBelief and GRIBehaviors) and consists of 20 questions (Appendix E).

Gender Ratio Imbalance Beliefs and Behavior Scale Example Questions

1. There are fewer men than women in my community.

2. Fewer men in my community decrease my chances of dating.

3. Fewer men in my community decrease my chances of getting married.

4. Fewer men in my community decrease my chances of having children.

5. Fewer men in my community decrease my chances of maintaining a steady

relationship.

6. To maintain my relationship, I do not use a condom when having oral, vaginal,

or

rectal sex.

7. I allow my male partner to have sex with other female partners to maintain our

relationship.

8. I use a condom even if it causes me to lose my mate.

9. I do not have sexual relationships when I know the man has multiple partners.

10. There are not enough men for all women to be in a steady and exclusive

relationship.

Gender Ratio Imbalance Belief and Behavior Scale Response

A. Strongly Disagree

B. Disagree

C. Neutral

D. Agree

E. Strongly Agree

Gender Ratio Imbalance Beliefs and Behaviors Scale Score Key

Items are scored using the sum of both subscales. Scores range from 10 to 50,

with high scores indicating the presence of gender ratio imbalance.

1=Strongly Disagree

2=Disagree

3=Neutral

4=Agree

5=Strongly Agree

Lanier developed this survey tool to collect data for a specific research effort; therefore, there is not a lot of research found using this tool (2013). The current research effort will serve a number of roles. The use of this tool via the current study will contribute to the gap in literature. This will assist the effort of future researchers who opt to use this tool for their research efforts.

Operationalization of Variables

The GRIBBS tool was used to measure gender imbalance beliefs and was split into two independent subscales. Items are scored on a 5-point Likert scale (1=strongly disagree; 2=disagree; 3=somewhat agree; 4=agree; and 5=strongly agree). The total sum of each GRIBBS subscale ranges from 10 to 50 when used together. GRIBeliefs indicators are item numbers 1, 2, 3, 4, 5, 10, 11, 12, 13, and 19 and provide an evaluation of gender ratio imbalance beliefs among women. GRIBehaviors are measured via item numbers 6, 7, 8, 9, 14, 15, 16, 17, 18, and 20. These items evaluated the impact of gender ratio imbalance beliefs on condom use and safe sex behaviors. Higher scores indicated higher gender ratio imbalance beliefs and suggested high gender ratio imbalance beliefs influence sexual behaviors.

The GRBS tool was used to measure gender roles (masculine ideologies). The 20-item scale uses a 7-point Likert scale to score each response (1=strongly agree; 2=agree; 3=somewhat agree; 4=undecided; 5=somewhat disagree; 6=disagree; and 7=strongly disagree). Items 2, 3, 7, 10, 12, and 17 will be coded reversely. Total scores range from 20 to 140, with higher scores indicating feminist beliefs, and lower scores indicating masculine ideology dominance.

Data Analysis Plan

In order to conduct an analysis for this research, data were downloaded from the Qualtrics online survey tool and analyzed using version 21 of IBM's Statistical Package for Social Science (SPSS).

The foundation of this research was based on the following research question and hypothesis.

Research Question (RQ$_1$): Is there a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (H$_0$1): There is no statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (H$_A$1): There is a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Research Question (RQ$_2$): Is there a statistically significant relationship between

perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (H_o2): There is no statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (H_A2): There is a statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Descriptive frequencies were reported for all of the independent and dependent variables. T-tests were used, as appropriate, to determine the differences between groups that could be categorized in a binary fashion (for example, race: 0=white/1=non-white; ethnicity: 0=US/1=non-US, education level: 0=no college/1=some college; STI/STD status: 0=no history/1=history of STI/STD; relationship status: 0=married/long term/1=not long term) condom use among this age group of women, as well as the relationship between masculine ideologies, partner availability, and condom use. Correlation analyses were completed in order to determine the strength of relationships between variables, and this determined if any variables should be removed from some

statistical analyses to reduce multicollinearity. There was only one dependent variable in both research questions, condom use, which is binary, so multiple linear regression was also used to determine the relationship between the independent (including covariates) and dependent variables including calculated odds ratios.

Threats to Validity

Testing theories subjectively through the examination of related variables defines quantitative research (Polit & Hungler, 2013). This type of research can be influenced externally and internally (Onwuegbuzic, 2000). My ability to clearly illustrate results and findings for interpretation demonstrated internal validity (Campbell & Stanley, 1966). For the sake of this research effort, current/previous sexual relationship status could have been a threat to internal validity. Elements and/or memories of previous, or even current relationships, could have influenced the responses of the participants, therefore posing a potential threat to the internal validity of this research. An example includes a participant engaging in behaviors which she is ashamed of, or the participant simply thinks the questions are too personal (Clark & Desharnais, 1998). Questions related to this subject may have caused a participant to not answer honestly or skip this question altogether (Clark & Desharnais, 1998). For these reasons, the emphasis of confidentiality was constantly reiterated throughout the survey tool. The presentation of results further emphasized confidentiality by only including aggregate data, so no one person could be identified based off of her answers to the survey tool.

External validity brings attention to how a study's results can be generalized outside of the study sample (Cook & Campbell, 1979). This includes women outside of the specified age range and/or women who are not fluent in the English language.

Convenience sampling could have posed a threat to external validity due to the reality of the researcher having no control of the representativeness of women who elected to complete the survey tool. As a result, there could have been an abundance of women who completed the survey and resided in the South, or an extreme number of women who identified as Hispanic.

The results of this research provide a generalized understanding of how women perceive the effects of masculine ideology and partner availability on their decision to use condoms, but it does not represent all women. The sample for this research was collected from women who have access to the Walden University research pool, as well as those connected to my social media outlet (e.g. Instagram). It does not include women who do not have access to a computer, leaving a great possibility of the results being skewed in favor of women who have access to computers to participate in the research effort, making it hard to form a conclusion about women and their perception on the subject at hand.

Ethical Procedure

Since the effort consists of human participants, the Walden University Institutional Review Board (IRB) application was prepared for submission, and I completed the National Institute of Health's (NIH) "Protecting Human Research Participants" (certification#: 2466775). Approval from the Walden University IRB must have been gained before any contact could have been made with any participants or data could be collected. Protection of participant rights has been maintained through the completion of the informed consent process (Creswell, 2009; Frankfort-Nachmias & Nachmias, 2008). Through this process, participants understood the purpose of the

research, the qualifications for participation, as well as that participation in this study was strictly voluntary and that they had the right to opt out at any time, if desired.

Participants were questioned about their sexual practices, sexual partners, and behaviors. If or when a participant deemed questions to be too intrusive, she had the option to discontinue the survey tool. Data collected via the research effort were not linked to participants, nor will they be shared outside of this research study. Specific information such as names, telephone numbers, addresses, places of employment, and other related identifiable information was not solicited. Study data will be kept up to five years after the study ends via my personal laptop, which is password protected. After the five years, data will be erased from my laptop permanently using the system's erasing process.

Summary

This correlational, quantitative study sought to determine the influence male partner availability and masculine ideology has on a woman's decision to use condoms. An assessment of whether age, race, ethnicity, profession, previous condom use, as well as relationship status, influence a woman's perception of both masculine ideology and gender ratios was done. The Gender Roles and Beliefs Scales (GRBS) and the Gender Ratio Imbalance Beliefs and Behaviors Scale (GRIBBS) was used to accomplish the goals of this research. The measurement tools were administered electronically, and an analysis was performed via the latest version of SPSS. Ethical approval was obtained from the Walden University IRB. Chapter 4 provides illustrations of the data collected from the study.

Chapter 4: Results

Introduction

The objective of this quantitative, correlational study was to examine the relationship between the perceptions of women about gender ratio, masculine ideology, and condom use while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history. The theory of gender and power and the theory of planned behavior were used to provide a theoretical foundation for this research. The research questions and hypotheses used in the study included:

Research Question (RQ_1): Is there a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (H_01): There is no statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.
Alternative Hypothesis (H_A1): There is a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race,

employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Research Question (RQ2): Is there a statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (H$_o$2): There is no statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (H$_A$2): There is a statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

In chapter 4, I provide insight on the research processes of data collection, recruitment of participants, and data analyses. Data analyses included information on demographic characteristics of study participants, as well as results for statistical analyses related to each research question.

Data Collection

Institutional Review Board (IRB) approval was granted June 14, 2018.

Recruitment information was then posted via the Walden University participant pool

portal on June 15, 2018, where potential participants were able to view information about

the study and inclusion criteria. When they clicked the link to the study, participants

were directed to the study's informed consent. Upon completing the informed consent,

participants were given the opportunity to opt in or out of the research. If they opted out,

they were routed out of the study. If they opted in, they were taken to the inclusion

criteria questions (e.g. Are you 18 years or older? Are you female?). These two questions

determined whether or not each participant could participate in the study or not. If one

responded no to either question, she was routed to a page that thanked her for her interest

and let her know she did not qualify to participate. In the event one answered yes to both

questions, she was routed to the electronic version of the survey instruments (details in

chapter 3 and appendices E and F). By July 31, 2018, there were only 11 responses

collected. On August 7, 2018, a request for change in procedures was submitted to the

Walden University IRB to include the social media outlet Instagram as a recruitment tool.

Approval for the change in procedures was granted on August 17, 2018. At that time, the

recruitment materials were posted to Instagram. Data collection ended on August 20,

2018. There was a total of 66 participants, but two were excluded due to incomplete

surveys. The final number of participants was 64.

Data were downloaded from Qualtrics, and all incomplete surveys (surveys with

missing responses) were not used in data analyses (data from two participants). As

summarized in chapter 3, the necessary sample size for this study was calculated at 55 to

arrive at statistical power of 0.80, given a medium effect size of 0.15 (Faul, Erdfelder, Lang, & Buchner, 2009; Gravetter & Wallnau, 2009). At the end of data collection, a total of 64 participants completed the entire survey. The calculated statistical power for the number of actual participants was 0.95 and included an effects size of 0.05. Analyses were conducted using the Statistical Package for Social Sciences (SPSS) Version 25.0. No outliers were identified in the final dataset used for the data analyses.

Demographics and Other Factors

Sample characteristics. The majority of the participants identified as Black/African American (80%) (see Table 5). A total of thirty-eight percent of the participants were between the ages of 31 and 35. Eighty-three percent of the participants were employed full-time, and 91% of participants had at least an associate degree. Seventy-five percent of the participants made at least $36,000 a year. The majority of the participants identified themselves as Christian (84%) with varying devoutness/participation levels.   Of the participants, 93% identified themselves as being heterosexual, 41% were in long-term relationships, and 72% preferred to date within their own race/ethnicity. Approximately 39% of the participants affirmed being infected with an STD/STI at some point in their lives. STD/STI partner lifetime history revealed that 41% of their partners had a history of STDs/STIs. Approximately 22% of the respondents were unsure of their partners' STD/STI history.

Table 5

Sample demographics and other factors (n=64)

Characteristic of Participants	Category	N	Frequency
Age	21-25	5	8%

	26-30	12	19%
	31-35	24	38%
	36-40	13	20%
	41-45	5	8%
	46-50	3	5%
	51-56	2	2%
Race	Black	51	80%
	White	8	12%
	More than one race	5	8%
Employment Status	Full-time	53	83%
	Part-time	8	12%
	Unemployed	3	5%
Education	Doctorate	6	9%
	Master's	25	39%
	Bachelor's	20	31%
	Associate's	7	12%
	Professional Certificate	2	3%
	High school diploma	4	6%
	Less than a high school	0	0%
		0	0%
Income (yearly)	$0-$25,000	8	12%
	$26,000-$35,000	8	13%
	$36,000-$45,000	11	17%
	$46,000-$55,000	13	20%
	$56,000-$60,000	2	3%
	$61,000 and above	22	35%
Religion	Christian	54	84%
	Judaism	2	3%
	Buddhism	0	0%
	Hinduism	0	0%
	Atheist	1	2%
	Agnostic	1	2%
	Other	6	9%
Religious Devoutness	Attend services each week/involved in church activities	13	20%

	Attend services each week	9	14%
	Attend services occasionally	32	50%
	Attend services only on holidays	1	2%
	Do not attend/am not religious	9	14%
Sexual Orientation	Heterosexual	60	94%
	Bi-sexual	4	6%
Relationship Status	Causal Dating	21	33%
	Long term relationship	26	41%
	Married	17	26%
Dating Preference	Date within race/ethnicity	46	72%
	Date outside of race/ethnicity	3	5%
	Date both inside/outside of race	15	23%
STD History (self)	Yes	25	39
	No	38	59%
	Not sure	1	2%
STD History (partner)	Yes	26	41%
	No	24	37%
	Not sure	14	22%

Note. No missing values were used

Results

The GRIBBS was used to measure the perceptions of gender ratio and condom use among women (Lanier, 2013). The survey tool was broken into the two subscales to measure gender ratio imbalance and condom use, respectively. The scores ranged between 10 and 50, with higher scores indicating the presence of gender ratio imbalance and/or the presence of gender ratio imbalance on condom use (Lanier, 2013). The mean

score, as well as the standard deviation for the GRIBBS, can be found in table 6. The

GRIBBS averaged 43.4 (SD = 8.0), which indicates high gender ratio imbalance beliefs,

suggesting that gender ratio imbalance beliefs could be related to the use of condoms

within the relationships of participants. GRIBBS frequencies are illustrated in Appendix

G. The data regarding gender ratio imbalance (partner availability), measured via the

GRIBBS subscale GRIBelief, averaged 22.4 (*SD = 6.5*). The GRIBehavor subscale of

GRIBBS, which measured condom use, averaged 21.0 (SD = 4.2).

Table 6

Descriptive analyses for the GRIBBS (n=64)

Scale	Mean	Standard Deviation	Median
GRIBBS	43.4	8.0	43
GRIBeliefs	22.4	6.5	21
GRIBBehaviors	21.0	4.2	21

Note. GRIBBS=total score of Gender Ratio Imbalance Beliefs and Behavior Scale;
*GRIBelief and GRIBehaviors=GRIBBS subscal*es

GRBS Means & Frequencies

The GRBS was designed to measure the perception of women about masculine

ideology. Scores can range from 20 to 140 on the 20-question questionnaire. Scores

equaling 80 or above indicate the presence of more feminist gender role beliefs (Kerr &

Holden, 1996). The average score for masculine ideology, as shown in table 7, was 95.1

among the 64 participants (*SD= 14.0*), with the median score of 91. This score suggests

that research participants believe that women have equal rights in decision making within

relationships. Illustrations for the GRBS response frequencies can be found in Appendix

H.

Table 7

Descriptive analyses for the GRBS (n=64)

Scale	Mean	Standard Deviation	Median
GRBS	95.1	14.0	91

Note. GRBS=score of Gender Roles and Beliefs Scale

Independent t-Test Results

Independent t-test analyses were completed in order to determine if there were statistically significant differences between binary demographic groups in scores on the GRIBBs, the GRIBeliefs subscale, the GRIBehaviors subscale, and the GRBS. The demographic variables were recoded to binary values (see table 8), and the instrument scores were linear, so this type of analysis was appropriate (Field, 2009). Variables include Black vs. non-Black, full-time vs non-full-time employment status, Christian vs. non-Christian (religion), religious vs. non-religious (religious devoutness), heterosexual vs. bisexual (sexual orientation), married vs. not married (relationship status), sexual history of self (yes vs. no), and sexual history of partner (yes vs. no).

Table 8

Recoding of independent variables for t-test analyses

Variable Name	Initial Coding	Recoding for t-Test
Race	1=Black/African American 2=White/Caucasian 3=Asian 4=American Indian/Alaskan Native 5=Native Hawaiian/Pacific Islander 6=More than one race	0=Black (1 in initial category) 1=non-Black (2-6 in initial category)
Employment status	1=Full-time 2=Part time 3=Unemployed	0=Full-time (1 in initial category) 1=not Full-time (2-3 in initial category)

Religion	1=Christian 2=Judaism 3=Buddhism 4=Hinduism 5=Atheist 6=Agnostic 7=Other	0=Christian (1 in initial category) 1=non-Christian (2-7 in initial category)
Religious devoutness	1=Attend services each week/involved in church activities 2=attend services each week 3=Attend services occasionally 4=Attend services only on holidays 5=Do not attend services/not religious	0-Religious (1-3 in initial category) 1=non-Religious (4-5 in initial category)
Sexual orientation	1=Heterosexual 2=Bisexual	0=Heterosexual 1= Bisexual
Relationship status	1=Casual dating 2=Long term relationship 3=Married	0=Married (3 in initial category) 1=not married (1-2 in initial category)
STD history (self)	1=Gonorrhea 2=Chlamydia 3=Syphilis 4=Herpes 5=HIV/AIDS 6=Other 7=Not Sure 8=Prefer not to answer	0=Yes (1-5, 7,8 in initial category) 1=No (6 in initial category)
STD history (partner)	1=Gonorrhea 2=Chlamydia 3=Syphilis 4=Herpes	0=Yes (1-5, 7,8 in initial category) 1=No(6 in initial category)

5=HIV/AIDS
6=Other
7=Not Sure
8=Prefer not to answer

Race. Table 9 illustrates the results of the t-Test analyses of race, divided into

Black and non-Black. There were no statistically significant differences (p>.05) between

Black women and non-Black women on their scores on the GRIBBS (partner availability

and condom use), GRIBBS subscales GRIBeliefs (partner availability), or the

GRIBehaviors (condom use). There was a statistically significant difference between

Blacks and non-Blacks in relation to scores on the GRBS (masculine ideology). The

mean score for Blacks (n=51) was 90.7, while the non-black group (n=13) had a mean

score of 102, which indicated the presence of masculine ideology.

Table 9

t-Test Results: Black (n=51) vs. Non-Black Respondents (n=13)

	F	Df	t	Sig (2tailed)
GRIBBS	1.439	62	1.230	.223
GRIBeliefs	.365	62	1.354	.181
GRIBehaviors	.076	62	.266	.791
GRBS	3.727	62	-2.792	.007*

Note: p < .05

Employment status. The independent variable of employment status divided

into full-time and not full-time, is shown in Table 10. There were no statistically

significant differences (p>.05) between women employed full-time and those who were

not employed full-time on the GRIBBS (gender ratio imbalance and condom use),

GRIBBS subscales GRIBeliefs (gender ratio imbalance), GRIBehaviors (condom use),

nor the GRBS (masculine ideology).

Table 10

t-Test Results: Full Time (n=53) vs. Non-full Time Employment (n=11)

	F	Df	T	Sig (2tailed)
GRIBBS	.008	62	-.376	.708
GRIBeliefs	1.892	62	.167	.868
GRIBehaviors	.550	62	-.988	.327
GRBS	.14	62	-.860	.393

Religion. Table 11 shows the results of the t-Test for religion, divided into

Christian and non-Christian. There were no statistically significant (p>.05) differences

between Christian and non-Christian groups on the GRIBBS (gender ratio imbalance and

condom use) and its subscales GRIBeliefs (gender ratio imbalance) and GRIBehaviors

(condom use). Statistically significant differences (p=.000) were found between the

Christian (M=90.2) and the non-Christian group (M=108.4) on the GRBS (masculine

ideology), indicating the presence of masculine ideology.

Table 11

t-Test Results: Christian (n=54) vs. Non-Christian (n=10)

	F	Df	T	Sig (2tailed)
GRIBBS	2.093	62	.101	.920
GRIBeliefs	.137	62	.417	.678
GRIBehaviors	.902	62	-.452	.653
GRBBS	.762	62	-4.268	.000*

Note: p < .05

Religious Devoutness. The results of t-Tests analyses for religious devoutness

are shown in Table 12. Devoutness is classified as attending services each week, as well

as being involved in other related activities such as attending services weekly and

attending services occasionally. Non devout entails only attending services on holidays or not attending services at all. There was a statistically significant difference between these two groups (p=.004) on masculine ideology as measured by the GRBS. The non-devout group averaged a score of 104.6, while the participants who identified as being religious devout averaged a score of 90.9. There were no statistically significant (p>.05) differences between the devout and non-devout group related to the GRIBBS (gender ratio imbalance and condom use), and its subscales GRIBeliefs (gender ratio imbalance) and GRIBehaviors (condom use). The non-devout group illustrated more masculine ideology, as measured by the GRBS, than the devout group.

Table 12

t-Test results devout (n=54) vs. non-devout (n=10)

	F	Df	T	Sig (2tailed)
GRIBBS	.084	62	.186	.853
GRIBeliefs	.012	62	.163	.871
GRIBehaviors	.183	62	.611	.543
GRBS	1.249	62	-3.023	.004*

Note: p < .05

Sexual Orientation. Table 13 illustrates the results of the t-Test analysis based on sexuality (divided into heterosexual and not heterosexual). The difference between the two groups on GRBS (masculine ideology) score proved to be statistically significant. The bisexual group scored higher with a mean of 109.5 for masculine ideology, while the heterosexual group averaged a score of 91.6. There were no statistically significant (p>.05) differences between the heterosexual and bisexual groups related to the GRIBBS (gender ratio imbalance and condom use), and its subscales GRIBeliefs (gender ratio

imbalance) and GRIBehaviors (condom use). The GRBS (masculine ideology) did

illustrate statistical significance between the heterosexual group and the bisexual group.

Table 13

t-Test results heterosexual (n=60)l vs. bisexual (n=4)

	F	Df	T	Sig (2tailed)
GRIBBS	3.98	62	.048	.962
GRIBeliefs	2.103	62	.440	.662
GRIBehaviors	1.299	62	-.591	.557
GRBS	.124	62	-2.535	.014*

Note: p < .05

Relationship Status. The independent variable of relationship status was divided

into married and not married. The results of the t-Test analysis are illustrated in Table

14. There was no statistically significant difference between women who identified as

being married and those who were not married as measured by the GRIBBS (gender ratio

imbalance and condom use), its subscales GRIBeliefs (gender ratio imbalance) and

GRIBehaviors (condom use), and the GRBS (masculine ideology).

Table 14

t-Test results married (n=17) vs. not married (n=47)

	F	Df	T	Sig (2tailed)
GRIBBS	.001	62	-.020	.984
GRIBeliefs	.422	62	.288	.775
GRIBehaviors	.192	62	-.484	.630
GRBS	.875	62	-1.157	.252

STD History (self). Table 15 shows the results of the independent sample t-test

based on STD history. The GRIBBS (gender ratio imbalance and condom use), its

subscale GRIBehaviors (condom use) and GRIBeliefs (gender ratio imbalance), and

GRBS (masculine ideology) demonstrated no statistically significant mean differences

between the two groups. The number of participants who answered "yes' to a previous

history of STD's averaged a score of 22.8, while the participants who responded "no" had

a mean score of 22.1.

Table 15

t-Test results STD history (self) (n=25) vs. no (n=39)

	F	Df	T	Sig (2tailed)
GRIBBS	.002	62	1.022	.311
GRIBeliefs	.3.984	62	.441	.661
GRIBehaviors	.538	62	1.282	.205
GRBS	.394	62	-.211	.834

STD History (partner). Table 16 displays the results of the independent sample

t-test for the partner STD history variable. The two categories of the variable were

partners who the participants knew had an STD previously and partners who the

participants did not know of any history of an STD. The GRIBBS (gender ratio

imbalance and condom use), its subscales GRIBeliefs (gender ratio imbalance) and

GRIBehaviors (condom use), and the GRBS (masculine ideology) showed no statistically

significant differences between the two groups.

Table 16

t-Test results partner STD history yes (n=26) vs. no (n=38)

	F	Df	T	Sig (2tailed)

GRIBBS	.144	62	.809	.421
GRIBeliefs	11.714	62	.462	.646
GRIBehaviors	1.355	62	.836	.406
GRBS	.029	62	-.628	.532

Note: p < .05

Research Question Data Analyses (Multiple Linear Regression)

Assumptions for multiple regression. The assumptions are that the variables are distributed normally (multivariate normality) and that none of the independent variables are highly correlated with each other (multicollinearity) (Fields, 2013). The presence of multicollinearity indicates that there are inaccurate estimates of standard errors and coefficients, as well as inference errors (Grewal et al., 2004). The GRIBBS subscale GRIBehaviors measured the use of condoms. Shapiro-Wilkes and Kolmogorov-Smirnov maintained non-significant values of 0.138 and 200, respectively, thus validating the assumption that the condom use variable was s normally distributed. A correlation analysis was conducted to test if multicollinearity would be an issue when running multiple linear regression (see table 17). To avoid multicollinearity, the Pearson's correlation should be less than 0.7 between each variable, respectively, and the variance inflation factor (VIF) among 8 variables should be less than 0.3, respectively. Data indicated that all bivariate correlations were less than 0.7, and the VIFs among all of the variables were less than 0.3. This indicated no multicollinearity among the variables (Field, 2013), so none of the variables had to be removed from the multiple linear regression analysis. Thus, all assumptions for multiple regression were met.

Table 17

Pearson's Correlation Values (n=64)

Variable	GRIBeh.. Total Score	Race	Employ.	Relig.	Devout.	Sex Orien.	Rela Stat	STD Hist (self)	STD Hist (partner)
GRIBehav. Total Score		-.034	.125	.057	-.077	.075	.062	-.161	-.106
Race	-.034		.182	.531	.425	.030	.224	.006	.101
Employ	.125	.182		.032	-.082	.053	-.085	.280	.293
Relig	.057	.531	.032		.526	.244	.131	-.008	.005
Devout	-.077	.425	-.082	.526		.067	.131	-.096	-.082
SexOrien	.075	.030	.053	.244	.067		-.009	-.058	-.312
Relationship Stat	.061	.224	-.086	.131	.131	-.009		-.026	-.007
STD Hist (self)	-.161	.006	.280	-.008	-.096	-.058	-.026		.577
STD Hist (partner)	-.106	.101	.293	.005	-.082	-.312	-.007	.577	

Results Related to Research Question 1

Research Question (RQ1): Is there a statistically significant relationship between

the perceptions of women about gender ratio (as measured by the GRIBBS subscale

GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (H_01): There is no statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (H_A1): There is a statistically significant relationship between the perceptions of women about gender ratio (as measured by the GRIBBS subscale GRIBeliefs) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Results. A multiple linear regression analysis was conducted to evaluate the relationship between the perceptions of women about gender ratio (as measured by the Gender Ratio Imbalance Beliefs and Behavior Scale (GRIBBS) subscale GRIBeliefs) and condom use while controlling for the other factors   SPSS formulated several models for variable selection. The forward method proved to be the most useful by illustrating the maximum correlation between the independent variables and dependent variable and the largest partial correlation. The $R^2 = .03$ associated with this regression model suggests that gender ratio imbalance accounts for (3%) of the variation in condom use and cannot be explained by gender ratio imbalance, while controlling for race, employment status,

religion, religious devoutness, sexual orientation, relationship status, STD history of self, and partner STD history.

There was no statistically significant relationship between the perceptions of women about gender ratio (as measured by the Gender Ratio Imbalance Beliefs and Behavior Scale (GRIBBS) subscale GRIBeliefs) and condom use while controlling for the other factors. Therefore, null hypothesis one was not rejected.

Table 18

Regression Results of GRIBeliefs & Condom use (GRIBehaviors) while controlling for the other factors (n=64)

| Variable | β | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
		STD Error	Beta		
GRIBBeliefs (Gender Ratio Imbalance)	.053	.082	.083	.655	.515
Race	-.890	1.704	-.086	-.522	.604
Employment Status	2.388	1.549	.217	1.542	.129
Religion	2.677	2.005	.234	1.335	.188
Religious Devoutness	-1.122	1.815	-.098	-.618	.539
Sexual Orientation	1.502	2.572	.088	.584	.562
Relationship Status	1.096	1.243	.117	.882	.383
STD History (self)	-1.808	1.361	-.212	-1.328	.190
STD History (partner)	.047	1.468	.006	.032	.974

Results Related to Research Question 2

Research Question (RQ2): Is there a statistically relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history?

Null Hypothesis (Ho2): There is no statistically significant relationship between

perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Alternative Hypothesis (H_A2): There is a statistically significant relationship between perceptions of women about masculine ideology (as measured by the GRBS) and condom use, while controlling for demographic factors including race, employment status, religion, religious devoutness, and other factors including sexual orientation, relationship status, STD history of self, and partner STD history.

Results. A multiple linear regression analysis was conducted to determine the relationship between perceptions of women about masculine ideology (as measured by the Gender Role Beliefs Scale (GRBS) and condom use while controlling for the other factors. SPSS formulated several models for variable selection. The forward method proved to be the most useful by illustrating the maximum correlation between the independent variables and dependent variable, as well as ones with the largest partial correlation. The R^2 value of .14 associated with this regression model means that gender ratio imbalance accounts for 14% of the variation in condom use, while controlling for the other factors. There was no statistically significant relationship between perceptions of women about masculine ideology (as measured by the Gender Role Beliefs Scale (GRBS) and condom use while controlling for the other factors ((see table 19). Therefore, the null hypothesis was not rejected.

Table 19

Regression Results of GRBS & Condom use (GRIBehaviors) while controlling for

demographics (n=64)

Model	β	Unstandardized Coefficients STD Error	Standardized Coefficients Beta	T	Sig.
(constant)	23.846	4.111	-	5.8	.000
Masculine Ideology	-.043	.038	-.143	-1.133	.262
Race	-.890	1.704	-.086	-.522	.604
Employment Status	2.388	1.549	.217	1.542	.129
Religion	2.677	2.005	.234	1.335	.188
Religious Devoutness	-1.122	1.815	-.098	-.618	.539
Sexual Orientation	1.502	2.572	.088	.584	.562
Relationship Status	1.096	1.243	.117	.882	.383
STD History (self)	-1.808	1.361	-.212	-1.328	.190
STD History (partner)	.047	1.468	.006	.032	.974

Summary

The independent sample t-tests indicated there was some statistical significance among masculine ideology and race, religion, religious devoutness, and sexual orientation. T-tests also indicated statistical significance among partner availability and STD history of self, as well as STD history of partner. Correlation analyses indicated no statistically significant correlations between gender ratio imbalance and condom use, nor was there a statistically significant correlation between masculine ideology and condom use. Multiple linear regression indicated no statistically significant association between condom use and gender ratio imbalance, while controlling for race, employment status, religion, religious devoutness, sexual orientation, relationship status, STD history (self), and partner STD history. Multiple linear regression also indicated no statistically significant association between condom use and masculine ideology, while controlling for race, employment status, religion, religious devoutness, sexual orientation, relationship status, STD history (self), and partner STD history.

Chapter 5 interprets the aforementioned findings, as well as identifies this study's limitations, provides recommendations for further research, and sheds light on the implications for positive social changes.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this correlational, quantitative study was to examine the perceptions of women about gender ratio imbalance (partner availability) and masculine ideology and their effects on condom use, while controlling for race, employment status, religion, religious devoutness, sexual orientation, relationship status, STD history of self, and partner STD history. Study results indicated that neither null hypothesis be rejected as there were no statistically significant relationships between the independent variables (gender ratio imbalance and masculine ideology) and the dependent variable (condom use).

Interpretation of the Findings

The results of this study provide insight from a small group of women on how they perceive themselves in their sexual relationships. Previous researchers suggested gender role beliefs were related to a woman's uncertainty in maintaining her relationship (Corneille et al., 2008). I used similar research methods and instruments used by previous researchers (Briggs, Kothari, Briggs, Banks, & DeGruy, 2015; Huang & Liu, 2005; Wingood & DiClemente, 2001). The majority of the participants for this research were heterosexual, Black Christians, with varying ages. Most were employed full-time, and their relationship status varied. This research showed neither gender ratio imbalance nor masculine ideology, while controlling for the nine other variables listed above, to be predictors of condom use among the women who participated in this study. These results are the complete opposite of those obtained in a similar qualitative research project in which African American women were the only participants (Corneille et al., 2008).

Researchers have concluded that African American women perceive themselves as having less power in their sexual relationships (Botempi et al., 2008; Corneille et al., 2008; Ferguson et al., 2006; Jarma et al., 2007). However, before relinquishing their relationship power to their male counterparts, these women identified themselves as being independent, strong, and assertive, and preferred being alone (Botempi et al., 2008). Jarma at al. in 2007 and Mallory et al. in 2009 conducted a similar qualitative study that upheld the belief that gender ratio imbalance directly influences relationship power perceptions, thus influencing sexual behaviors among women.

I focused on the beliefs of women of varying ethnicities, and their behavioral beliefs (gender beliefs), normative beliefs, and control beliefs (relationship power), which are elements of the TPB. Its principles make up the foundation of behaviors (Ajzen, 1985, 1991), which break down predictors and motives behind behaviors. The GRIBBS is a culmination of the TPB concept and illustrates attitudes (behavioral beliefs) in that it quantitatively measures gender ratio imbalance, as well as condom use. The TGP, although originally designed to provide an explanation to link the cause and effects of HIV among the African American population (Wingood &DiClemente, 1998), provided the blueprint most specifically for the sexual division of power and the structure of sexual norms (cathexis). The TGP includes concepts that give men the dominate role in society, as well as having more power within their relationships (Wingood &DiClemente, 1998).

As indicated in this research, women are doing the opposite of the traditional roles they once practiced. They are educated, they are heads of households, and they are making decisions about their sexual health without permission or being intimidated by

their male counterpart. My research determined there was no relationship between masculine ideology, partner availability, and condom use.

Limitations of the Study

Interpretations of the aforementioned results should be done with the study's limitations in mind. First, the GRIBBS survey tool was developed previously for a similar research effort (Lanier, 2013) but has not been widely used to date (Briggs et al., 2015; Shah, 2016; Rayford, 2016). While the tool has been deemed both reliable and valid by subject matter experts, with the initial alpha coefficient for the GRIBBS overall being .71, for GRIBelief being .82, and for GRIBehaviors being .56 (which was thought to be a result of the short data collection scale, it has not been widely used in research to date (Lanier, 2013). Two experts in HIV/AIDS research measured content validity. They evaluated and assessed the scale's question relevance and overall tool objective to complete the content validity index (CVI). The CVI was calculated based on the researcher's ability to quantify scale ratings (Waltz et al., 2005), and was deemed valid based on these elements. There are few research studies that have utilized this scale as a data collection tool.

Generalizability of results is limited because the respondents were predominately black. The study lacked a diversity of women of varying races/ethnicities A generalized conclusion cannot be made based on the sample used (Field, 2013). This study could also be limited by the research announcement to participate. It was only posted to the university's participation pool, and my personal social media outlet (e.g. Instagram). This could be the reason why the majority of the participants (80%) were Black. While the study did exceed its required sample size (n=64), the social science community associates

lower response rates to electronic surveys (Roberts, 2007; Ye 2007). The internet was the only way for participants to access the data collection survey. Thus the use of the internet to collect data was also a limitation as women without internet access (or limited access) could not participate in the research effort. Also, the recruitment announcement was only produced in English. This could have presented as a barrier for women who did not speak the English language fluently, as they may not have been able to comprehend the research announcement nor understand the research questions.

Lastly, convenience sampling may have introduced sample bias. Convenience sampling entails using any available subject that meets the study's criteria at the time of data collection (McKenzie, Neiger, & Thackeray, 2009). This study only took into account the opinions of women ages 18 and older who opted to take the survey during the designated timeframe set by me. This meant a number of people were excluded (i.e. men, individuals younger than 18, and those who could not complete the survey tool during the designated timeframe). Although limitations were present, findings from the study provide a starting point to examine the relationships between masculine ideology, gender ratio imbalance (partner availability), and condom use.

Recommendations

This study collectively addressed the effects of masculine ideology and gender ratio imbalance (partner availability) on condom use. While the research was open to all women, as mentioned above, the majority of the participants identified as being non-Hispanic, African Americans. Additional research exploring the masculine ideology and gender ratio imbalance on condom use among Hispanic women, or Caucasian women, or

Muslim women, or bisexual women could provide additional insight. Targeting a specific group of women would provide variation in results that could be compared.

The CDC (2016) indicated a decrease in STIs/STDs among women (CDC, 2016). Future researchers could explore the contributing factors to this occurrence. It is vital to shed light on the effectiveness of educational resources and other related contributing factors. Future researchers should also take into account how gender roles have changed in society. As pointed out in the current research, women are educated, economically sound, and are leaning more towards feministic views. Future efforts should reflect this and how it influences sexual health among the varying populations of women.

 As the results of this research indicated, masculine ideology and gender ratio imbalance have minimal influence on a woman's decision to use condoms with her partner. Therefore, it is vital to continue research efforts surrounding this subject due to the disproportionate number of women being infected with STDs compared to their male counterparts. Ongoing research ensures that educational efforts continue, and changes be made as needed.

Implications for Social Change

This study sought to add knowledge and validate previous research efforts regarding the roles of masculine ideology and gender ratio imbalance (partner availability) on condom use among women. The results of this study could possibly lead to positive social change by adding to the general knowledge pertaining to condom education and sexual health awareness. Additionally, the results of this research could enhance existing sexual health educational campaign and awareness activities targeting women.

The results of this study could potentially lead to positive social change by serving as an example for women that things have changed. Previously, women assumed a traditional role as the keeper of the house, taking care of their children with no career/job outside of the household (Bowleg et al. 2004; Kiefer & Sanchez, 2007; Sanchez et al. 2006). Based on the data collected in this study, women are economically sound and are taking charge of their own sexual health. Current research could serve as a tool to enhance sexual health education programs as well as serve as an empowerment tool for women who are less inclined to execute such power when determining the use of condoms in their sexual relationship(s).

Another potential implication for social change includes closing the gap in communication and sexual health among men and women. The current study's participants indicated the ability to exert control of their sexual health through the use of condoms. This could be the beginning of a trickledown effect to all women (e.g. women who are less inclined to take control of their sexual health).

The overall implication for positive social change surrounding this study illustrates the possibility of women being in more control of their sexual health. The perception of masculine ideology and gender ratio imbalance (partner availability) on condom use could contribute to the enhancement of sexual health education programs specifically focusing on effective communication about condom use between women and their partners.

Conclusion

Data collected by the CDC shows that women have been disproportionally affected by STDs/STIs in comparison to their male counterparts (CDC, 2017a). Previous

research made mention of traditional gender roles/scripts, masculine ideology, and lack of effective communication as contributing factors to the lack of condom use within these relationships (Bell et al. 2015; Byers, 1996, LaPlante, McCormick, & Brannigan, 1980; Rose & Frieze, 1989, 1993). This study examined and identified some of the perceptions of masculine ideology and gender ratio imbalance on condom use among women. This study intended to add to what is already known regarding condom use and the influence of masculine ideology and gender ratio imbalance on it. In turn, its results will add to a foundation structured to enhance educational programs for women, as well as empower more women to be confident in their sexual relationships.

While this research shed light on women who don't identify with traditional gender roles, and showed that there are women who are confident in their sexual relationships and that gender ratio imbalance does not play a role in condom use decisions, it is important not to lose sight of the issues identified. The issues brought to light by this study included (1) women are empowered, yet still disproportionally infected with STDs/STIs, (2) non-Black participants were not as engaged and should be engaged and included in similar research efforts, (3) the study sample average was similar to previous research, but results could vary based on a different sample (e.g. homeless women, domestic violence victims, women who are unemployed and their male partner is the head of household). Addressing these shortcomings as they relate to educational material, and possible research could ultimately help bridge the knowledge gap in women and ultimately push for the elimination of STDs/STIs among all women.

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Appendix A: Demographic Questionnaire

RESEARCH TOPIC: Impact of the perceptions of limited partner availability and

masculine ideologies on condom use among women.

The perception of condom uses among women, specifically with the choices for partners

and the role masculine ideologies has in the decision. In the instance of a woman being

confronted with a decision as to whether or not a condom will be used may be influenced

by one of these factors.

The purpose of the study is to assess the personal attitudes and perception of condom use

among women. There is no right or wrong answer, nor will their answers be scored.

This survey will be used to enable the researcher to identify the attitudes and perceptions

of these women. ALL information provided will be kept confidential.

Demographic Survey

Age

Sexual Orientation ☐Heterosexual ☐Lesbian ☐Bi-Sexual ☐Other_____

Relationship Status ☐Casual dating   ☐Long-term relationship   ☐Divorced

☐Widow

Race (check all that apply) ☐Black/African American   ☐White   ☐Asian

☐American Indian/Alaska Native ☐Native Hawaiian/Pacific Islander

Employment Status ☐Part-time   ☐Full-time   ☐Unemployed

Highest Level of Education ☐Doctorate   ☐Master's Degree   ☐Bachelor's Degree

☐Associate's Degree   ☐Professional Certificate

☐High School Diploma   ☐Less than a high school diploma

Income (yearly salary)	☐0-$25,000 ☐$26,000-$35,000 ☐$36,000-$45,000 ☐$46,000-$55,000 ☐$56,000-$60,000 ☐$61,000 and above
Religion	☐Christian ☐Judaism ☐Buddhism ☐Judaism ☐Hinduism ☐Other_____
Religion Devoutness	☐involved in church on a weekly basis ☐attend church only on holidays
Dating Preference (check all that apply)	☐date within race or ethnicity ☐date outside of race or ethnicity ☐both
STD/STI status (Self)	☐Gonorrhea ☐Chlamydia ☐Syphilis ☐Herpes ☐ HIV/AIDS ☐unknown_
Partner STD/STU status	☐Gonorrhea ☐Chlamydia ☐Syphilis ☐Herpes ☐ HIV/AIDS ☐unknown_____

Appendix B: Permission Letters

Lanier, Latrona <llanier@albanytech.edu>
Mon 10/30, 1:23 PM

Hi Ms. Thomas,

First, I would like to apologize for my late response and thank you for your interest in the GRIBBS. You have my consent to utilize the GRIBBS for your dissertation; however, I am requesting you share your study results with me as I would like to perform a factor analysis on the scale in the near future. Feel free to contact me with any questions and/or concerns.

Thank you,
Dr. Lanier

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Lanier   1 of 5

>
> Hello Diakima:
>
>
> Thank you for the email.
>
>
> Yes, you have my permission to use the scale for your research.
>
>
> Attached is the article on the GRBS. Items on the scale are responded to on 7-point ratings where"
>
>
> 1 = Strongly Agree
>
> 4 = Undecided
>
> 7 = Strongly Agree
>
>
> The scale items are listed in Table 1 of the article. Please note that reverse-keyed items are present and indicated in Table 1.
>
>
> Best wishes with your research.
>
> Ron Holden
>
>
>
>
> Ronald R. Holden
> Professor
> Department of Psychology
> Queen's University
> 62 Arch Street
> Kingston, Ontario K7L 3N6
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Appendix C: Informed Consent to Participate in Research

Informed Consent Form
You are invited to take part in a research study to gain more understanding on the influence of masculine ideology and gender ratio has on a woman and her decision to use condoms within sexual relationships. This invitation is extended to current and former Walden University research pool participants. This form is part of an "informed consent" process, which allows you the opportunity to gain a better understanding of what is being studied before deciding to participate. A researcher named Diakima Y Thomas, a doctoral student at Walden University, is conducting this study.

Background Information
This study will be a significant endeavor in producing knowledge that might be useful in developing interventions to target sexual health and condom use among women. By understanding how and why they make specific decisions pertaining to their sexual health, interventions can be designed to target them specifically and address any social, cultural, and/or religious variables in an intervention. Moreover, this research will provide recommendations on masculine ideologies and gender ratios influence the ability of a woman to include the use of condoms within their sexual relationships.

Procedure for Data Collection
If you agree to be in this study, you will be asked to:
I. Answer eligibility, demographic criteria questions, a process to ensure you meet the inclusion criteria of this study and to categorize the collected data.
II. Complete an electronic questionnaire once, expected to take approximately 15 minutes of less. These questions will help determine your perception of masculine ideology and gender ratio on your decision to insert condoms into your sexual practices
III. *Sample from the questionnaire*:
- It is disrespectful for a man to swear in the presence of a lady
- Fewer men in my community decrease my chances of getting married
- Women with children should not work outside of the home if they don't have to financially

Voluntary Nature of the Study
Participation in this study is voluntary, meaning it is totally up to you to participate. If at any time you decide you no longer want to participate, you can opt out with no questions asked.

Risks and Benefits of Being in the Study
This study requires that you complete the survey tool electronically. Due to the nature of the questions, you may experience some discomfort due to information being asked related to your sexual health. This should pose no risk to your safety and/or well-being. The results of this research effort could benefit you directly or indirectly in that it could serve as the foundation for future interventions and/or improve existing interventions target the health of women. The results of this study will provide a better understanding

as to why women make the decisions they do regarding condom use and their sexual health.

Payment
Other than contributing to research regarding the sexual health of women, there is no monetary compensation or incentive for participation in this research. I am, however, forever grateful for your decision to participate.

Privacy
All information collected via this study will be kept confidential. No personal information such as your name, address, telephone number, or email address will be collected. Data that is collected will not have any specific identifiable variables. Data will be kept, electronically secured, for no more than five years per the Walden University requirements.

Contacts and Questions
If you have any questions or concerns about your participation in this study, you may contact me via diakima.thomas@mail.waldenu.edu or via telephone at (404)909-1074 You have the option to print or save this consent form for your records.

Statement of Consent
I have read the above information and I understand the study well enough to make a decision about my involvement. Acknowledging the link below, I consent that I understand, and I am agreeing to participate in this study. I also consent to terms described above.

☐ I acknowledge I have read this informed consent, and I agree to participate in this research.

Appendix D: Study Criterion

Are you 18 years old or older?   ☐Yes ☐No

Are you involved in a same sex   ☐Yes ☐No
relationship only?

Appendix E: Gender Ratio Imbalance Beliefs and Behavior Scale (GRIBBS)

Participants will be given the following responses to choose from: Strongly Disagree, Disagree, Somewhat Agree, Agree, and Strongly Agree, to answer the question below.

1. There are fewer men than women in my community.
2. Fewer men in my community decrease my chances of dating.
3. Fewer men in my community decrease my chances of getting married.
4. Fewer men in my community decrease my chances of having children.
5. Fewer men in my community decrease my chances of maintaining a steady relationship.
6. To maintain my relationship, I do not use a condom when having oral, vaginal, or rectal sex.
7. I allow my male partner to have sex with other female partners to maintain our relationship.
8. I use a condom even if it causes me to lose my mate.
9. I do not have sexual relationships when I know the man has multiple partners.
10. There are not enough men for all women to be in a steady and exclusive relationship.
11. Men are in demand and I will do whatever is required to keep them as my sexual partner.
12. If I make my man use a condom, he will go to another woman who will have sex without a condom.
13. Not having a man in my life means that I cannot have children.
14. I do not use condoms in order to keep my male sexual partner.
15. I always determine condom use in my relationship.
16. To maintain my relationship, I let my partner set what is expected in our sexual relationship.
17. To maintain my relationship, I do not question my partner about his involvement with others sexually.
18. I do not ask my partner to be tested for sexually transmitted infections (STIs) prior to having sex with him.
19. I believe if I ask my man to use a condom, I will lose him.
20. I negotiate condom use with my partner.

Appendix F: Gender Role Beliefs Scale

Participants will be given the following responses to choose from: Strongly agree, somewhat agree, Agree, Neutral, Disagree, Somewhat Disagree, and Strongly Disagree, to answer the question below.

1. It is disrespectful for a man to swear in the presence of a lady.
2. Women should not expect men to offer them seats on buses.
3. Homosexual relationships should be as socially accepted as heterosexual relationships.
4. The initiative in courtship should usually come from the man.
5. It bothers me more to see a woman who is pushy than a man who is pushy.
6. When sitting down at the table, proper respect demands that the gentleman hold the lady's chair.
7. Women should have as much sexual freedom as men.
8. Women should appreciate the protection and support that men have traditionally given them.
9. Women with children should not work outside the home if they don't have to financially.
10. I see nothing wrong with a woman who doesn't like to wear skirts or dresses.
11. The husband should be regarded as the legal representative of the family group in all matters of law.
12. I like women who are outspoken.
13. Except perhaps in very special circumstances, a gentleman should never allow a lady to pay the taxi, buy the tickets, or pay the check.
14. Some equality in marriage is good, but by and large the husband ought to have the main say-so in family matters.
15. Men should continue to show courtesies to women such as holding open the door or helping them on with their coats.
16. It is ridiculous for a woman to run a locomotive and for a man to darn socks.
17. A woman should be as free as a man to propose marriage.
18. Women should be concerned with their duties of childrearing and house tending, rather than with desires for professional and business careers.
19. Swearing and obscenity is more repulsive in the speech of a woman than a man.
20. There are some professions and types of businesses that are more suitable for men than women.

Appendix G: GRIBBS response frequencies (n=64)

	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
There are fewer men than women in the community	4.7%	31.3%	14.1%	35.9%	14.1%
Fewer men in the community decrease my chances of dating	15.6%	32.8%	14.1%	32.8%	4.7%
Fewer men in the community decrease my chances of getting married	12.5%	32.8%	17.2%	29.7%	7.8%
Fewer men in the community decrease my chances of having children	21.9%	35.9%	10.9%	20.3%	10.9%
Fewer men in my community decrease my chances of maintaining a steady relationship	18.8%	32.8%	15.6%	23.4%	9.4%
There are not enough men for all women to be in a steady and exclusive relationship	31.3%	37.5%	12.5%	14.1%	4.7%
Men are in demand and I will do whatever is required to keep them as my sexual partner	71.9%	15.6%	10.9%	1.6%	-
If I make my man wear a condom, he will go to another woman who will have sex without a condom	71.9%	18.8%	4.7%	3.1%	1.6%
Not having a man in my life means that I cannot have children	54.7%	28.1%	4.7%	7.8%	4.7%
I believe if I ask my man to use a condom, I will lose him	82.8%	12.5%	1.6%	3.1%	-
To maintain my relationship, I do not use condoms when having oral, vaginal, or rectal (anal) sex	45.3%	29.7%	7.8%	15.6%	1.6%
I allow my male partner to have other female partners to maintain our relationship	45.3%	29.7%	7.8%	15.6%	1.6%
I use a condom even if it causes me to lose my mate	34.4%	37.5%	12.5%	6.3%	9.4%
I do not have sexual relationships when I know the man has multiple sex partners	54.7%	20.3%	10.9%	9.4%	4.7%
I do not use condoms in order to keep my male sexual partner	73.4%	20.3%	4.7%	1.6%	-
I always determine the condom use in my relationship	26.6%	48.4%	10.9%	9.4%	4.7%

To maintain my relationship, I let my partner set what is expected in our sexual relationship	59.4%	28.1%	6.3%	6.3%	-
To maintain my relationship, I do not question my partner about his involvement with others sexually	81.3%	18.8%	-	-	-
.I do not ask my partner to be tested for sexually transmitted infections (STIs) prior to having sex with them	59.4%	26.6%	9.4%	4.7%	-
I negotiate condom use with my partner	42.3%	23.4%	12.5%	10.9%	10.9%

Appendix H: GRBS response frequencies (n=64)

	Strongly Agree	Agree	Somewhat Agree	Undecided	Somewhat Disagree	Disagree	Strongly Disagree
It is disrespectful for a man to swear in the presence of a lady	12.5%	6.3%	17.2%	15.6%	15.6%	28.1%	4.7%
Women should not expect a man to offer them a seat on the bus	3.1%	9.4%	14.1%	4.7%	15.6%	29.7%	23.4%
Homosexual relationships should be as socially accepted as heterosexual relationships	31.3%	26.6%	17.2%	12.5%	3.1%	7.8%	1.6%
The initiative in courtship should usually come from the man	17.2%	31.3%	18.8%	6.3%	12.5%	12.5%	1.6%
It bothers me to see a woman who is pushy than a man who is pushy	3.1%	7.8%	17.2%	20.3%	7.8%	28.1%	15.6%
When sitting down at the table, proper respect demands that a gentleman hold the lady's chair	23.4%	34.4%	10.9%	6.3%	4.7%	18.8%	1.6%
Women should have as much sexual freedom as men	57.8%	35.9%	1.6%	1.6%	1.6%	-	1.6%
Women should appreciate the protection and support that men have traditionally given them	18.8%	48.4%	21.9%	3.1%	4.7%	1.6%	1.6%
Women with children should not work outside of the home if they don't need to financially	1.6%	3.1%	3.1%	1.6%	6.3%	31.3%	53.1%
I see nothing wrong with a woman who doesn't wear skirts or dresses	62.5%	28.1%	1.6%	3.1%	1.6%	1.6%	1.6%
The husband should be regarded as the legal representative of the family in all matter of the law	3.1%	4,7%	7.8%	6.3%	17.2%	35.9%	25.0%
I like women who are unspoken	37.5%	39.1%	10.9%	4.7%	4.7%	3.1%	-

Statement							
Except in very special circumstances, a gentleman should never allow a lady to pay the taxi, buy the tickets, or pay the check	9.4%	18.8%	14.1%	6.3%	25.0%	20.3%	6.3%
Some equality in marriage is good, but by large the husband ought to have the main say so in family matters	4.7%	4.7%	20.3%	3.1%	12.5%	29.7%	25.0%
Men should continue to show courtesies to women such as holding the door or helping them on with their coats	43.9%	45.3%	9.4%	1.6%	-	-	-
It is ridiculous for a woman to run a locomotive and for a man to darn (mend/sew) socks	3.1%	-	-	7.8%	1.6%	45.3%	42.2%
A woman should be as free as a man to propose marriage	9.4%	26.6%	10.9%	14.1%	6.3%	18.8%	14.1%
Women should be concerned with their duties of child bearing and house tending, rather than with desires for professions and business careers	-	-	1.6%	1.6%	6.3%	17.2%	73.4%
Swearing and obscenity is more repulsive in the speech of a woman than a man	4.7%	9.4%	12.5%	9.4%	12.5%	26.6%	25.0%
There are some professions and types of businesses that are more suitable for men than women	6.3%	9.4%	20.3%	9.4%	12.5%	21.9%	20.3%