THE RELATIONSHIP OF SEXUAL EMPOWERMENT AND SEXUAL PRESSURE TO CONDOM USE OF YOUNG ADULT AFRICAN AMERICAN AND CAUCASIAN WOMEN

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ABSTRACT

Introduction: HIV knowledge, high self-esteem, condom self-efficacy, positive attitudes toward condom use, and condom negotiation skills have been associated with decreased HIV risk behavior among women, but have not been examined within a framework of empowerment for sexual risk. Sexual pressure, inclusive of both coercive and non-coercive pressures to engage in unwanted or unprotected sex, has also not been studied in association with sexual empowerment as a framework or as a potential moderator between sexual empowerment and condom use among women of different racial groups.

Study Purpose: 1) To explore the relationship between sexual empowerment and condom use; 2) to explore the moderating effect of sexual pressure on the relationship between sexual empowerment and condom use; and 3) to explore racial differences in sexual empowerment, sexual pressure, and condom use among young adult African American women (AAW) and Caucasian women (CW) ages 19-25.

Methods: A convenience sample of AAW and CW ages 19-25 (N = 101- 50 AAW, 50 CW, 1 Biracial) was recruited from two local health department clinics located in a Southeastern metropolitan area. Statistical analyses included descriptive analyses, correlational analyses, logistic and linear regression, and t-tests.
**Major findings:** Although positive attitudes toward condoms and condom negotiation skills were found to be associated with increased condom use, this relationship was negatively moderated in the context of sexual pressure. Also, women who were more likely to experience sexual pressure reported lower self-esteem and more negative attitudes toward condoms. AAW reported higher self-esteem, but lower condom negotiation skills than CW/Other. Although mean scores of sexual pressure did not differ between races, AAW scored significantly higher on the sexual coercion subscale. Condom use did not significantly differ between races.

**Conclusions:** Identifying factors that empower women toward safer sexual practices is an important step in implementing effective HIV prevention interventions. In addition, empowerment interventions that target power imbalances and gender norms in sexual relationships will benefit from addressing ways in which to increase resistance to sexual pressure in both coercive and non-coercive situations. Lastly, researchers should tailor interventions based on the social context and ensure their relevance for various racial/ethnic groups.

**Key words:** Sexual empowerment, Sexual pressure, Sexual coercion, HIV risk, Racial/Ethnic differences, African American women
DEDICATION

This dissertation is dedicated in loving memory of my mother, Bettie Long, whose spirit
will reside with me forever.
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CHAPTER I

INTRODUCTION

The Study Problem

The HIV/AIDS epidemic has had devastating effects in the African American (AA) community. Although AAs comprise 13% of the U.S. population, they account for approximately 50% of the estimated new HIV/AIDS cases in the country (Centers for Disease Control & Prevention [CDC], 2007). African American women (AAW) are especially at risk; they account for 61% of new HIV cases among women, yet make up only 12% of the female population (CDC, 2008). Compared with Caucasian women (CW), AAW are 23 times more likely to acquire HIV infection. In 2003, HIV/AIDS was the third leading cause of death for AAW ages 25-44 (as opposed to the ninth leading cause of death for CW ages 25-44) and the fourth leading cause of death for AAW ages 45-54 (14th leading cause of death for CW ages 45-54) (CDC, 2006). For women, heterosexual contact is the primary transmission route for HIV infection. For AAW in particular, heterosexual contact accounts for 74% of HIV transmission, followed by injection drug use at 24% (CDC, 2007). For this reason, it is important to determine factors that lead to high-risk sexual behaviors among this population.

Statement of Purpose

The purpose of this study was to assess the relationship of sexual empowerment and sexual pressure to sexual risk behaviors among young adult AAW and CW. These
relationships were assessed from a cultural perspective, comparing similarities and differences between racial groups. Sexual empowerment, as defined for the purposes of this study, is the ability to exert self-protective influence or control in one’s sexual behaviors (Long, Vance, & Antia, in press; Nyanzi, Nyanzi, Wolff, & Whitworth, 2005; Vance, Ross, Long, & Griffin, 2008). Dimensions of sexual empowerment identified from a comprehensive review of the literature of sexual risk include HIV knowledge (Mize, Robinson, Bockting, & Scheltema, 2002), self-esteem (Sterk, Klein, & Elifson, 2004), condom self-efficacy (Gazabon, Morokoff, Harlow, Ward, & Quina, 2007), attitudes toward condom use (DeHart & Birkimer, 1997), and condom negotiation skills (Noar, Morokoff, & Harlow, 2002). These factors can play a role in a woman’s empowerment to increase condom use. However, sexual pressure, which includes both coercive and non-coercive pressures to engage in unprotected or unwanted sex (Jones, 2006), may moderate the relationship between women’s sexual empowerment and sexual risk behaviors.

Based on gender/empowerment theories and a review of the literature, the following specific aims and research hypotheses, which are discussed in Chapters 2 and 3, were posed:

- **Aim 1:** To explore the relationship between sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) and condom use.
  
  **H1:** Women who exhibit higher levels of sexual empowerment will be more likely to use condoms.

- **Aim 2:** To explore the moderating effect of sexual pressure on the relationship between sexual empowerment and condom use.
H2: Women who experience sexual pressure will have lower levels of sexual empowerment.

H3: Women who experience sexual pressure will be less likely to use condoms.

H4: Sexual pressure will moderate the relationship between sexual empowerment and condom use such that the relationship between sexual pressure and condom use varies as a function of sexual pressure.

- Aim 3: To explore racial differences in sexual empowerment, sexual pressure, and condom use among young adult AAW and CW ages 19-25.

  H5: Sexual empowerment will not differ between AAW and CW.

  H6: Sexual pressure will differ between AAW and CW.

  H7: Condom use will differ between AAW and CW.

**Background**

*Empowerment and HIV Risk*

One of the first researchers to use empowerment theory in research was James Rappaport (1984, 1987), who used empowerment as a framework for the new discipline of community psychology. Rappaport (1984) described empowerment as an ongoing process through which people gain mastery over their lives. More specifically, the ability and willingness of a woman to protect herself against HIV within the social context of an intimate relationship is in direct relation to her sense of empowerment and self-efficacy (Sanders-Phillips, 2002). Many studies focused on HIV risk among women have suggested that the concept of empowerment is associated with decreased high-risk sexual
behavior (Amaro & Raj, 2000; Beeker, Guenther-Grey, & Raj, 1998; McQuiston, Chio-
Level, & Clawson, 2001; Riley-Eddins, Boelter, Banks, & Holloway, 1998; Romero et
al., 2006; Wechsberg, Lam, Zule, & Bobashev, 2004). Such studies have found associa-
tions between empowerment and a woman’s decisions to protect herself sexually. For
example, in an empowerment-focused intervention study among 620 crack-abusing
AAW, Wechsberg et al. (2004) found that increasing a woman’s sense of power in devel-
oping social support and securing education, employment, and housing was associated
with a decreased likelihood of engaging in unprotected intercourse. Participants in the
empowerment intervention group were significantly less likely to engage in unprotected
intercourse when compared with their control and standard intervention counterparts
(Wechsberg, et al., 2004). Similarly, Romero et al. (2006) implemented an empower-
ment-based participatory HIV prevention program for 308 women that addressed gender
inequalities in health and focused on economic, sociopolitical, and cognitive empower-
ment to increase sexual communication with partners and decreased high-risk behavior
through education. Findings suggested that although the women in the study were psy-
chologically empowered, showed perceived control, and were more effective in sexual
communication post-intervention, actual change in HIV risk behaviors was not supported.
Behavior change strategies were later added to the intervention for greater effectiveness
in HIV risk reduction (Romero et al., 2006).

With regard to how the empowerment perspective can be applied to women and
their HIV risk, it is proposed that perceptions of high self-esteem, coupled with HIV
knowledge, positive attitudes toward sexual protection (i.e., attitudes toward condom
use), and the ability to engage in self-protective behaviors (i.e., condom self-efficacy and
condom negotiation skills) will empower a woman to decrease her risk for HIV through the use of self-protective behaviors. Previous studies have found an association between higher self-esteem, positive attitudes toward condom use, condom self-efficacy and greater effectiveness in negotiating condom use (Salazar et al., 2005). Similarly, other studies have shown that women at higher risk for HIV had lower self-esteem, lower self-efficacy, were less knowledgeable about HIV/AIDS, and reported lower confidence in self-protective behaviors against transmission of HIV, than women who were low-risk (Somlai, Kelly, Heckman, Hackl, Runge, & Wright, 2000). An empowerment framework that incorporates these factors as determinants of sexual risk behaviors may help to guide development of effective interventions to prevent HIV among at-risk women.

**Dimensions of Sexual Empowerment**

**HIV knowledge.** Previous studies targeting women have highlighted the importance of HIV knowledge in decreasing sexual risk behaviors (Cerwonka, Isbell, & Hansen, 2000; Jackson, Early, Schim, & Penprase, 2005; Ratcliff-Crain, Donald, & Dalton, 1999; Williams, Ekundayo, Udezulu, & Omishakin, 2003). Many of these studies have found that HIV knowledge does not necessarily translate into lower risk behaviors. This has been the case in samples that included both AAW and CW. Few studies, however, examined racial and risk behavior differences between the two groups.

Williams et al. (2003) compared similarities and differences leading to HIV risk in a sample of rural and urban AAW and found that although HIV knowledge was higher among urban women, potential for behavior change did not differ significantly from their rural counterparts. Similarly, Jackson et al. (2005) assessed HIV knowledge in a sample of predominantly AAW and found that although HIV knowledge was generally high, this
knowledge did not always translate into changes in risk behaviors, as condom use was not common.

The findings for studies with CW have been similar. In a sample of predominantly Caucasian female college students, Cerwonka et al. (2000) found that HIV/AIDS knowledge was not associated with sexual risk-taking behavior. In a similar sample of predominantly female Caucasian college students, overall level of HIV knowledge was high, yet this knowledge was not independently related to the extent of risky sexual behaviors (Ratcliff-Crain et al., 1999).

**Self-esteem.** Self-esteem is defined as a favorable attitude toward one’s self worth (Rosenberg, 1965). Because risky sexual behavior typically has its onset in adolescence, studies assessing the association of self-esteem and sexual risk behaviors have targeted adolescent populations (Ethier et al. 2006; Salazar et al., 2005). The findings of these studies have consistently shown a significant relationship between self-esteem and high risk behaviors. However, the findings about the nature of this relationship have been inconsistent. In a comprehensive review of the role of self-esteem in safer sexual practices among adolescents, Cole (1997) found that higher levels of self-esteem were associated with an increase in risky sexual behaviors. In contrast, more recent studies have found a negative association between self-esteem and sexual risk behavior. Ethier et al. (2006) conducted a study among AA and Latina adolescent females and found that adolescents with lower self-esteem were more likely to exhibit high-risk sexual behaviors. Similarly, in a college sample of predominantly Caucasian students, Gullette and Lyons (2006) found an association between lower self-esteem and HIV risk-taking behaviors. Other studies of adolescents have had mixed results (Hylton, 1999; Long-
Middleton, 2001; Salazar et al., 2005). The findings of studies of the relationship between self-esteem and sexual risk behaviors are equivocal, indicating that individuals with high and low self-esteem engage in sexual risk behaviors. Although those with lower self-esteem may engage in sexually risky behavior to secure love and acceptance from a sexual partner, those with higher self-esteem may engage in risky behavior because of over-confidence and a sense of freedom or spontaneity in exploring their own sexuality.

Although a great majority of studies assessing self-esteem and HIV risk target adolescent populations, other studies have identified the need to also target at-risk adult populations. Sterk, Klein, and Elifson (2004) found an association between HIV risk behaviors and lower self-esteem among at-risk, predominantly AAW. Likewise, Somlai et al. (2000) assessed differences between high-risk and low-risk inner city women and found that those who scored lower in self-esteem were at highest risk for HIV.

The findings of studies that examined the relationship between self-esteem and HIV risk behaviors suggest that self-esteem is a significant factor in HIV risk behavior, although the nature of this relationship is not all together clear. However, the findings for adult women suggest that positive self-esteem may be a protective factor influencing practices that decrease their risk for HIV.

**Condom self-efficacy.** Based on Bandura’s social cognitive theory (1977), self-efficacy, or one’s confidence in the ability to perform a behavior, is highly associated with actually carrying out the behavior. Thus, a woman must possess the confidence in her ability to effectively and consistently use condoms in order to decrease her risk for HIV. Previous studies have shown the importance of self-efficacy in the use of condoms to decrease sexual risk (Gazabon, Morokoff, Harlow, Ward, & Quina, 2007; Peipert et
Gazabon et al. (2007) studied the association between self-efficacy and unprotected sex in a sample of at-risk ethnically diverse women. The researchers found a significant inverse relationship between self-efficacy in condom use and unprotected sex such that low self-efficacy was associated with unprotected sex. Similarly, in a study of high-risk ethnically diverse women (Peipert et al., 2007), low condom use self-efficacy was associated with increased odds of unprotected intercourse. Findings from these studies support the notion that higher self-efficacy in condom use is positively associated with lower sexual risk behaviors.

It is important to note that condom self-efficacy not only takes into account the ability to correctly and safely use a condom, but also the ability to be prepared to use a condom when faced with the opportunity. Furthermore, condom self-efficacy involves the competence to effectively communicate condom use with a sexual partner. Although women may be aware of the effectiveness of condoms to prevent HIV or other sexually transmitted infections (STIs), knowledge alone does not predict self-efficacy in condom use (Vance et al., 2008). Therefore, self-efficacy should be examined as a predictor of sexual risk behaviors and more specifically, condom use.

**Attitudes toward condom use.** Attitudes toward a behavior are beliefs that a person has, whether from experience, outside influence, or their own inference (Ajzen & Fishbein, 1980). Such beliefs can originate from a person’s own reasoning and/or feelings, but are also influenced by a number of other factors including education, culture and one’s social environment, peers, and significant others. Likewise, attitudes toward condom use can originate from one’s own beliefs, sexual experiences, or partner influences. Generally, research has demonstrated a significant relationship between attitudes toward
condoms and their use. For example, in a study assessing factors related to condom use among two independent samples of primarily Caucasian young adults, results indicated that condom attitudes were the strongest predictor of condom use behaviors in both samples (Noar, Zimmerman, Palmgreen, Lustria, & Horosewski, 2006).

There is evidence that some women may hold ambivalent or negative attitudes toward condom use, even if these attitudes ultimately lead to their risk for HIV infection. In an ethnographic study of predominantly AAW who were high-risk, results indicated that attitudes toward condom use were either ambivalent or weakly positive. The more negative women’s attitudes were toward condoms, the more likely they were to engage in risky sex (Sterk, Klein, & Elifson, 2004). In another study identifying risk factors associated with HIV risk among predominantly AA inner city women, negative attitudes toward condom use did not differ significantly between women who were considered high-risk and those who were low-risk (Somlai et al., 2000). Although the results from Somlai et al. (2000) differed from findings of Sterk et al. (2004), it is worth noting that although positive attitudes toward condom use are important to increase consistent condom use, they alone are not sufficient to decrease sexual risk behaviors.

**Condom negotiation skills.** In addition to having positive attitudes toward condom use, women must also possess the necessary skills to verbally communicate and negotiate condom use with their sexual partner. The ability to successfully negotiate condom use is central to decreasing the risk for HIV. A great majority of studies that assessed condom negotiation skills have been conducted among mixed-gender, college student samples. Lam, Mak, Lindsay, and Russell (2004) explored condom negotiation strategies among a sample of Asian and White American college students and found that
Whites were more direct and Asians more indirect in their condom negotiation strategies. Moreover, women were more nonverbal and indirect in their strategies when compared to men. In a sample of predominantly Caucasian college students, Noar, Morokoff, and Harlow (2002) assessed the ability of students to effectively influence condom use. Results indicated that those who were more effective in condom negotiation were also more likely to consistently use condoms. Furthermore, the women in the sample were significantly more likely than the men to negotiate condom use.

Other studies have found that the ability to negotiate condom use is not always considered an option. Davila and Brackley (1999) assessed barriers to condom negotiation in a sample of battered Mexican and Mexican American women. Participants identified fears of physical, psychological, and sexual abuse that prevented them from successfully negotiating condom use with their partners. The women also identified men’s power over their public, private, and sexual interactions as a barrier to condom use. Koenig and Moore (2000) suggested that only a small percentage of women fear violence as a result of condom requests, but rather are primarily concerned with their partners being displeased, disapproving, or raising issues of trust and fidelity, which deter women from effectively negotiating condom use.

Race may play a role in the effectiveness of condom negotiation skills. Lam and Barnhart (2006) assessed condom negotiations among Chinese- and Filipina-American college women and found that Asian women with non-Asian partners were more likely to be nonverbal than those with same-ethnicity partners. Whether women use verbal or nonverbal communication to negotiate condom use, the current trend of assessing ethnici-
ty in the effectiveness of condom negotiation skills is a major starting point for tailoring culturally-appropriate interventions that promote condom use among diverse groups.

**Sexual Empowerment and Sexual Pressure**

There is a current trend towards empowerment-based studies that assess the relationship between a woman’s social environment and her sexual risk behaviors. As researchers, what may be thought of as a reasonable choice for a woman’s sexual health outside of her social environment may not mirror a woman’s sexual choices within that same context (Vance et al., 2008). For example, although a woman may be well educated when it comes to knowledge of sexual risk reduction strategies, this knowledge may not coincide with her actual behavior within certain social contexts, such as the context of an intimate sexual relationship. Thus, other social factors that occur within the immediate bounds of a female-male sexual relationship play a vital role in a woman’s sexual decision-making.

Sexual pressure has been defined as “sexual choices that are limited by adherence to gender stereotypical expectations for sex and fear of, or experience with, adverse consequences, such as losing the relationship, threats, or physical coercion, if these expectations are not met” (Jones, 2006, p. 282). Although women may be or may become empowered to make safer sexual choices, sexual pressure has the potential to disempower a woman, whether this pressure is from her sexual partner or attributed to personal feelings she holds in regard to sex with her partner. It is an assumption that sexual pressure may differ between young adult AAW and CW, given distinct social backgrounds. Two published research studies of the relationship between sexual pressure and sexual risk among women have been identified (Jones, 2006; Jones, 2009). Jones (2006 & 2009), however,
did not assess cultural differences between ethnic groups, nor did the researchers assess the relationship of multiple factors of sexual empowerment and sexual pressure. In the follow-up study, however, Jones (2009) did measure interpersonal power within a main female-male partner relationship.

**Sexual Pressure and Condom Use**

There have been few studies examining the relationship between sexual pressure and condom use. Teitelman, Ratcliff, and Cederbaum (2008) studied the relationship between parent-adolescent communication about sexual pressure and sexual risk behaviors among minority urban girls. These researchers reported that adolescent girls were more likely to practice preventative behaviors such as condom use when their mothers and fathers communicated with them on resisting sexual pressure from their partners.

Jones (2006) studied sexual pressure among young adult urban women and found that sexual pressure was significantly associated with unprotected sex. However, the majority of women were found not to experience sexual pressure. Additionally, the study was conducted in the Northeastern region of the U.S., and studies conducted in other geographical areas may yield different results. Moreover, the study included a sample of predominantly AA (64%) and Latina (15%) women and the findings were not discussed in terms of racial/ethnic differences. Sexual pressure may differ between racial groups with different social backgrounds. A follow-up study on sexual pressure among young adult women, in which a similar ethnic sample was used, yielded analogous results (Jones, 2009).
Significance

In the current study, sexual empowerment was defined as inclusive of a number of factors that can play a protective role in terms of sexual risk behavior. Several studies have shown an association between these factors (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) and sexual risk behaviors (Salazar et al., 2005; Somlai et al., 2000). However, such factors have not been examined within an empowerment framework. Likewise, little is known about the role that sexual pressure may play in moderating the relationship between sexual empowerment and actual condom use. Also neglected are potential differences in empowerment, sexual pressure and condom use among racial groups such as AAW and CW.

Although an important determinant of sexual risk behaviors, HIV knowledge alone cannot account for sexual risk behaviors (Vance et al., 2008). However, examining HIV knowledge in addition to other factors such as self-esteem, condom self-efficacy, positive attitudes toward condom use, and condom negotiation skills may better predict sexual risk behavior. Identification of factors that may empower women toward safe sex practices is an important first step in identifying targets for interventions that are predictably effective in decreasing HIV risk behaviors. Factors arising from within the sexual relationship may also be powerful influences of sexual risk behavior. Sexual pressure is one such relationship factor that may moderate the effects of sexual empowerment, particularly for young adult women. Additionally, there may be racial differences in condom use between young adult AAW and CW that are associated with differences in sexual empowerment and sexual pressure.
This study attempted to fill the gaps in knowledge by identifying factors of sexual empowerment that are associated with condom use, while assessing the moderating effect of sexual pressure on those factors of empowerment. It is an assumption that although a woman may exhibit some, if not all of these factors, the extent to which she experiences sexual pressure can offset the desired outcome of increased condom use. Although Jones (2006) reported that in a previous study done in the Northeastern U.S. there was a significant relationship between sexual pressure and sexual risk behavior among women, the vast majority of participants were not influenced by sexual pressure, which was attributed to low mean scores. Because this study was conducted in the Deep South, where HIV/AIDS rates are higher than for the rest of the U.S., and included both AAW and CW, results contributed to an increased understanding of differences in HIV risk among these two racial groups.

Summary

In summary, the incidence of HIV/AIDS has devastating effects among AAW, especially the young adult population. Therefore, it is vital to determine significant factors that lead to high-risk behavior such as lack of condom use, and address the need to effectively promote increased and consistent condom use through ethnic- and gender-specific interventions. The specific aims of the study are to explore the relationship between sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) and condom use among young adult AAW and CW, ages 19-25; the role of sexual pressure in moderating the relation-
ship between sexual empowerment and condom use; and racial/ethnic differences in sexual empowerment, sexual pressure, and condom use among young adult AAW and CW.
CHAPTER II
CONCEPTUAL MODEL AND LITERATURE REVIEW

Conceptual Model

Two theoretical approaches found in the literature have been used to guide the current study: psychological empowerment theory and the theory of gender and power. These theories were utilized to develop the conceptual model and are further explained in the following sections.

Psychological empowerment theory (Zimmerman, 1995) is an individual level framework rooted in social action theory. It has three components: intrapersonal, interactional, and behavioral. The intrapersonal component describes self-perceptions of the ability to exert influence in a social context. The interactional component, describes an understanding of how a person’s perceptions of their ability to exert influence actually work in that social context. Lastly, the behavioral component, defines the behaviors used to exert influence or control within the context (Zimmerman, 1995). See Figure 1 for an illustration of the components of psychological empowerment theory.

When applied to the context of sexual relationships and HIV risk, sexual empowerment theory is a useful framework for organizing factors known to have positive and negative effects on sexual risk behavior. The intrapersonal, interactional, and behavioral components, when defined within the context of sexual relationships and HIV risk, incorporate both risk and protective factors. The intrapersonal component incorporates HIV
knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills, all factors positively associated with condom use (Mize, Robinson, Bockting, & Scheltema, 2002; Pulerwitz, Amaro, De Jong, Gortmaker, & Rudd, 2002; Somlai et al., 2000). Thus, the intrapersonal component includes the sex-related beliefs, attitudes, knowledge, and skills that a woman brings to a sexual relationship. In contrast, the interactional component incorporates the concept of sexual pressure and social stereo-
types about gender roles and sex which can act as a negative force that moderates the relationship between the intrapersonal components and the outcome of condom use such that the intrapersonal components have less influence on condom use. The behavioral component, when defined within the context of sexual relationships involves those actions taken to prevent negative health outcomes, such as condom use.

On an intrapersonal level, HIV knowledge is an important determinant of the likelihood that a woman will increase condom use (Mize et al., 2002). HIV knowledge is foundational to safe sex behaviors; however, HIV knowledge is a necessary but insufficient precursor to safe sex behaviors (Ratcliff-Crain et al., 1999; Whyte, Standing, & Madigan, 2004). In addition to knowledge, women must also hold positive self-perceptions about their self-worth and their ability to act on their own behalf (e.g., self-esteem, mastery/competence, condom self-efficacy) (Gazabon et al., 2007; Sterk, Klein, & Elifson, 2004). In addition, positive attitudes toward condom use will increase the likelihood of engaging in their use and developing the needed skills to negotiate condom use with sexual partners (Salazar et al., 2005).

On an interactional level, forces outside the individual that influence behavior are identified. The theory of gender and power is integrated with psychological empowerment theory to define interactional level components important to understanding sexual risk behaviors. Gender stereotypes toward sex roles and sexual behaviors are important influences on sexual risk behaviors (Jones, 2006; Lichtenstein, 2005). For instance, a woman may adhere to gender stereotypes toward sex. An example of this might be placing the responsibility for condom purchase and use solely on the male partner and taking a more submissive role in discussing sexual protection. Also, acting on gender stereo-
types, the male in a relationship may apply sexual pressure, while women who ascribe to such stereotypes may be particularly vulnerable to such pressure (Jones, 2006; Ortiz-Torres, Williams, & Ehrhardt, 2003). Such interactional factors may explain why despite being knowledgeable of HIV risk and safe sex behaviors, women engage in risky sexual behaviors. HIV knowledge, positive attitudes toward condom use, and high self-esteem can aid in combating these factors. The potential effects of sexual pressure and the capability of the woman to draw upon factors of sexual empowerment will determine whether or not she experiences sexual pressure and/or engages in condom use. Similarly, the outcome behavior, whether it is increased condom use or lack thereof, is a function of the relative influence of sexual empowerment versus sexual pressure.

A model of the variables selected for study and their proposed relationships is presented in Figure 2. In the model, the dimensions of sexual empowerment (HIV knowledge, self-esteem, attitudes toward condom use, condom negotiation skills, and condom self-efficacy) are identified. As illustrated by the arrow from sexual empowerment to condom use, research and theory support a positive relationship between these variables. However, the model also illustrates how sexual pressure in the context of intimate relationships moderates this relationship and helps to explain why women may not use condoms despite possessing the knowledge and skills to protect themselves.

The theory of gender and power (Connell, 1987) is an integrative theory based on theories of sexual inequality and gender/power imbalances. It explains the culturally bound gender roles assumed by women and men. Two of the major constructs of this theory, the sexual division of power and the structure of cathexis, were used to explore sexual pressure among women. A further explanation of these constructs follows.
In continuing with the aforementioned discussion on empowerment among women, sexual division of power, described as social mechanisms of authority and control (Wingood & DiClemente, 2000), is inherent in men often times having more power over women, both in the larger society and in interpersonal relationships. Based on this construct, as power increases among men and decreases among women, women are more likely to exhibit adverse health outcomes (Wingood & DiClemente, 2000). This disparity can be true of a woman who complies with sexual pressure from a man to engage in unprotected sex. She may not see using a condom as an option if she wishes to maintain the relationship (Jones, 2006). Similarly, if her partner provides for her financially in some
Nevertheless, it places him in a position of power and the woman may be more likely to give in to his wishes, even if it is to the detriment of her sexual health.

The structure of cathexis characterizes the emotional and sexual attachments that women have with men. It also produces cultural norms and enforces gender roles and stereotypical beliefs with regard to sex (e.g., multiple sex partners accepted for men, but not accepted for women). As with the sexual division of power, women who accept conventional social norms, based on the structure of cathexis, are also more likely to have adverse health outcomes (Wingood & DiClemente, 2000). The structure of cathexis can be linked to sexual pressure among women in a number of ways. First, sexual pressure characterizes both coercive and non-coercive pressures to engage in sex such as physically abusive acts from a male partner or gender norms and stereotypes in which a woman adheres (Jones, 2006). In addition to perceiving coercion from a male partner, women may also have misconceptions of their intimate sexual relationships. What may be a monogamous, trusting relationship on the part of a woman may not be the case for her male partner. Similarly, if a woman invests both sexually and emotionally in a relationship and ultimately acquires an STI because of her partner’s infidelity, this can lead to a downward spiral in future sexual attachments that can be maladaptive to otherwise positive sexual decisions for the woman.

**Conceptual and Operational Definitions of Study Variables**

The independent study variables include HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills. The dependent study variable (outcome) is condom use. Sexual pressure is a variable that is
thought to moderate the relationship between sexual empowerment and condom use.

Conceptual definitions of the variables are based on an extensive review of the literature.

**Independent Variable: Sexual Empowerment**

*HIV knowledge.* HIV knowledge was defined as having an understanding of rates of HIV transmission, risk reduction strategies, consequences of infection, and treatment of HIV disease (Carey, Morrison-Beedy, & Johnson, 1997). HIV knowledge was measured with the HIV-Knowledge Questionnaire, a ‘true’ or ‘false’ self-report instrument that measures HIV transmission, non-transmission, effective risk reduction strategies, ineffective prevention methods, and consequences of infection (Carey et al., 1997). A more thorough discussion of this instrument is included in Chapter III: Methods.

*Self-esteem.* Self-esteem was defined as a favorable or unfavorable attitude towards self (Rosenberg, 1965) with higher levels of self-esteem indicating a more favorable attitude and lower levels indicating the latter. Self-esteem was measured with the Self-Esteem Scale (Rosenberg, 1965), a self-report, Likert scale, that measures feelings of self-worth or self-acceptance and is scored using a four-point response with categories ranging from ‘strongly disagree’ to ‘strongly agree.’ A further discussion of this instrument is included in Chapter III: Methods.

*Condom self-efficacy.* Condom self-efficacy was defined as the confidence in one’s ability to use condoms (Hanna, 1999). Condom self-efficacy was measured with the Condom Self-Efficacy Scale (Hanna, 1999), a self-report Likert scale, that measures confidence in performance of specific behaviors related to using condoms. It is scored using a five-point response with categories ranging from ‘very unsure’ to ‘very sure.’ Further discussion of this instrument is included in Chapter III: Methods.
**Attitudes toward condom use.** Attitudes toward condom use was defined as beliefs and intentions related to condom use during any type of sexual activity (DeHart & Birkimer, 1997). Attitudes toward condom use was measured with the Sexual Risks Scale- Attitudes toward Condom Use (DeHart & Birkimer, 1997), a self-report, Likert scale using a five-point response with categories ranging from ‘strongly disagree’ to ‘strongly agree.’ Additional information on this instrument is discussed in Chapter III: Methods.

**Condom negotiation skills.** Condom negotiation skills were defined as the ability to use a set of skills to persuade or influence a partner to use a condom (Noar, Morokoff, & Harlow, 2002). Condom negotiation skills were measured with the Condom Influence Strategy Questionnaire (Noar et al., 2002), a self-report, Likert scale using a five-point response with categories ranging from ‘very likely’ to ‘very unlikely’. Further discussion of this instrument is included in Chapter III: Methods.

**Dependent Variable: Condom Use**

Condom use was defined as consistently using condoms during sexual activity in the past 6 months. For each type of sexual activity (vaginal, oral, and anal), condom use was measured by a self-report, Likert scale question asking, “In the past 6 months, how often have you used a condom when you have had ______ sex with your current or most recent main sexual partner?” Response categories ranging from ‘never’ to ‘always’, with an additional response category if the participant does not engage in that particular sexual behavior.
Moderating Variable: Sexual Pressure

Sexual pressure was defined as “sexual choices that are limited by adherence to gender stereotypical expectations for sex and fear of, or experience with, adverse consequences, such as losing the relationship, threats, or physical coercion, if these expectations are not met” (Jones, 2006, p. 282). Sexual pressure was measured with the Sexual Pressure Scale (Jones, 2006), a self-report, Likert scale that measures experiences and views regarding condom fear, sexual coercion, women’s sex role, sexual expectations of men, and trust. The response categories for experience range from ‘never’ to ‘always.’ The response categories assessing views range from ‘definitely do not feel’ to ‘definitely feel.’ A more thorough discussion of the instrument is in Chapter III: Methods.

Assumptions

The following study assumptions were identified:

- Participants answered questionnaire items truthfully, provided their answers were confidential.
- Participants’ sexual partners influenced their perceptions of sexual pressure.

Research Aims

Based on the Sexual Empowerment Conceptual Model (SECM), dimensions of sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) were examined for their relationship to condom use. Additionally, sexual pressure was examined as a factor that potentially moderates the relationship between sexual empowerment and condom use such that the
relationship varies as a function of sexual pressure. The SECM guided the study in addressing the following aims:

- To explore the relationship between sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) and condom use.
- To explore the moderating effect of sexual pressure on the relationship between sexual empowerment and condom use.
- To explore racial differences in sexual empowerment, sexual pressure and condom use among AAW and CW ages 19-25.

**Review of Literature**

The purpose of the review of literature is to examine the relationships among sexual empowerment, sexual pressure and consistency in condom use. The discussion of the literature is specific to: (1) HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, condom negotiation skills, (2) sexual pressure and similar concepts (e.g., sexual coercion), and (3) predictors of condom use. Studies of HIV/AIDS prevention programs for women not only highlight the need for an educational component (i.e., increasing HIV knowledge), but also focus on the need to assess other psychosocial factors such as self-esteem, attitudes toward condom use, and the skills necessary to effectively negotiate condom use (Dancy & Berbaum, 2005; Gazabon et al., 2007; Mize et al., 2002). In addition, research related to sexual pressure is limited; thus, concepts closely related to sexual pressure were also reviewed. Studies using the concept of empowerment as a framework for HIV prevention studies among women were identified and will
be discussed. Finally, significant factors that predict condom use among women will be discussed.

Sexual Empowerment

HIV Knowledge

Many studies among both AAW and CW have shown that although HIV knowledge may be high, sexual risk behaviors also remain high (Cerwonka, Isbell, & Hansen, 2000; Jackson, Early, Schim, & Penprase, 2005; Ratcliff-Crain, Donald, & Dalton, 1999; Williams, Ekundayo, Udezulu, & Omishakin, 2003). Williams et al. (2003) compared HIV knowledge, HIV attitudes and beliefs, and sexual behaviors in a sample of 300 rural and 449 urban AAW. Although knowledge of HIV was higher among urban women when compared with rural women, beliefs, attitudes and sexual behavior patterns did not differ significantly between the two groups.

Similarly, Cerwonka, Isbell, and Hansen (2000) assessed the influence of psychosocial/psychological factors such as peer influence, resistance to change, risk perception, self-efficacy, self-concept, denial, repression, and rationalization on sexual risk-taking behavior of 374 college students. Of the sample, 66% were female and 34% were male. The participants were predominantly Caucasian (72%) with African Americans (AAs) representing 23% of the sample. Among the results that were found, HIV/AIDS knowledge was not associated with sexual risk-taking behavior. Ratcliff-Crain et al. (1999) also explored factors associated with sexual behaviors among college students (65% female and 87% Caucasian). Again, overall HIV knowledge was high, yet this
knowledge was not independently related to the extent of risky behaviors such as number of sexual partners and condom use (Ratcliff-Crain et al., 1999).

Other studies have found a significant relationship between HIV knowledge and sexual risk behaviors. In an HIV-risk study among 158 inner city women (89% AA, 8% Caucasian, 3% other), Somlai et al. (2000) compared two groups: high-risk and low-risk women. Criteria for being high-risk included having been treated for a sexually transmitted disease (STD) in the past year, having unprotected intercourse with multiple partners in the past 3 months, or having injected drugs within the past 3 months. Results indicated that women at highest risk for HIV had lower levels of HIV/AIDS risk knowledge. Likewise, Whyte et al. (2004) assessed the relationship of HIV knowledge and sexual behavior among AAW in the Southeastern region of the U.S. (n = 75). Researchers found a significant relationship between greater HIV knowledge and safer sexual behavior. However, when other factors were controlled, such as income, level of education, age at initial onset of sex, and lifetime number of sexual partners, the relationship between HIV knowledge and sexual behavior was not significant (Whyte et al., 2004).

From the discussion of the above findings, it is evident that although knowledge of HIV is not consistently associated with lower-risk behaviors, this factor should not be underestimated as a potential determinant of sexual risk behaviors. Intervention studies targeting both AAW and CW support the need to include an HIV knowledge educational component in reducing these risk behaviors (Dancy Marcantonio, & Noar, 2000; Jaworski & Carey, 2001). There is also a need to obtain gender-specific samples composed of ethnically diverse women in order to further generalize study findings to various racial and ethnic groups.
**Self-Esteem**

The majority of sexual risk behavior studies addressing self-esteem as an important factor in sexual risk have been conducted among adolescent and college populations (Ethier et al., 2006; Gullette & Lyons, 2006; Salazar et al., 2005). It can be argued, however, that there is a need to address this concept in adult populations, as studies assessing sexual experiences during childhood have found significant relationships with self-esteem and sexual risk behaviors that carry over into adulthood (Gwandure, 2007; Wenzel, Hambarsoomian, D’Amico, Ellison, & Tucker, 2006).

Gullette and Lyons (2006) explored motivational factors of HIV risk behaviors among 159 college students. The sample was predominantly Caucasian (82.4%) and female (75.3%). Among the factors included were sexual sensation seeking, self-esteem, condom self-efficacy, and alcohol consumption. Of the findings, those who had higher self-esteem were high sensation seekers, had more self-efficacy in condom use, and fewer alcohol problems. Likewise, students with lower self-esteem consumed more alcohol and had more sexual partners and HIV risk-taking behaviors than other students (Gullette & Lyons, 2006). In a more diverse sample of adolescent females recruited from clinics and community health centers ($n = 155$; 46% AA; 37% Latina), Ethier et al. (2006) examined psychological factors associated with sexual behaviors. As with the Gullette and Lyons study (2006), adolescents who had lower self-esteem also reported high-risk behaviors, such as early onset of sexual activity and a history of high-risk partners.

Self-esteem has also been studied among at-risk adult female populations. Sterk et al. (2004) sought to identify relationships between self-esteem and HIV risk-behaviors in a sample of 250 at-risk women (86.4% AA) recruited through community outreach.
The researchers found that lower self-esteem was associated with more oral sex, more sex with paying partners, greater frequency of sexual risk-taking, more negative attitudes toward condoms, and less condom use self-efficacy (Sterk et al., 2004). Based on the literature, there is a need to extend research on self-esteem and sexual risk behaviors beyond the adolescent population to young adult populations, as many young women may continue to deal with issues of confidence and self-worth.

**Condom Self-Efficacy**

According to social cognitive theory, knowledge increases self-efficacy and self-efficacy increases behavior (Bandura, 1977). Thus, HIV knowledge regarding transmission rates and methods of prevention are likely to increase the ability to carry out self-protective behaviors such as condom use and to actually exhibit such behavior. In a sample of 100 urban women (70% AAW), Lindberg (2000) sought to find factors related to condom use behavior in this population. The low-income women were recruited from a gynecology and family planning clinic. Among the findings, there was a significant relationship between condom self-efficacy and condom use. This study supports the need to assess components such as self-efficacy in addition to HIV knowledge in the examination of sexual behaviors.

Similar to the Lindberg study, Gazabon et al. (2007) tested the mediating effect of self-efficacy on condom use and condom decisions in an at-risk sample of 166 Caucasian and 166 minority women (45% of the minority were AA). For both groups, lower condom self-efficacy was a significant mediating factor in unprotected sex such that lower levels of condom self-efficacy were significantly related to unprotected sex.
Peipert et al. (2007) assessed barriers to unprotected condom use in a sample of 627 ethnically diverse women (46% CW, 27% AAW, 24% Hispanic, & 36% other) less than 35 years of age. The sample was recruited from primary, gynecological, and family planning clinics. Of the results found, low condom self-efficacy scores were associated with lack of condom use in participants less than 20 years of age. CW were more likely to have more episodes of unprotected sex than their AA counterparts (47% and 27%, respectively) (Peipert et al., 2007). Reports on condom self-efficacy scores by race, however, were not reported. Women’s ability to effectively use a condom may differ between races. The current literature continues to support the need for researchers to take into account the efficacy or ability to effectively and consistently use a condom in relation to actual condom use.

**Attitudes toward Condom Use**

Attitudes toward a behavior are beliefs that a person has, whether from experience, outside influence, or their own inference (Ajzen & Fishbein, 1980). With regard to attitudes toward condom use, beliefs can originate from sexual experiences, peer or partner influences, opinions, etc. Thus, whether these attitudes are positive or negative, they can have a direct relationship with condom use behavior.

In an ethnographic study, Sterk et al. (2004) examined predictors of condom-related attitudes among 250 at-risk women (86.4% AAW). Participants were recruited using ethnographic mapping and were interviewed by self-report measures. Researchers found that women’s attitudes toward condom use were ambivalent or weakly positive. Fifty-one percent (51%) of participants had favorable attitudes, although 42.7% had neutral attitudes toward condom use. The more negative the attitudes were toward condoms,
the more often the participants engaged in high-risk sex. The study found that more positive attitudes were predicted by younger age, absence of childhood neglect, higher self-esteem, and lack of substance use.

In a similar study assessing HIV risk among 158 inner city women (89% AA), Somlai et al. (2000) compared factors associated with HIV risk among high-risk women (had been treated for an STD in the past year, unprotected sex with multiple partners in the past 3 months, and injection drug use in the past 3 months) and women considered low-risk (did not report these risk behaviors). Although women at highest risk reported lower self-efficacy and lower levels of HIV knowledge, the two groups did not differ in their attitudes toward condom use or behavior change intentions. It is noteworthy that the Cronbach’s alpha for the instrument used to measure attitudes toward condom use in the sample was .61. A more reliable instrument may have yielded more significant results.

Studies among college populations also examined condom attitudes in relation to sexual risk behaviors. In a study among 284 college students (87% Caucasian and 65% female) examining factors related to sexual risk behaviors, Ratcliff-Crain et al. (1999) found that negative attitudes toward condom use to “avoid them if at all possible” was significantly associated with decreased condom use. The majority of the sample, however, did not engage in high-risk sexual behavior and attitudes toward condom use were not examined by gender. From the discussion on attitudes toward condom use, it is concluded that those who have negative attitudes toward condoms are likely not to engage in using them consistently. Attitudes toward a behavior may be likely to be influenced on an interpersonal level as well as on an intrapersonal level.
**Condom Negotiation Skills**

As previously mentioned, self-protective behaviors to decrease HIV risk (e.g., condom self-efficacy) can be influenced by male partners within the bounds of an intimate relationship. It is within this social context that a woman must also practice the ability to successfully negotiate condom use with her partner. Studies that examine condom negotiation skills have been conducted among various populations such as in college samples (Lam et al., 2004; Lam & Barnhart, 2006; Noar et al., 2002), adolescent populations (Crosby et al., 2002; Milhausen et al., 2007; Salazar et al., 2005), and vulnerable populations such as battered women and those at risk for HIV (Davila & Brackley, 1999; Koenig & Moore, 2000; Pulerwitz et al., 2002).

Lam et al. (2004) examined verbal and non-verbal condom negotiation skills in a sample of 508 Asian American and Caucasian American college students (70% female). The study explored four methods of condom negotiation skills: verbal-direct (verbal and explicit in requests for condom use), verbal-indirect (verbal, but subtle in requests for condom use), nonverbal-direct (not verbal, but direct strategies to use condoms), and nonverbal-indirect (not verbal and subtle strategies to use condoms). Results indicated that both verbal and nonverbal direct strategies were more frequently used; indirect strategies (both verbal and nonverbal), however, were also used to negotiate condom use. From a cultural standpoint, Asian Americans employed more verbal-indirect strategies, whereas Caucasians were more verbally-direct. Also, women used nonverbal-indirect strategies more so than their male counterparts (Lam et al., 2004). Studies such as these also have important implications for AAW as well. Whether condom negotiation skills
are direct or indirect, the ability to effectively negotiate condom use is a considerable factor in increased condom use with partners.

Lam and Barnhart (2006) assessed the effect of partner ethnicity on condom negotiation skills among 181 Chinese American and Filipina American college students. As with the previous study, verbal-direct, verbal-indirect, nonverbal-direct, and nonverbal-indirect negotiation strategies were examined. Of the results, Asian women with non-Asian partners were more likely to use nonverbal-direct negotiation strategies than those with Asian partners (Lam & Barnhart, 2006). Although the results from the study are only generalizable to Asian American college students, results indicated that ethnicity plays a role in how the women communicated or negotiated condom use with their partners. Whatever method of condom negotiation is utilized, there may be significant differences between other ethnic groups, such as AAW and CW.

Lauby, Smith, Stark, Person, and Adams (2000) evaluated the effectiveness of a community intervention to decrease sexual risk among predominantly AAW (73%). Interviews were conducted among 225 to 240 women from various local community sites. Pre-intervention, 68-70% of the women had no intention of using condoms with either their main or casual partners. After 2 years of intervention activities, increased rates in condom communication and in the number of women who attempted to negotiate condom use was significantly higher in the intervention group than in comparison groups (Lauby et al., 2000).

In regard to the literature on condom negotiation skills, a woman can communicate the need to use condoms to her partner in a variety of ways. What is most significant is not so much about the manner in which she negotiates condom use, but rather if her
communication is received by her male partner and condom use is carried out successfully as a result.

**Condom Use**

Condom use is the most effective method available for the prevention of HIV/STI transmission for those who are sexually active. Because transmission among heterosexual women remains high, recent studies among women have focused on sociodemographic and psychosocial factors that predict condom use, thereby decreasing HIV risk.

In a study of 100 low-income urban women (70% AAW, 15% CW, 15% Hispanic women), Lindberg (2000) explored the relationships between condom use knowledge, condom self-efficacy, coping, and condom use. Using social cognitive theory and a path analysis to test the model, findings indicated that there were significant positive effects between condom use knowledge and condom self-efficacy and between condom self-efficacy and condom use. There was also an indirect effect of condom use knowledge on condom use through condom self-efficacy.

Although the findings supported the theory and test of the model, findings indicated that there was no direct relationship between knowledge of condom use and actual condom use. This finding emphasizes the need to focus on both knowledge and skill building when planning HIV interventions. An examination of the similarities and differences between ethnic subgroups in condom knowledge, self-efficacy, and condom use would have strengthened the study.

Soler et al. (2000) assessed the effects of relationship dynamics and ethnicity on condom use among 393 low-income AA (n = 89), Caucasian (n = 132), and Hispanic (n =
Higher levels of consistent condom use were reported among AAW and Hispanic women (15-17%) than CW (4%). Although both AAW and CW reported being more comfortable talking about condoms with their partners than Hispanic women, Hispanic women reported the highest level of confidence in negotiating condom use (Soler et al., 2000).

The researchers suggested that results from the study challenge gender stereotypes and sexual powerlessness among minority women noted in the literature. Although they noted that barriers to condom use may be attributed to machismo for Hispanic women and sex ratio imbalances for AAW, there was a faster increase in condom use among minority women than in CW (Soler et al., 2000).

It is noteworthy that the previous study noted ethnic differences between groups in condom use and negotiation skills. Although the study was done in a Southeastern region of the U.S. (Miami, FL) where the HIV/AIDS prevalence is high, results indicated that there was a trend of increasing condom use among minority women. Although these results are significant, it would be important to determine factors that further explain these differences between ethnic groups.

Roberts and Kennedy (2006) examined factors that impacted condom use among 100 ethnically diverse college women (22% AAW, 30% Hispanic, 41% CW). Women who were sexually assertive, had intentions to use condoms, and did not use substances were more likely to use condoms. Despite assertiveness and intentions, 64% of the women were inconsistent condom users. Negative condom attitudes were also associated with lack of condom use. Also, older women who had steady partners experienced partner resistance to condoms. CW had higher sexual behavior risk than AAW or Latinas.
The finding that CW were at higher risk than AAW because of lack of condom use was similar to findings from Soler (2000). Roberts and Kennedy (2006) stated that although CW had high self-perceived risk, they may still have engaged in high-risk behaviors. The study was conducted in southern California, where HIV/AIDS rates are lower than in the Southeastern region of the U.S. and the sample was also a college sample. Students in college are not considered as high-risk as low-income, inner city women, or intravenous drug users. Thus, studies that assess those at higher risk for HIV may reveal differing results.

**Sexual Pressure**

This section includes a review of the literature and discussion of the concept of sexual pressure, similar concepts to sexual pressure (e.g., sexual coercion), and the relationship between sexual pressure, sexual empowerment, and condom use. The studies examining sexual pressure and sexual risk have been conducted primarily with minority adolescent females (Kershaw, Ethier, Niccolai, Lewis, & Ickovics, 2003; Teitelman, Ratcliffe, & Cederbaum, 2008). Sexual pressure in these studies involved pressure to have sex and pressure to not use condoms during sex. There is a dearth of information in the literature, however, on sexual pressure among young adult women.

Jones (2006) first defined the concept of sexual pressure as “sexual choices that are limited by adherence to gender stereotypical expectations for sex and fear of, or experience with, adverse consequences, such as losing the relationship, threats, or physical coercion, if these expectations are not met” (p. 282). This first study identified by this researcher that examined sexual pressure among women included a sample of 306 young
adult urban women, in which the majority were AA (64%) followed by 15% Latina (Jones, 2006). The purpose of the study was to test the reliability and validity of a newly developed instrument to measure sexual pressure among women. A more thorough discussion of the instrument is included in Chapter III: Methods. Women in this study who experienced sexual pressure were more likely to practice risky sexual behaviors (Jones, 2006). The majority of participants, however, were not influenced by sexual pressure. The study, however, was administered in the Northeast region of the U.S. Studies conducted in other geographical locations, such as the South where HIV/AIDS is significantly higher, may yield different results. Also, because the sample was predominantly AAW and the results were presented in aggregate form, no noted similarities or differences between ethnic groups were identified. Jones (2009) conducted a follow-up study for revision of the Sexual Pressure Scale to improve the instrument’s reliability. Using a similar ethnic sample of young adult urban women, similar findings revealed an association with HIV risk behaviors as well as an association between sexual pressure and lack of power within a female-male partner relationship.

Although studies that examine sexual pressure are limited in the literature, other related concepts were found: sexual coercion, sexual victimization, and sexual imposition. These concepts are indicative of coercive behaviors by the partner that are in direct conflict with a woman’s wishes or desires. The key difference in sexual pressure and these concepts is that sexual pressure takes into account both coercive and non-coercive pressures to engage in sex, such as coercion and gender stereotypes (Jones, 2006). A brief discussion of these concepts in the literature follows.
Sexual coercion is described as any type of sexual advance made by a partner after the other partner indicates refusal in any way (Pacifici, Stoolmiller, & Nelson, 2001). In a study of 125 AAW from a low-income housing development, Kalichman, Williams, Cherry, Belcher, and Nachimson (1998) assessed the effect of sexual coercion on HIV risk. Forty-two percent (42%) of the women reported having experienced sexual coercion. More specifically, in addition to 18% of women who had unwanted sex because of threats of physical force and 12% who reported actual physical force to have unwanted sex, 13% reported having unwanted sex because their partner threatened to leave the relationship if the woman did not comply. Additionally, coerced women were more likely to fear negotiating condom use with their partners than non-coerced women.

Sexual victimization, described as the experience of forced intercourse or other sexual assault (Zweig, Crockett, Sayer & Vicary, 1999), often occurs during one’s childhood or adolescence. Trent, Clum, and Roche (2007) assessed the effect of sexual victimization on sexual health outcomes of urban youth. Their cross-sectional study included 1,698 AA and Caucasian young adults. Although sexual victimization did not vary by ethnicity, females were more likely to report victimization than males. Also, females who reported sexual victimization were more likely to have an STI than females who did not report victimization (Trent et al., 2007).

Sexual imposition has been defined as feelings of pressure to engage in undesired sex (Hoskins, 1988). Jones (2004) assessed sexual imposition and other factors related to sexual risk behavior among 257 young adult urban women, in which the majority were AAW (64.2%) followed by Latina (20.6%). The researchers found a positive association
between sexual imposition and sexual risk; however, the pressure to sexually satisfy a male partner was more common than physical coercion.

The findings from the literature on sexual pressure among women and related concepts such as sexual coercion, sexual victimization, and sexual imposition highlight the need to not only assess coercive pressures to engage in high-risk sexual behaviors, but to also assess non-coercive pressures. Although some women may face physical threats or acts of physical coercion (Davila & Brackley, 1999; Lichtenstein, 2005), many others face threats of non-coercive pressures such as losing the relationship, infidelity, or loss of emotional stability or financial dependence if they don’t comply with men’s condom use preferences (Ferguson, Quinn, & Sandelowski, 2006; Jarama, Belgrave, Bradford, Young, & Honnold, 2007; Jones, 2006). Moreover, high-risk sexual behaviors among women have been attributed to male dominance and female dependence in both interpersonal and sexual relationships, which may hinder the ability of a woman to carry out positive decisions regarding sexual protection (Lindberg, 2000). A partner’s unwillingness to use condoms has also been associated with increased episodes of unprotected sex among women (Peipert et al., 2007). Thus, the sociocultural context of an intimate relationship must be taken into account as a predictor of sexual behavior. It is within this context that positive decisions may potentially be challenged. Sexual pressures to engage in unprotected sex can negatively affect otherwise positive decisions to adopt self-protective behaviors such as increased condom use.
Sexual Empowerment, Sexual Pressure, and Condom Use

In a review of 56 published reports of HIV prevention interventions focused on primary prevention, interpersonal, and community empowerment of at-risk women from the beginning of the AIDS epidemic through 1998, Riley-Eddins, Boelter, Banks, and Holloway (1998) made the following recommendations for successful empowerment interventions:

1. Empowerment interventions should include no fewer than two of three strategies (psychological, behavioral, and educational) that specifically address sexual risk reduction.

2. Empowerment interventions should be ethnic-specific and/or culturally relevant and culturally competent.

3. Empowerment interventions should include an evaluation behavioral component (Riley-Eddins et al., 1998).

Although the current study is a descriptive, cross-sectional study, it incorporates these suggestions in assessing factors that lead to high risk behaviors among women; more specifically, lack of condom use. As discussed in earlier sections and based on the recommendations set forth by Riley-Eddins et al. (1998), the dimensions of sexual empowerment include HIV knowledge (educational), self-esteem and attitudes toward condom use (psychological), and condom self-efficacy and condom negotiation skills (behavioral). The assessment will also be racial-specific and culturally relevant, as similarities and differences will be examined in both AAW and CW. Lastly, condom use (behavioral component) will be measured in relation to sexual empowerment.
Previous studies focused on empowerment among women substantiate the need to incorporate this element in studies assessing HIV risk. Romero et al. (2006) conducted an empowerment based participatory HIV prevention program over a 3-year period in a sample of 308 rural and urban women (53.2% Latina majority, followed by 19.5% CW). The participants were recruited by outreach efforts to recruit high-risk women in the community to evaluate the effectiveness of the intervention. The objective of the intervention was to increase HIV/AIDS knowledge, identify barriers to HIV/AIDS prevention, develop strategies for change, develop skills in condom use, communication, and competencies, and develop plans for social action. Among the findings, significant changes between pretest and posttest on HIV transmission and prevention knowledge were found. Qualitative data on skills for negotiating condom use supported posttest changes, as women discussed how they could better communicate to protect themselves sexually. Education was the most mentioned strategy for positive change and to increase self-esteem (Romero et al., 2006).

Intervention studies such as the previous study by Romero and colleagues are substantial in not only educating women about HIV transmission and prevention, but also focusing on gender inequalities and cultural norms that play a role in sexual decision making. Empowerment interventions have important implications for women. Although the sample was predominantly Latina, AAW also stand to gain from HIV prevention interventions rooted in empowerment theory, as often times they are disempowered whether from power imbalances within a relationship or in the larger community (Sanders-Phillips, 2002).
Similarly, Wechsberg et al. (2004) implemented a culture- and gender-based HIV prevention intervention to reduce risk among a sample of 620 drug-using AAW. Out-of-treatment women were recruited from community outreach approaches. The study compared a culturally sensitive, gender-specific intervention grounded in empowerment theory and AA feminism with a standard group and a control group. The study assessed the outcomes at 3 and 6 month follow-up. The empowerment intervention group received empowerment-based education in areas such as HIV knowledge, sexual communication, and self-efficacy as well as developing social support and securing education, employment, and housing. The researchers found that women in the empowerment-based intervention group were least likely to engage in unprotected sex when compared with women in the control group at 6 month follow-up (Wechsberg et al., 2004).

The review of literature supports an association between coercive pressures/gender stereotypes and engagement in unprotected sex (Jones, 2004; Jones, 2006; Ferguson et al., 2006; Kalichman et al., 1998; Lichtenstein, 2005). Whether the pressures are coercive, based on cultural or gender norms, or influenced by sexual partners, these factors directly conflict with otherwise positive sexual decisions driven by a woman’s sexual empowerment. Although the literature has shown that HIV knowledge, high self-esteem, condom self-efficacy, positive attitudes toward condom use, and effective condom negotiation skills are associated with lower-risk behaviors, and sexual pressure is associated with high-risk behaviors, no studies were identified that tested the moderating effect of sexual pressure on these dimensions of sexual empowerment. The current study will attempt to fill those gaps, further adding to the body of literature and will hopefully
be a starting point for future interventions targeting HIV prevention among vulnerable female populations.
CHAPTER III

METHODS

A cross-sectional, descriptive design was used to address the study aims. The first aim was to explore the relationship between sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) and condom use. The second aim was to explore the moderating effect of sexual pressure on the relationship between sexual empowerment and condom use. The third aim was to explore racial differences in sexual empowerment, sexual pressure, and condom use among young adult AAW and CW ages 19-25. The descriptive design allowed the investigator to examine associations between major variables included in the study and to address the posed research hypotheses.

Setting

The study was conducted in a metropolitan area (Greater Birmingham/Jefferson County, Alabama) in the Southeastern United States following Institutional Review Board (IRB) approval of human subjects’ research by the University of Alabama at Birmingham and the Jefferson County Department of Health (JCDH). This metropolitan region is the most densely populated area in Alabama with an estimated population of 656,700 and a racial distribution of 56.4% Caucasian, 39.4% AA, and 4.2% other. Approximately 52.6% of the total population is female (Alabama Department of Public Health, 2008). Jefferson County also has the highest prevalence of HIV/AIDS in the
state, accounting for 28.6% of the reported number of cumulative HIV/AIDS cases in Alabama (Alabama Department of Public Health, 2008). Participants were recruited from the local STD clinic and the Women, Infants, and Children (WIC) program through the JCDH.

Sample

The target population was young adult women ages 19 to 25. Women were included in the study who met the following criteria: (1) self-identified as AA or Caucasian; (2) unmarried; (3) were sexually active and had sex with a male partner within the previous 6 months; (5) had never been tested for HIV, or if tested, reported HIV-negative serostatus or unknown serostatus; (6) English speaking; and (7) a resident of Jefferson County, Alabama. Women were excluded who: (1) were HIV+; (2) did not have sex with males; and/or (3) were unable to participate in the interview process due to cognitive or other impairments.

Although AAs represent 26% of the population of Alabama, 63.4% of all reported HIV/AIDS cases in the state are from this ethnic group. In addition, AAs ages 20-29 represent 26.0% of all reported HIV/AIDS cases among AAs in Alabama (Alabama Department of Public Health, 2008). The rationale for selecting participants between 19-25 years of age was to obtain a sample from a high-risk sexual behavior group. Previous HIV prevention studies on sexual risk behaviors among women have focused on young adult women in similar age groups (Ferguson et al., 2006; Jones, 2006; Ortiz-Torres et al., 2003). Furthermore, rates of gonorrhea and Chlamydia in Jefferson County, Alabama are highest among people ages 20-24 (Alabama Department of Public Health, 2008). In-
Individuals with an STI are two to five times more likely to acquire HIV through sexual contact than those who are not infected (Centers for Disease Control and Prevention, 2008).

A power analysis was conducted to estimate the sample size needed to test the study hypotheses. A sample size of 97 women was determined to be adequate for an analysis of a six-predictor model based on a medium effect size, a power of .80, and an alpha level of .05 (Soper, 2008). The number of participants was rounded to 100 to obtain an equal number of AAW and CW.

**Recruitment Strategies/Data Collection Plan**

Purposive sampling was used to recruit a sample of young adult women living in the target area, with equal representation of AAW and CW. The participants were recruited through the JCDH once written administrative approval was obtained. Staff of the STD Clinic and the WIC program agreed to act as intermediaries for the investigator by distributing brochures about the study to young adult female clients who were eligible to participate. The investigator was also on site to hand out brochures and was available to enroll individuals interested in being in the study. The brochures described the study purpose and procedures to be used, as well as the investigator’s contact information. Brochures were also placed in the lobby areas of the health department with the prior permission of department directors. Although the investigator’s contact information was included on the brochure for alternative arrangements in lieu of the investigator’s absence, all of the study participants were recruited on site and completed the question-
naires while either waiting to be seen for treatment/services or on site after their clinic visit had ended.

Written informed consent was obtained from each study participant. As part of the consent process, the investigator described the purpose of the study, all procedures, compensation, and the potential risks and benefits of participation. Potential participants were given an opportunity to ask questions and every effort was made to answer questions to their satisfaction. Approximately 10% of eligible women who were approached for participation refused to be in the study. Those who agreed to participate in the study were screened to determine if they met inclusion criteria. Those who met the criteria were given the opportunity to participate in the study. Participants were provided a copy of the written informed consent statement for their records.

Once enrolled, participants were provided a survey to complete. On average, the surveys were completed in approximately 20 to 30 minutes. Participant names or other identifying information were not recorded on the survey to ensure confidentiality. Once completed, the participants returned the surveys to the investigator. The investigator then checked the surveys for completeness. Completed surveys were stored in a locked file cabinet in the School of Nursing, Center for Nursing Research. Those who completed surveys were compensated $10.00 in cash.

**Measures**

The survey administered to participants included the following measures: (1) HIV-Knowledge Questionnaire (HIV-K-Q), (2) Rosenberg Self-Esteem Scale (R-SES), (3) Condom Self-Efficacy Scale (CSES), (4) Sexual Risks Scale- Attitudes toward Con-
dom Use (SRSA), (5) Condom Influence Strategy Questionnaire (CISQ), (6) Sexual Pressure Scale (SPS), and (7) frequency of condom use. Each of the measures is described below. In addition, participants completed a demographic data sheet that elicited information about participant age, racial identity, educational level, occupation, and income level (see Appendix D, Part A).

HIV knowledge was measured by the **HIV-Knowledge Questionnaire (HIV-K-Q)** (Carey et al., 1997). The HIV-K-Q is a 45-item, self-administered scale that assesses the respondent’s knowledge about HIV transmission, non-transmission, effective risk reduction strategies, ineffective prevention methods, and consequences of infection. Response options for each item are true or false. ‘True’ or ‘false’ responses are considered correct based on the specific question asked. Correct answers are scored as “1” and incorrect answers as “0”. A total score is achieved by summing all items. Scores range from 0 to 45 with higher scores indicating higher levels of HIV knowledge.

The HIV-K-Q is both culturally sensitive and appropriate for women and requires only a 6th grade reading level. The measure was validated among a diverse sample of HIV experts, primary care patients, undergraduate college students, and community-based samples. The community-based sample included urban women who were predominantly AA (75%). Validity was evidenced by comparing groups who differed in HIV-related knowledge, implementing an education intervention to test the effectiveness of the measure, and using convergent and discriminant analyses. Internal consistency of the instrument was demonstrated by a Cronbach’s alpha of 0.91 (Carey et al., 1997). For the current study sample, the Cronbach’s alpha was 0.69 (See Table III-1). The HIV-K-Q is included in Appendix D, Part C.
Self-esteem was measured by the **Rosenberg Self-Esteem Scale (R-SES)** (Rosenberg, 1965). The R-SES is a 10-item scale that measures a sense of self-worth. It is one of the most widely used measures of self-esteem in social science research and has been used in adolescent and adult populations, as well as in various ethnic populations (Sterk, Klein, & Elifson, 2004; Salazar et al., 2005; Gulette & Lyons, 2006). In a review of psychological scales, Robinson, Shaver, and Wrightsman (1991) wrote that the R-SES “is the standard against which new measures are evaluated” (p. 123). Response choices for the scale range from ‘**strongly agree**’ (1) to ‘**strongly disagree**’ (4). Scores range from 10 to 40, with higher scores indicating higher levels of self-esteem. Scores of 20 or higher indicate high self-esteem and acceptance. The R-SES has been utilized in HIV risk studies among young adult minority women (Gwandure, 2007; Harris, Bausell, Scott, Hetherington, & Kavanagh, 1998; Salazar et al., 2005; Sterk et al., 2004) with reported Cronbach’s alpha ranging from 0.68 to 0.90. For the current study sample, the Cronbach’s alpha was 0.87 (See Table III-1). The R-SES is included in Appendix D, Part B.

Condom self-efficacy was measured by the **Condom Self-Efficacy Scale (CSES)** (Hanna, 1999). The CSES is a 14-item scale that measures condom self-efficacy in terms of condom-specific behaviors and communication with sexual partners. Response categories range from ‘**very unsure**’ (1) to ‘**very sure**’ (5), with higher values indicating higher self-efficacy. The scale has been validated with ethnically diverse samples of adolescents and young adults. Content validity was supported by expert review of master’s prepared nurse clinicians and educators and construct validity was evaluated in association with Bandura’s social cognitive theory and empirical literature on the influence of condom self-efficacy on condom use. Cronbach’s alpha for the scale was 0.85 (Hanna,
Attitudes toward condom use were measured with the **Sexual Risks Scale- Attitudes Toward Condom Use (SRSA)** (DeHart & Birkimer, 1997). The SRSA is a 13-item subscale of the larger 38-item Sexual Risks Scale that measures attitudes toward condom use. Response categories range from ‘*strongly disagree*’ (1) to ‘*strongly agree*’ (5). A total score is calculated by computing the mean scores across the items yielding a possible mean score range from 1 to 5, with higher mean scores indicating more positive attitudes toward condom use (DeHart & Birkimer, 1997). The scale was validated among two college student samples, using derived items based on constructs related to the health behavior literature including the Theory of Reasoned Action, the Theory of Trying, the Information-Motivation-Behavioral Skills Model, and the Health Belief Model. The reliability coefficient for the development of the scale was 0.88 (Dehart & Birkimer, 1997). For the current study sample, the Cronbach’s alpha was 0.86 (See Table III-1). The SRSA is included in Appendix D, Part D.

Condom negotiation skills were measured by the **Condom Influence Strategy Questionnaire (CISQ)** (Noar, Morokoff, & Harlow, 2002). The CISQ is a 36-item, self-administered questionnaire that measures influence strategies to negotiate condom use. Response categories range from ‘*very likely*’ (1) to ‘*very unlikely*’ (5) and the reading level of the scale was assessed at below a 6th grade level. A total score is tabulated by summing item responses and dividing by the total number of items. Lower scores indicate higher levels of condom negotiation skills. The measure was tested and validated in a sample of college students (\(n = 471\); 85% Caucasian; 68% female) and found to be reli-
able with each of the six subscales having an internal consistency ranging from 0.83 to 0.94. The validity of the scale was supported by a positive relationship between the CISQ and other instruments that measured sexual assertiveness, condom self-efficacy, negotiation self-efficacy, partner communication, intentions to use condoms consistently, and condom use (Noar et al., 2002). For the current study sample, the Cronbach’s alpha reliability coefficients for the six subscales ranged from 0.86 to 0.95 and reliability for the overall scale was 0.95 (See Table III-1). The CISQ is included in Appendix D, Part E.

Sexual Pressure was measured by the Sexual Pressure Scale (SPS) (Jones, 2006). The SPS is a 19-item, self-administered scale that measures both coercive and non-coercive pressures to engage in unprotected sex. The five factors included in the SPS are: 1) condom fear, 2) sexual coercion, 3) women’s sex role, 4) men expect sex, and 5) show trust. Items include assessment of sexual experiences and assessment of sexual views. Response categories assessing sexual experiences range from ‘never’ (1) to ‘always’ (5), and response categories assessing sexual views range from ‘definitely do not feel’ (1) to ‘definitely feel’ (5). A total score is achieved by computing the mean scores across the items yielding a possible mean score range from 1 to 5. The higher the score, the greater the perceived sexual pressure. Content validity was supported by revising the scale based on feedback from 20 culturally diverse young adult women and through expert review by educational counselors and a doctoral health practitioner. Convergent validity and discriminant validity have also been demonstrated. The scale was utilized in a sample of 306 young adult urban women (64% AA; 15% Latina) and had a Cronbach’s alpha of 0.81 for the overall scale with the five subscales ranging from 0.63
to 0.82 (Jones, 2006). For the current study sample, the Cronbach’s alpha reliability coefficients for the five subscales ranged from 0.74 to 0.84 and reliability for the overall scale was 0.90 (See Table III-1). The SPS is included in Appendix D, Part G.

**Condom use** was measured as the frequency of condom use during vaginal, oral, and/or anal sex during the previous 6 months. The following question was asked for each of the three types of sexual activity: “In the past 6 months, how often have you used a condom when you have had _______ (vaginal, oral, or anal) sex with your current or most recent main sexual partner?” Response categories ranged from ‘never’ (1) to ‘always’ (5), with an additional response category if the participant did not engage in that particular sexual behavior in the past 6 months. For the purpose of data analysis, responses to the condom use items were collapsed into two categories, “never or almost never” (0) and “at least sometimes” (1). The measure for condom use is included in Appendix D, Part H.

**Protection of Human Subjects**

Approval from the Institutional Review Board (IRB) at the University of Alabama at Birmingham was obtained prior to implementation of the study. The investigator obtained all informed consents from each participant. The investigator read the informed consent and explained the research procedure to the participants, allowed adequate time to address all questions and concerns brought up by the participants, and provided them with a copy of the informed consent.

The study involved no more than minimal risk to study participants. Potential risks included anxiety or discomfort about sharing personal information regarding their
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Number of Items</th>
<th>Scoring Range</th>
<th>Cronbach’s Alpha (reported in previous studies)</th>
<th>Cronbach’s Alpha (for study sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-K-Q</td>
<td>45</td>
<td>0 – 45</td>
<td>0.91</td>
<td>0.69</td>
</tr>
<tr>
<td>R-SES</td>
<td>10</td>
<td>10 – 40</td>
<td>0.68 – 0.90 (range for female minority samples)</td>
<td>0.87</td>
</tr>
<tr>
<td>CSES</td>
<td>14</td>
<td>14 – 70</td>
<td>0.85</td>
<td>0.94</td>
</tr>
<tr>
<td>SRSA</td>
<td>13</td>
<td>13 – 65</td>
<td>0.88</td>
<td>0.86</td>
</tr>
<tr>
<td>CISQ</td>
<td>36</td>
<td>1 – 5</td>
<td>0.83 – 0.94 (range of six subscales)</td>
<td>0.83 – 0.95 (range of six subscales) 0.95 (overall scale)</td>
</tr>
<tr>
<td>SPS</td>
<td>19</td>
<td>1 – 5</td>
<td>0.63 – 0.82 (range of five subscales) 0.81 (overall scale)</td>
<td>0.74 – 0.84 (range of five subscales) 0.90 (overall scale)</td>
</tr>
</tbody>
</table>

sexual experiences. Six scales contained items that pertained to sexuality. These scales included (1) the HIV-Knowledge Questionnaire, (2) the Condom Use Self-Efficacy Scale, (3) the Sexual Risks Scale- Attitudes toward Condom Use, (4) the Condom Influence Strategy Questionnaire, (5) the Sexual Pressure Scale, and (6) Condom Use. Participants were informed of their right to refuse to answer any question at any time or to withdraw from the study without prejudice.
The investigator maintained confidentiality by instructing each participant not to place their names or any other identifying information on the actual survey form. Each participant’s completed survey form was coded by a unique numerical identifier and the findings of the study are reported in aggregate form so that individuals cannot be identified. All surveys were stored in a locked file cabinet in the School of Nursing, Center for Nursing Research. Data were entered into a password protected file stored on the UAB server. Only members of the research team had access to the data.

**Data Collection**

After informed consent was obtained, each of the study participants was given a packet which contained the demographic data sheet and self-report measures that included: the HIV-Knowledge Questionnaire, the Rosenberg Self-Esteem Scale, the Condom Self-Efficacy Scale, the Sexual Risks Scale- Attitudes toward Condom Use, the Condom Influence Strategy Questionnaire, the Sexual Pressure Scale, and the Condom Use Scale. Each packet of questionnaires was given an identification number for data entry purposes only.

Each participant had the option of either completing the questionnaires in the waiting area of the health department or through the use of a private room located in the health department. Before administration of the questionnaires, the investigator explained the research procedure to each participant and provided them with written instructions on how to complete each questionnaire. The investigator remained in the waiting area of the health department and periodically offered assistance while questionnaires were being completed. It took approximately 20 to 30 minutes to complete the question-
naires. Once participants completed the questionnaire packets, the investigator checked the questionnaires for completeness and placed each in a sealed envelope. Each participant was thanked for her involvement in the study and compensated $10 in cash. After receiving the compensation, each participant signed a receipt book stating that she was compensated $10 for her participation in the study. None of the study participants withdrew from the study or failed to complete the questionnaires.

Data Analysis Plan

The investigators used SAS Version 9.2 and SPSS Version 16.0 for all statistical analyses. Descriptive statistics (frequency, percentages, means, and standard deviations) were used to describe the study sample. Initially, the women’s overall level of condom use was evaluated for each of the three outcome behaviors (vaginal, oral, and anal sex). The descriptive statistics for each of the six instruments testing the independent variables were computed and reported. Next, the potential dimensions of sexual empowerment that influence women’s reported condom use were determined, with condom use during vaginal, oral, and anal sex serving as the dependent variables. Each of these outcome behaviors were assessed individually for their relationship with the independent variables. The independent variables included demographic characteristics (i.e., race, education, and income level), and the dimensions of sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills). Pearson’s correlations were used to assess the relationship among the dimensions of sexual empowerment and sexual pressure. Logistic regression models included chi-square tests for bivariate associations between the independent variables/predictors and the de-
dependent variables/outcome behaviors and odds ratios tested for the likelihood of an event occurring (condom use). Variables significant at the $p < .05$ level in bivariate analyses were further tested as interaction terms with the moderating variable (i.e., sexual pressure).

To evaluate the role of the moderating variable, regression models with interaction terms for sexual pressure and each independent variable were examined. Chi-square statistics were used to evaluate the strength of the interaction effects. Odds ratios were also determined based on the values of sexual pressure: low (a SD below the mean), medium (the mean), and high (a SD above the mean) for a unit increase in the independent variable scores.

Linear regression models tested bivariate associations between sexual empowerment dimensions and sexual pressure scores. The means and $t$-values assessed these bivariate associations. Linear regression was also used to test associations between race and sexual empowerment as well as between race and sexual pressure using similar technique.

Additional logistic regression models were used to test the association between sexual pressure and condom use. This technique was also used to test the association between race and condom use. Chi-square tests and odds ratios were included for these analyses. The specific statistical analyses used to address each research question are discussed as follows.

**Research Hypothesis 1:** Women who exhibit higher levels of sexual empowerment will be more likely to use condoms.
Each of the dimensions of sexual empowerment was examined to determine their bivariate relationship to condom use. Simple regression was used, as the independent variables (dimensions of sexual empowerment) were continuous variables. Logistic regression was used as follows: variables testing significant at the bivariate level were entered into the multiple logistic regression model. The analysis determined the significance of the model and identified the predictors of condom use.

**Research Hypothesis 2:** Women who experience sexual pressure will have lower levels of sexual empowerment.

Pearson’s correlations were used to assess the strength of the relationships between sexual pressure and each dimension of sexual empowerment. Linear regression models further tested these dimensions of sexual empowerment (dependent variables) and their association to sexual pressure (independent variable). T-statistics with corresponding p-values were used, with each dimension of sexual empowerment regressed on sexual pressure to determine those significantly associated with sexual pressure.

**Research Hypothesis 3:** Women who experience sexual pressure will be less likely to use condoms.

Simple logistic regression was used to test the association between the continuous independent variable (sexual pressure) and the dichotomized dependent variable (condom use during vaginal, oral, and anal sex), with each dependent variable regressed on sexual pressure to determine significant associations. T-test statistics for independent group means were used to further compare the study sample with a hypothetical sample, using values from the actual sample utilized to develop the Sexual Pressure Scale.
**Research Hypothesis 4:** Sexual pressure will moderate the relationship between sexual empowerment and condom use such that the relationship between sexual empowerment and condom use varies as a function of sexual pressure.

Based on the number of significant predictors determined in hypothesis 1, regression models with interaction terms between sexual pressure and the independent variables (dimensions of sexual empowerment) were further examined to identify the potential moderating effect of sexual pressure in relation to condom use. This method was used as opposed to a step-wise regression because it tests the contribution of each explanatory variable to the outcome regardless of the order of entry in the model. Odds ratios based on low, medium, and high values of the moderator variable were used as a calculated. Significant moderating effects were then determined when the relationship between an independent variable and condom use varied as a function of sexual pressure.

**Research Hypothesis 5:** Sexual empowerment will not differ between AAW and CW.

Linear regression models tested bivariate associations between race and the dimensions of sexual empowerment. AAW was used as the reference code for the independent variable and the t-values assessed the bivariate associations between race and sexual empowerment. Based on each individual item of sexual empowerment, their values, and significance, determinations were made with regard to sexual empowerment and potential differences between races.

**Research Hypothesis 6:** Sexual pressure will differ between AAW and CW.

Linear regression models also tested associations between race and sexual pressure. The t-values assessed these associations and their significance. T-test statistics for independent group means were further used to test the potential differences between
AAW and CW with respect to each of the 5 subscales of the Sexual Pressure Scale to note potential differences between races.

**Research Hypothesis 7:** Condom use will differ between AAW and CW.

Logistic regression was used to test the bivariate associations between the independent variable (race) and the dichotomous dependent variables (vaginal, oral, and anal sex condom use). The analysis determined the potential significance of the model with regard to differences between races in condom use.
CHAPTER IV

RESULTS

Specific Aims/Research Hypotheses

Based on psychological empowerment theory (Zimmerman, 1995), the theory of gender and power (Connell, 1987), and a comprehensive review of the literature, the following specific aims and research hypotheses, were posed:

- **Aim 1:** To explore the relationship of sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills) to condom use.
  
  H1: Women who exhibit higher levels of sexual empowerment will be more likely to use condoms.

- **Aim 2:** To explore the moderating effect of sexual pressure on the relationship between sexual empowerment and condom use.
  
  H2: Women who experience sexual pressure will have lower levels of sexual empowerment.

  H3: Women who experience sexual pressure will be less likely to use condoms.

  H4: Sexual pressure will moderate the relationship between sexual empowerment and condom use such that the relationship between sexual empowerment and condom use varies as a function of sexual pressure.
• Aim 3: To explore racial differences in sexual empowerment, sexual pressure, and condom use among young adult AAW and CW ages 19-25.

H5: Sexual empowerment will not differ between AAW and CW.

H6: Sexual pressure will differ between AAW and CW.

H7: Condom use will differ between AAW and CW.

This chapter includes a description of the results of statistical analyses carried out in the process of testing the research hypotheses and the characteristics of the study sample. Descriptive statistics were calculated and reported for all study variables. Frequency distributions and percentages are reported for categorical variables, while the range, mean and standard deviation (SD) are reported for continuous variables. Inferential statistics were used to test the hypotheses and included correlations, linear regression, logistic regression, odds ratios, and t-tests. The study findings are interpreted in relation to each specific research hypothesis. The findings are summarized and discussed at the conclusion of the chapter.

Sample Characteristics

Of the 101 women included in the study, 50 were AAW, 50 were CW, and 1 participant was Biracial (AA/Caucasian). For analysis purposes, the biracial participant was combined with CW in the category CW/Other to prevent bias and to exclusively examine AAW as an independent racial group. The age range of the study sample was 19 to 25 years, with a mean age of 21.4 years and a standard deviation of 2.14. The mean ages of the subgroups were 21.0 and 21.7 for AAW and CW/Other, respectively. Although the majority of the participants had completed at least some college (58.0 % of AAW and
54.9% of CW/Other), approximately half of each subgroup reported household incomes of less than $10,000 per year (52.1% of AAW and 49.0% of CW/Other). Demographic characteristics for the sample are displayed in Table IV-1.

Table IV-1. Demographic Characteristics (N = 101)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>African American Women</th>
<th>Caucasian Women/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>20</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>21</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>8</td>
<td>5</td>
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<tr>
<td>23</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>25</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not finish high school</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>High school graduate</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Some college</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>College graduate</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Attended graduate school</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Annual Household Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0 - $4,999</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>$5,000 - $9,999</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>$10,000 - $19,999</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>$20,000 - $29,999</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>$30,000 - $49,999</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>$50,000 +</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

The following section reports on the results of the statistical analyses for each research hypothesis. Table IV-2 illustrates the means, standard deviations (SD), and actual ranges for the sample, as well as possible ranges. The proceeding section will report the findings for each research question.
Research Hypotheses

Descriptive statistics were calculated for each of the major study variables represented in the research hypotheses. The means, standard deviations (SD), and range of sample scores are presented in Table IV-2. A correlation matrix showing the relationship among the variables is presented in Table IV-3. For the regression analyses, all initial models included possible confounding variables (i.e., race, education, and income). The results of analyses for each study hypothesis are presented in the following subsections.

Table IV-2. Means, Standard Deviations, Sample Ranges, and Possible Ranges

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Mean</th>
<th>SD</th>
<th>Sample Range</th>
<th>Possible Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-K-Q</td>
<td>36.73</td>
<td>4.23</td>
<td>24 – 45</td>
<td>0 – 45</td>
</tr>
<tr>
<td>RSES</td>
<td>33.59</td>
<td>5.51</td>
<td>15 – 40</td>
<td>10 – 40</td>
</tr>
<tr>
<td>CSES</td>
<td>54.62</td>
<td>13.89</td>
<td>14 – 70</td>
<td>14 – 70</td>
</tr>
<tr>
<td>SRSA</td>
<td>49.29</td>
<td>9.6</td>
<td>27 – 65</td>
<td>13 – 65</td>
</tr>
<tr>
<td>CISQ</td>
<td>2.28</td>
<td>0.8</td>
<td>1 – 5</td>
<td>1 – 5</td>
</tr>
<tr>
<td>SPS</td>
<td>1.66</td>
<td>0.66</td>
<td>1 – 4</td>
<td>1 – 5</td>
</tr>
</tbody>
</table>

Research Hypothesis 1: Women who exhibit higher levels of sexual empowerment will be more likely to use condoms.

The results of logistic regression are presented in Table IV-4. Of the five dimensions of sexual empowerment (HIV knowledge, self-esteem, condom self-efficacy, attitudes toward condom use, and condom negotiation skills), two dimensions were found to be significantly associated with condom use: attitude toward condom use was positively associated with increased condom use during vaginal sex ($\chi^2 = 9.98$, $df = 1$, $p = .0016$),
Table IV-3. Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>HIV-K</th>
<th>SE</th>
<th>CSE</th>
<th>ATC</th>
<th>CNS</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-K</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>.20*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>.30**</td>
<td>.13</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATC</td>
<td>.15</td>
<td>.21*</td>
<td>.38***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS</td>
<td>.1</td>
<td>-0.09</td>
<td>-0.38***</td>
<td>-0.44***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>-0.1</td>
<td>-0.27**</td>
<td>-0.18</td>
<td>-0.21*</td>
<td>0.13</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Key: HIV knowledge- HIV-K; self-esteem- SE; condom self-efficacy- CSE; attitudes toward condom use- ATC; condom negotiation skills- CNS; sexual pressure- SP

*p < .05; **p < .01; ***p < .0001

and level of condom negotiation skills was positively associated with condom use during vaginal sex ($X^2 = 7.49, df = 1, p = .0062$) and oral sex ($X^2 = 6.14, df = 1, p = .0132$).

That is, women with more positive attitudes toward condom use were significantly more likely to use condoms for vaginal sex, and women with greater condom negotiation skills were significantly more likely to use condoms for vaginal sex and oral sex. Odds ratios of condom use were also calculated for each unit increase in attitudes toward condom use score and condom negotiation skills score (see Table IV-4).

The association between attitudes toward condom use and condom use during vaginal sex remained significant while controlling for race, education, and income level.
Likewise, the association between condom negotiation skills and condom use during vaginal sex also remained significant while controlling for these confounding variables.

The association between condom negotiation skills and condom use during oral sex remained significant while controlling for race and education, but not income level.
Table IV- 4. Logistic Regression Analysis for Variables Predicting Condom Use

<table>
<thead>
<tr>
<th>Variable/Outcome</th>
<th>β</th>
<th>Chi-Square Statistic</th>
<th>df</th>
<th>p- value</th>
<th>OR</th>
<th>95% CI for OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes toward Condom Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal Condom Use</td>
<td>0.08</td>
<td>9.98</td>
<td>1</td>
<td>0.0016</td>
<td>1.08</td>
<td>1.03-1.13</td>
</tr>
<tr>
<td>Condom Negotiation Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal Condom Use</td>
<td>-0.78</td>
<td>7.49</td>
<td>1</td>
<td>0.0062</td>
<td>0.46</td>
<td>0.26-0.80</td>
</tr>
<tr>
<td>Oral Condom Use</td>
<td>-1.23</td>
<td>6.14</td>
<td>1</td>
<td>0.0132</td>
<td>0.29</td>
<td>0.11-0.77</td>
</tr>
</tbody>
</table>

**Research Hypothesis 2:** Women who experience sexual pressure will have lower levels of sexual empowerment.

Pearson’s correlations were used to assess the relationships between the dimensions of sexual empowerment and sexual pressure. Of these dimensions, self-esteem and attitudes toward condom use were found to be significantly correlated with sexual pressure (see Table IV- 3). Linear regression was then used to assess the extent to which these dimensions of sexual empowerment predicted women’s experiences of sexual pressure. Women who experienced sexual pressure reported significantly lower self-esteem levels, compared to those who did not experience sexual pressure ($t = - 2.8, p = .0062$). Similarly, women who experienced sexual pressure significantly reported more negative attitudes toward condom use, compared to those who did not experience sexual pressure ($t = - 2.16, p = .0329$). These associations remained significant while controlling for race, education, and income level.

**Research Hypothesis 3:** Women who experience sexual pressure will be less likely to use condoms.
The data did not provide significant evidence of a direct relationship between sexual pressure and condom use for vaginal, oral, or anal sex. However, a two-sample t-test assuming unequal variances was performed comparing the current sample to a young adult female sample in which there was a significant association between sexual pressure and condom use (Jones, 2006). Assuming an \( N \) of 101 for both samples, the mean score of sexual pressure for the current sample was 1.66 with a SD of 0.66. The mean score for the comparison sample was 1.44 with a SD of 0.44. The mean difference between the current sample and the comparison sample was 0.22, \( t \) value = 2.79, and \( df = 174 \). Based on the two-tailed t-test, the \( p \) value was .0059. Results from the test indicate the current sample to be significantly more likely to experience sexual pressure than the comparison sample.

**Research Hypothesis 4:** Sexual pressure will moderate the relationship between sexual empowerment and condom use, such that the relationship between sexual pressure and condom use varies as a function of sexual pressure.

As indicated in hypothesis 1 and Table IV-4, two dimensions of sexual empowerment, attitudes toward condom use and condom negotiation skills, were found to be significant predictors of condom use. No significant associations were noted between the other three dimensions of sexual empowerment and vaginal, oral, or anal sex.

The two dimensions of sexual empowerment that were significant were differentially associated with condom use during vaginal and oral sex. It was therefore necessary to examine the moderating role of sexual pressure in terms of the relationship between two predictor variables (attitudes toward condom use and condom negotiation skills) and two outcome variables (condom use during vaginal sex and condom use during oral sex).
Three regression models were tested that included three interaction terms, each representing the relationship between the predictor variable and sexual pressure. The results presented represent the interaction terms of interest (attitudes toward condoms X sexual pressure; condom negotiation skills X sexual pressure) that if significant, support the moderating role of sexual pressure. For condom use during vaginal sex, the interaction term for positive attitudes toward condom use and sexual pressure was significant ($X^2 = 6.85, df = 1, p = .009$), indicating that sexual pressure moderated the relationship between positive attitudes toward condom use and condom use during vaginal sex (See Table IV-5). Thus, the relationship between positive attitudes toward condom use and condom use during vaginal sex was modified in the context of sexual pressure such that condom use decreased despite positive attitudes toward the use of condoms. Odds ratios of condom use were also determined for each unit increase in attitudes toward condom use. See Table IV-6 for the $OR$ at low (a SD below the mean), medium (mean), and high (a SD above the mean) levels of sexual pressure.

**Table IV-5. Logistic Regression Analysis of Moderating Effect of Sexual Pressure on the relationship between Attitudes toward Condom use and Condom Use for Vaginal Sex**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>Chi-Square Statistic</th>
<th>$Df$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-12.26</td>
<td>9.93</td>
<td>1</td>
<td>.002</td>
</tr>
<tr>
<td>Attitudes Toward Condom Use</td>
<td>0.26</td>
<td>11.13</td>
<td>1</td>
<td>.001</td>
</tr>
<tr>
<td>Sexual Pressure</td>
<td>4.9</td>
<td>6.45</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Attitudes Toward Condom Use X Sexual Pressure</td>
<td>-0.1</td>
<td>6.85</td>
<td>1</td>
<td>.009</td>
</tr>
</tbody>
</table>

Similarly, for condom use during vaginal sex, the interaction term for condom negotiation skills and sexual pressure approached significance ($X^2 = 3.64, df = 1, p =$
.0564), indicating that sexual pressure had a minimal moderating effect on the relationship between condom negotiation skills and condom use during vaginal sex (See Table IV- 7). Thus, the relationship between condom negotiating skills and condom use varied as a function of sexual pressure such that the effects of condom negotiation skills were buffered in the presence of sexual pressure. The \textit{OR} of condom use for a unit increase in condom negotiation skills for each score of sexual pressure (low, medium, high) are included in Table IV- 8.

### Table IV- 6. Odds Ratios of Vaginal Condom Use for a Unit Increase in Attitudes toward Condom Use Score at 3 Levels of Sexual Pressure Scores

<table>
<thead>
<tr>
<th>Sexual Pressure</th>
<th>OR</th>
<th>95% CI for OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 (low)</td>
<td>1.17</td>
<td>1.08- 1.28</td>
</tr>
<tr>
<td>1.66 (medium)</td>
<td>1.10</td>
<td>1.04- 1.16</td>
</tr>
<tr>
<td>2.32 (high)</td>
<td>1.02</td>
<td>0.96- 1.09</td>
</tr>
</tbody>
</table>

### Table IV- 7. Logistic Regression Analysis of Moderating Effect of Sexual Pressure on the relationship between Condom Negotiation Skills and Condom Use for Vaginal Sex

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \beta )</th>
<th>Chi-Square Statistic</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>6.39</td>
<td>7.9</td>
<td>1</td>
<td>.005</td>
</tr>
<tr>
<td>Condom Negotiation Skills</td>
<td>-2.45</td>
<td>6.59</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Sexual Pressure</td>
<td>-2.74</td>
<td>4.00</td>
<td>1</td>
<td>.04</td>
</tr>
<tr>
<td>Condom Negotiation Skills X</td>
<td>1.09</td>
<td>3.64</td>
<td>1</td>
<td>.056</td>
</tr>
</tbody>
</table>

Finally, sexual pressure had no moderating effect on the relationship between condom negotiation skills and the use of condoms during oral sex. See Tables IV- 9 and IV- 10 for statistical values, corresponding \( p \) values, and \( ORs \).

In essence, women with more positive attitudes toward condom use were more likely to use condoms for vaginal sex, but significantly less likely to do so in the context
of sexual pressure. Likewise, women with greater condom negotiation skills were more likely to use condoms for vaginal and oral sex, but significantly less likely to use condoms for vaginal sex in the context of sexual pressure.

**Table IV-8. Odds Ratios of Vaginal Condom Use for a Unit Increase in Condom Negotiation Skills Score at 3 Levels of Sexual Pressure Scores**

<table>
<thead>
<tr>
<th>Sexual Pressure</th>
<th>OR</th>
<th>95% CI for OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 (low)</td>
<td>0.26</td>
<td>0.11-0.62</td>
</tr>
<tr>
<td>1.66 (medium)</td>
<td>0.53</td>
<td>0.29-0.96</td>
</tr>
<tr>
<td>2.32 (high)</td>
<td>1.09</td>
<td>0.39-3.00</td>
</tr>
</tbody>
</table>

**Table IV-9. Logistic Regression Analysis of Moderating Effect of Sexual Pressure on the relationship between Condom Negotiation Skills and Condom Use for Oral Sex**

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>Chi-Square Statistic</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>6.51</td>
<td>3.94</td>
<td>1</td>
<td>.05</td>
</tr>
<tr>
<td>Condom Negotiation Skills</td>
<td>-3.37</td>
<td>5.05</td>
<td>1</td>
<td>.025</td>
</tr>
<tr>
<td>Sexual Pressure</td>
<td>-3.78</td>
<td>3.13</td>
<td>1</td>
<td>.077</td>
</tr>
<tr>
<td>Condom Negotiation Skills X</td>
<td>1.48</td>
<td>2.71</td>
<td>1</td>
<td>.100</td>
</tr>
<tr>
<td>Sexual Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table IV-10. Odds Ratios of Oral Condom Use for a Unit Increase in Condom Negotiation Skills Score at 3 Levels of Sexual Pressure Scores**

<table>
<thead>
<tr>
<th>Sexual Pressure</th>
<th>OR</th>
<th>95% CI for OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 (low)</td>
<td>0.15</td>
<td>0.35-0.64</td>
</tr>
<tr>
<td>1.66 (medium)</td>
<td>0.40</td>
<td>0.14-1.16</td>
</tr>
<tr>
<td>2.32 (high)</td>
<td>1.05</td>
<td>0.19-5.79</td>
</tr>
</tbody>
</table>

**Research Hypothesis 5:** Sexual empowerment will not differ between AAW and CW.

Linear regression models were used to test the potential similarities and differences in sexual empowerment based on race. AAW reported significantly higher self-esteem, on the average, when compared to CW/Other ($t = 2.53, p = .013$). In contrast,
AAW reported significantly lower condom negotiation skills, on the average, compared to CW/Other ($t = -2.25, p = .0268$). No other significant differences in sexual empowerment between races were noted.

**Research Hypothesis 6:** Sexual pressure will differ between AAW and CW.

Continuing with linear regressions, potential differences in race with regard to sexual pressure were tested. Based on the findings, the data did not provide significant evidence of differences in sexual pressure between AAW and CW/Other. Based on these findings, each subscale of the Sexual Pressure Scale was tested individually to determine if there were differences in any of the 5 subscales (i.e., condom fear, sexual coercion, women’s sex role, men expect sex, and show trust). Results indicated that although there were no differences in sexual pressure as a composite construct, sexual coercion differed between races. AAW were significantly more likely to experience sexual coercion than CW/Other ($t = 2.21, p = .0294$). This association remained significant even after controlling for education and income level.

**Research Hypothesis 7:** Condom use will differ between AAW and CW.

Based on the study findings, the data did not indicate that there were differences between races related to condom use (vaginal sex $[X^2 = .66, df = 1, p = .41]$; oral sex $[X^2 = .0003, df = 1, p = .99]$; anal sex $[X^2 = .83, df = 1, p = .36]$). When the sample was observed as a whole, most of the women ($n = 100, 99.0\%$) engaged in vaginal sex in the previous 6 months. Of these women, 40.0\% never or almost never used a condom during sex. A large majority of participants (74.3\%, $n = 75$) engaged in oral sex with their partners within the past 6 months. Of the women who engaged in oral sex, 82.7\% never or almost never used a condom. Nearly one-third of the women (30.7\%, $n = 31$) engaged in
anal sex. Of these women, 74.2% never or almost never used a condom during anal sex.

See Table IV-11 for a summary of condom use patterns of the sample.

Table IV-11 Condom Use Characteristics among Sample (N = 101)

<table>
<thead>
<tr>
<th>Condom Use</th>
<th>Never or almost never</th>
<th>At least sometimes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal sex</td>
<td>40 (40%)</td>
<td>60 (60%)</td>
<td>100 (100%)</td>
</tr>
<tr>
<td>Oral sex</td>
<td>62 (82.7%)</td>
<td>13 (17.3%)</td>
<td>75 (100%)</td>
</tr>
<tr>
<td>Anal sex</td>
<td>23 (74.2%)</td>
<td>8 (25.8%)</td>
<td>31 (100%)</td>
</tr>
</tbody>
</table>

Summary

Numerous statistical procedures were used to analyze the relationships among the dimensions of sexual empowerment, the potential moderating effect of sexual pressure, and condom use among the women in this study. A first consideration was the relationship between the dimensions of sexual empowerment, sexual pressure, and condom use. Although HIV knowledge scores (36.73, SD 4.23) and condom self-efficacy scores (54.62, SD 13.89) were generally high in the sample, contrary to expectations, these dimensions were not significantly associated with condom use or sexual pressure among the women in the sample.

Regression analyses showed a significant positive association between attitudes toward condom use and condom use during vaginal sex as well as positive associations between condom negotiation skills and condom use during both vaginal and oral sex. When regression analyses were used to test the moderating effect of sexual pressure on these relationships, however, there were some notable differences. Sexual pressure moderated the relationship between attitudes toward condom use and condom use during va-
iginal sex such that despite positive attitudes toward condom use, condom use decreased in the context of sexual pressure. In the same manner, the moderating effect of sexual pressure on the positive association between condom negotiation skills and vaginal condom use approached significance. However, sexual pressure did not moderate the relationship between condom negotiation skills and condom use during oral sex.

The findings of linear regression showed a significant negative association between self-esteem and sexual pressure. There was also a negative association between attitudes toward condom use and sexual pressure. There were also racial differences in dimensions of sexual empowerment. Self-esteem was significantly higher in AAW than in CW/Other; however, condom negotiation skills were significantly lower in AAW than in their counterparts.

Finally, although there were no significant differences between races in sexual pressure as a composite, when the subscales of sexual pressure were examined, sexual coercion was found to be significantly higher in AAW than CW/Other. Interpretation of study findings are discussed in Chapter 5.
CHAPTER V
DISCUSSION AND IMPLICATIONS

The primary purpose of this study was threefold: 1) to explore the relationship of sexual empowerment to condom use; 2) to explore the moderating effect of sexual pressure on the relationship between sexual empowerment and condom use; and 3) to explore racial similarities and differences in sexual empowerment, sexual pressure, and condom use among AAW and CW.

The proposed conceptual model for the study (see Figure 2) suggested a positive relationship between sexual empowerment and condom use. The model predicted that women who are knowledgeable about HIV, who have high self-esteem and condom self-efficacy, who hold positive attitudes toward condoms, and who can effectively negotiate condom use with their partners will in turn be more likely to use condoms than those who don’t possess these attributes. Moreover, the model suggested that sexual pressure moderates the relationship between sexual empowerment and condom use, thus diminishing the positive effects that sexual empowerment has on condom use. In addition, the model predicted that cultural norms and gender stereotypes, as well as intrapersonal and interpersonal factors can increase sexual risk behaviors in women.

Major findings of the study included the following:

- Women with more positive attitudes toward condom use were more likely to use condoms for vaginal sex, but less likely to do so in the context of sexual pressure.
• Women with greater condom negotiation skills were more likely to use condoms for vaginal and oral sex, but less likely to use condoms for vaginal sex in the context of sexual pressure.

• Women who experienced sexual pressure showed lower self-esteem and more negative attitudes toward condom use, when compared to women who did not experience sexual pressure.

• AAW showed higher self-esteem, on the average, when compared to CW/Other, but lower condom negotiation skills, on the average, when compared to CW/Other.

• AAW were more likely to experience sexual coercion than CW/Other.

• Neither HIV knowledge nor condom self-efficacy were significantly associated with condom use, sexual pressure, or race.

• There was not significant evidence of a relationship between sexual pressure and condom use.

This chapter includes a discussion of the major findings in the study. The findings are discussed in relationship to empirical evidence and further contribute to extending the body of knowledge of women’s sexual risk behaviors. Limitations and future recommendations for research are also discussed.

**Major Findings**

*Attitudes toward Condom Use, Condom Use, and Sexual Pressure*

The finding that women with more positive attitudes toward condom use were more likely to use condoms for vaginal sex is consistent with other studies (Morrison-
Beedy, Carey, Feng, & Tu, 2008; Noar et al., 2006; Sterk et al., 2004). To this extent, it is noted that those with more positive attitudes toward condom use are more likely to use condoms than those with more ambivalent or negative attitudes towards condoms. As mentioned previously, a person’s attitude towards a behavior can occur from experiences, outside influences, or their own inferences (Ajzen & Fishbein, 1980). Thus, the additional study finding that women with more positive attitudes toward condoms were more likely to use condoms for vaginal sex, but less likely to do so if they experienced sexual pressure, warrants further discussion.

Although researchers may assess attitude as an individual level factor, an individual’s attitude is also influenced on an interpersonal level. In this manner, although individuals may form beliefs or attitudes based on their own reasoning, this reasoning can also be influenced by others (Ajzen & Fishbein, 1980). Within the female-male sexual relationship, sexual practices, beliefs, and attitudes are freely exchanged. A woman who has an otherwise positive attitude toward the use of condoms to maintain her sexual health may compromise her feelings, albeit unfavorable towards her health, in order to please her partner. In a study of adolescent females’ perceptions of their partners’ attitudes toward condom use, Hogben et al. (2006) found that although adolescent females’ beliefs and attitudes toward condoms were positively associated with intentions to use condoms, the impact of these attitudes was nullified by females’ perceptions about their partners’ negative attitudes towards condoms. Likewise, in a larger study of adolescents and young adults, those who were less likely to use condoms were more likely to be concerned that their partners would not approve of condom use (Brown et al., 2008). In light of these findings and the findings of the current study, it is not surprising that a woman
who would ordinarily prefer the use of condoms may consider such preferences secondary to the need to maintain a harmonious relationship with her sexual partner.

**Condom Negotiation Skills, Condom Use, and Sexual Pressure**

Findings showed that women with greater condom negotiation skills were more likely to use condoms for vaginal sex. The association between a woman’s ability to effectively negotiate condom use with her partner and the actual outcome behavior of increased condom use is consistent with previous studies (Dancy & Berbaum, 2005; Noar et al., 2002; Soler et al., 2000). Yet, an interesting finding was that in addition to increased condom use for vaginal sex, women with greater condom negotiation skills were also more likely to use condoms for oral sex. Past research has shown that condom use during oral sex among adolescents and young adults is relatively uncommon (Boekeloo & Howard, 2002; Leichliter, Chandra, Liddon, Fenton, & Aral, 2007). Although condom use during oral sex was also rare in the current sample (only 17.3% used a condom at least some of the time in the previous 6 months), condom use was significantly more likely for those with greater condom negotiation skills.

Participants in the study who were less effective at negotiating condom use with their partners may lack understanding of the importance of using a condom during oral sex to prevent possible STIs. On the other hand, they may be more likely to give in to their partner’s wishes if they are deficient in the necessary communication skills to exert power on their own behalf. Kaestle and Halpern (2007) examined the relationship between love and various sexual activities in young adult heterosexual couples. Although almost all participants had engaged in vaginal sex, females had significantly higher odds of having provided oral sex to their male partners if the female felt she greatly loved her
partner as opposed to not feeling this strongly (Kaestle & Halpern, 2007). Although some women who feel a close emotional connection with their partners may engage in oral sex in addition to vaginal sex, some women may feel as if forgoing the use of a condom during oral sex may be a further extension of this love. They also may consider engaging in unprotected oral sex as an option for pleasing their partner as an alternative to the riskier unprotected vaginal sex. Unprotected oral sex has been identified in studies among both low-income women and the broader population as a method of prevention against HIV and other STIs because of beliefs that these infections cannot be transmitted through this route (Crosby, Yarber, & Meyerson, 2000; Donovan, 2000). Although transmission of HIV through unprotected oral sex is considered lower-risk than through unprotected vaginal or anal sex (Rothenberg, Scarlett, del Rio, Reznik, & O’Daniels, 1998) there are increasing reports of both viral and non-viral STIs that occur as a result of unprotected oral sex (Cherpes, Meyn, & Hillier, 2005; Edwards & Carne, 1998; Edwards & Carne, 1998).

Although women with greater condom negotiation skills were more likely to use condoms for both vaginal and oral sex, they were less likely to use condoms for vaginal sex if they experienced sexual pressure. Sexual pressure, however, did not significantly moderate the relationship between condom negotiation skills and oral sex. Therefore, women who experienced sexual pressure still maintained the capacity to effectively negotiate condom use with their partners during oral sex. Conceivably, women may have perceived greater sexual pressure from their partners to engage in unprotected vaginal sex when compared with oral sex. Additionally, frequency of vaginal sex may have greatly
outnumbered the frequency of oral sex, which also may have accounted in lower perceptions of sexual pressure for oral sex, when compared to vaginal sex.

**Self-Esteem, Attitudes toward Condom Use, and Sexual Pressure**

Findings of the study showed that women who experienced sexual pressure had lower self-esteem and more negative attitudes toward condom use, when compared to women who did not experience sexual pressure. Similar associations have been found relating to low self-esteem and concepts similar to sexual pressure such as sexual coercion, sexual imposition, and sexual assault (Gwandure, 2007; Livingston, Buddie, Testa, & VanZile-Tamsen, 2004; Testa & Dermen, 1999; Wenzel et al., 2006). It is worthy to note whether low self-esteem led to women’s experiences of sexual pressure or whether low self-esteem occurred as a result of sexual pressure experiences. Livingston et al. (2004) made this point in their study of young adult women who experienced verbal sexual coercion. A minority of the participants identified a lack of confidence as a reason for their non-resistance to coercion, while a larger number identified emotional and psychosocial distress as a result of the coercive experience.

Although it can be concluded that women with lower self-esteem are more likely to experience sexual coercion or sexual pressure from their partners because of a lack of confidence or sexual assertiveness in the relationship, negative attitudes toward condoms and the resulting experience of sexual pressure is less clear in the literature. To further explain the relationship of negative attitudes toward condom use and sexual pressure, it is important to determine how attitudes and beliefs can affect behavior. Based on the Theory of Reasoned Action, Ajzen and Fishbein (1980) termed salient beliefs as “immediate determinants of a person’s attitude” (p. 63). Henceforth, if a person believes that
the outcome of a behavior will be positive, they will have a positive attitude towards the behavior. In contrast, if the person believes that an outcome will be negative, they will likely have a negative attitude toward the behavior. More specifically, a woman has to cognitively determine if the positive effects of using a condom (i.e., prevention of STIs/pregnancy) outweigh the negative effects (e.g., possible mistrust from partner, partner disapproval/coercion, financial instability) (Hogben et al., 2006; Jones, 2006; Livingston et al., 2004). If the negative effects are more hard pressing than the positive, a woman’s attitudes are more likely to reflect this pattern and she will react appropriately, based on these circumstances.

Social norms play a major role in shaping attitudes, whether from peers (Kogan et al., 2008; Spitalnick et al., 2007), partner influences (Brown et al., 2008; Hogben et al., 2006; Soler et al., 2000), or the media (Chia, 2006; Pinkleton, Austin, Cohen, Chen, & Fitzgerald, 2008). Indeed, the manner in which the media popularizes and romanticizes women who are submissive to their male partner’s sexual preferences (Jenkins, 2000) places them at a disadvantage if their attitudes are not conducive to promoting their sexual well-being.

**Racial Differences in Self-Esteem and Condom Negotiation Skills**

One of the major findings of the study was that although AAW showed higher self-esteem on the average, when compared to CW and others, they showed lower condom negotiation skills. Previous studies among women that have examined the relationship between self-esteem and condom negotiation skills differed from the current study in that a positive relationship was found between the two variables (Neely-Smith & Pats-daughter, 2004; Salazar et al., 2005). The results of other studies of the relationship be-
between self-esteem and other HIV risk behaviors are equivocal (Cole, 1997; Ethier et al.,
2006; Gullette & Lyons, 2006; Hylton, 1999; Long-Middleton, 2001; Robinson, Holm-
beck, & Paikoff, 2007; Sterk et al., 2004). However, the findings from several studies are
relevant to the current study. In contrast to the findings of the current study, Soler et al.
(2000) examined relationship dynamics by ethnicity and found that AAW were more
likely to be confident in their condom negotiation skills than CW. Thus, much can be
learned from future studies that focus on self-esteem and condom negotiation skills in
both adolescent and at-risk adult populations, and in different racial and ethnic groups.

One explanation for the finding of high self-esteem, but low condom negotiation
skills in AAW is that some AAW may perceive themselves to be at low-risk for acquiring
HIV or other STIs and thus, may feel as if they do not need to negotiate condom use if
they are in a monogamous relationship. However, in a study of urban minority women,
Jones (2006) found that a significant number of women who perceived their male part-
ners to be at high-risk for HIV continued to have unprotected sex with them. This was
imputed to the woman’s adherence to gender stereotypical behavior (Jones, 2006). In
another study among low-income women and their prevention strategies against HIV
(Crosby et al., 2000), AAW were less likely than CW and other races to communicate
with their male sexual partners about HIV and sexual history. AAW’s lack of communi-
cation and negotiation with their partners may be further attributable to power imbalances
within the relationship that can differ for AAW based on cultural norms and internalized
oppression stemming from issues dealing with race, gender, and class (Amaro & Raj,
2000).
It is possible that many AAW are aware of their risk for HIV, as AAW ages 15-44 are twice as likely to be tested for HIV as CW of the same age range (Anderson, Chandra, & Mosher, 2005). Perhaps another reason why AAW are less likely to negotiate condom use with their partners is because of the sex-ratio imbalance. The ratio of men to women among AAs is lower than among any other ethnic group in the U.S. (Aral, Adimora, & Fenton, 2008) and AAs are most likely to choose sexual partners within their own race as compared with other ethnicities (Laumann & Youm, 1999). For this reason, AAW may communicate condom use less with their partners because there are fewer AAM available for sexual relationships.

In addition to the sex-ratio imbalance among AAs, some AAW women may be more concerned with pregnancy prevention than HIV prevention. Adolescent AA females are more likely to use implant/injectable contraception than adolescent Caucasian females, which can make them less likely to use condoms (Abma, Martinez, Mosher, & Dawson, 2004). Thus, if a woman is already using contraception, negotiating an additional form of protection against HIV, such as condom use may not be a common practice.

**AAW and Sexual Coercion**

Another major finding was that although AAW and CW/Other did not differ significantly on overall scores of sexual pressure, they did differ on the subscale of sexual coercion; more specifically, AAW were more likely to experience sexual coercion than their counterparts. Several studies on sexual coercion have found a positive association with high-risk sexual behavior (Jones, 2006; Messman-Moore, Coates, Gaffey, & Johnson, 2008; Zweig et al., 1999). Studies have also focused on both physical coercion
(Paxton, Myers, Hall, & Javanbakht, 2004; Wenzel et al., 2006), verbal coercion (Katz, Kuffel, & Brown, 2006; Livingston et al., 2004), or both (Rapoza & Drake, 2009; Zweig et al., 1999), as well as coerced consensual sex in women (Broach & Petretic, 2006; Livingston et al., 2004). For the current study, sexual coercion was inclusive of threats or acts of physical violence that occurred after the woman refused unwanted sex (Jones, 2006).

Although there are many studies that focus on sexual coercion or sexual abuse among either predominantly AAW/Minority women (Champion, Shain, Piper, & Perdue, 2001; Hall, Hogben, Carlton, Liddon, & Koumans, 2008) or predominantly Caucasian women (Livingston et al., 2004; Zweig et al., 1999), few studies have considered racial differences in sexually coercive experiences. Paxton et al. (2004) found that among HIV-positive women, African American women, and to a lesser extent, Caucasian women, were significantly more likely to report childhood sexual trauma than Latina women. It is possible that women of different races and ethnicities experience various forms of either verbal or physical coercion that result in their perceptions of nonconsensual, and at times, consensual sex.

In a meta-analysis of 24 HIV prevention interventions from 1989-1997 for women of different ethnicities, researchers found that interventions targeted toward improving self-efficacy for engaging in lower-risk behaviors were less effective for AAW, when compared with CW or Mixed-race groups. No studies, however, were found that evaluated the impact of ethnicity on sexual risk behaviors (Mize et al., 2002). Similar to the meta-analysis by Mize et al. (2002) and as discussed in the preceding sections, the current study found that AAW had less ability to negotiate condom use with their partners than
CW and others, but conversely reported a higher sense of self-esteem. Perhaps AAW hold themselves in high regard on an intrapersonal level, but when faced with partner influence (i.e., sexual coercion), this regard is overridden by interpersonal factors and power imbalances within the relationship. This can be especially true when there are considerable age differences between an adolescent or young adult woman and an older male partner. Previous research among AA adolescent females has shown an association between having older sex partners and sexual risk behaviors or co-occurrence of STDs (Begley, Crosby, DiClemente, Wingood & Rose, 2003; DiClemente et al., 2002). Patterns of sexual relationships with older men, which can continue later in young adulthood, may also lead to sexually coercive experiences due to aggressive or dominating behavior from a male partner.

For a woman to discuss condom use and actually carry out the act of using condoms requires her to have some degree of influence in the relationship. The reality, however, is that men often hold greater power in public spheres—often played out in relationships—and this association between men’s power/self-esteem and sexual freedom, spontaneity, and control over sex with their female partners (Weeks, Schensul, Williams, Singer, & Grier, 1995), places women at increased risk of being coerced sexually by men. AAW are at higher risk than CW because they not only face sexism, but also experience racial oppression from the dominant culture (Collins, 1990; Timmons & Sowell, 1999; Williams et al., 2003) as well as issues dealing with poverty. Census data from 2003 shows that AAW are far more likely to live in poverty than CW (26.5% and 9.1%, respectively) (News Release, 2005) and poverty has been identified as a risk factor for acquiring HIV disease (CDC, 2007). Therefore, the racial disparity in experiences of sex-
ual coercion is not surprising, as this is just one of many pieces of the puzzle that place AAW at increased HIV risk, because their sexual choices are either taken away or they feel as if they have no choices with which to begin.

**HIV Knowledge, Condom Self-Efficacy, and Outcome Behaviors**

Two of the dimensions of sexual empowerment examined in the current study, HIV knowledge and condom self-efficacy, were not significantly associated with condom use, sexual pressure, or race. Previous studies have also shown that higher HIV knowledge does not necessarily translate into lower risk behaviors (Cerwonka et al., 2000; Jackson et al., 2005; Ratcliff-Crain et al., 1999; Williams et al., 2003), nor does it tend to differ between races for those who are sexually active or who receive HIV interventions targeted toward improving HIV/AIDS knowledge (Davis, Sloan, MacMaster, & Kilbourne, 2007; Mize et al., 2002). Lastly, there is a dearth of information on the relationship between HIV knowledge and sexual pressure. There is a current trend of researchers to focus not only on educational factors such as improving knowledge, but to have a greater focus on social and interpersonal factors that can have a consequential impact on sexual pressure or condom use.

There was also a lack of association with condom use, sexual pressure, or race and condom self-efficacy. In an analysis of HIV prevention studies for women, Mize et al. (2002) found that for AAW, it took longer follow-up periods to observe significant improvements in self-efficacy than it did for their Caucasian counterparts. Contrarily, Soler et al. (2000) examined cultural norms and gender roles on condom use behaviors in women and found that AAW and CW were relatively similar when it came to condom self-efficacy. Past research has linked condom self-efficacy to increased condom use
(Gazabon et al., 2007; Peipert et al., 2007; Sanderson & Yopyk, 2007). Although this linkage was not supported by the current study, awareness of the ability to use condoms consistently and effectively was exceeded by more indicative predictors that were either internally psychological (i.e., self-esteem, attitudes) or externally interpersonal (i.e., negotiation skills, sexual coercion).

**Sexual Pressure and Condom Use**

Although the data did not provide significant evidence of a direct relationship between sexual pressure and condom use, the current sample was compared to a previous sample in which the relationship between sexual pressure and condom use was significant (Jones, 2006). Jones’ sample, conducted in the Northeastern U.S., was an urban sample of women, 64% of which were AAW followed by 15% Latina. The mean age was 21.8 years, compared with 21.4 years in the current sample. In addition, Jones’ also recruited a portion of her sample from a local STD clinic and WIC program (Jones, 2006). When the mean scores of sexual pressure for the two samples were compared using t-tests (using N of 101 and assuming unequal variances), the current sample was significantly more likely to experience sexual pressure than the comparison sample ($p = .0059$).

It is noteworthy that although Jones’ sample was similar to the current sample in age and probable risk behavior (e.g., STD clinic clients), the comparison sample was composed primarily of minority women and was conducted in another geographical area in the U.S. Even when comparing the current sample, 50% of which were Caucasian, to the comparison sample that was mostly minority, the current sample was highly more likely to experience sexual pressure. Thus, even when race is taken into account, the findings suggest that gender stereotypes and sexual coercion may be more prevalent in
the South, when compared with other areas in the U.S. Although a relationship between sexual pressure and condom use was not supported for the current sample, sexual pressure in combination with other social/cultural factors can increase a woman’s sexual risk regardless of race.

**Limitations**

As with much of research, the present study is not without its limitations. Because of the cross-sectional nature of the study, no inferences could be made with respect to identifying causality. Also, it is not possible to know with certainty the direction of the relationships among sexual empowerment and sexual pressure. For example, it is unknown whether women who report low self-esteem feel this way as a result of their experiences with sexual pressure or if feelings of low self-esteem led to their likelihood of experiencing sexual pressure. Similarly it is unknown whether the women in the study had negative attitudes toward condom use based on their own beliefs and reasoning, or whether these attitudes occurred secondary to their sexual partners’ attitudes or beliefs.

Another limitation of the sample was the small sample size, which may have affected study findings. For example, it was expected for hypothesis 4 that there would be a significant relationship between higher sexual pressure and decreased condom use. Although the parameters estimates approached significance, the findings were not significant at the .05 level or below. These findings may have been due to a lack of statistical power secondary to a small sample size. A major barrier to recruitment of equal numbers of AAW and CW was that there were substantially more AAW seeking care at the STD
clinic and the WIC Program from which to recruit than CW. Also, many CW that were
approached for participation in the study did not fit study criteria (e.g., married).

A potential bias of the research study is the use of a convenience sample. With a
convenience sampling method one cannot be assured that the sample is representative of
the target population. The majority of the participants (approximately 80-85%) was re-
cruited from the local STD clinic and thus had engaged in high risk sexual behaviors.

Also, there were potential participants who were approached, but deferred participation.
This could have been due in part to feelings of embarrassment or guilt about seeking an
STD clinic for diagnosis and/or treatment, and it is possible that those most likely to en-
gage in sexual risk behaviors were less likely to take part in the study. Thus, women’s
sexual risk behaviors and experiences of sexual pressure may have been underestimated,
which in turn may have weakened associations among variables in the study.

Other potential biases in the study are that of social desirability and recall inaccu-
rracy. Because the instruments used were self-report measures and the great majority of
items pertained to sensitive topics such as sexuality and violence, the validity of partici-
pants’ responses cannot be adequately determined. Thus, there is a significant possibility
that participants may have underreported or over-reported their sexual experiences.
Concerning recall inaccuracy for actual risk behaviors, a 6-month retrospective recall in-
terval was utilized. Although this measure was used to observe behavior beyond the
scope of the relatively recent past, the accuracy of participant reports using this approach
cannot be determined.

Last, is the limitation to generalizability of the study findings. The study sought
to extend previous research by comparing races with regard to sexual risk behaviors. Al-
though there were significant findings, the participants were recruited from clinics that generally serve low-income, high-risk clientele; hence, most had probably recently engaged in high-risk behavior. This may have been accountable for the study finding that condom use did not differ significantly between AAW and CW/Other. Also, participants were recruited from the Southeastern region of the U.S., where the prevalence of HIV and other STIs are significantly high, and the majority of participants reported being economically disadvantaged. Some of the results may not be generalizable to other areas of the U.S. where HIV/STIs may not be as high or generalizable to those who live well above the poverty line. Also, regional norms and influences in the local area linked with potential risk may differ from other geographical locations.

Although the study had its limitations, it added significantly to the body of knowledge by identifying associations among variables that had not previously been supported in the empirical literature. The current study also proposed a conceptual model for sexual empowerment based on theory and the research literature. The model is non-exclusive and is one that can be modified and built upon for future research. In addition, the study identified a potential modifier of sexual risk behavior and found notable racial differences between AAW and CW in both protective and risk factors.

**Implications of Findings/Future Research**

The findings of the study support the implementation of HIV interventions and prevention programs that shape attitudes and teach and foster skill development to promote increased condom use among women and their intimate partners. Researchers and clinicians should be mindful of how attitudes towards condoms on an intrapersonal as
well as an interpersonal level, and whether positive or negative, can affect consistent condom use. Researchers and other health professionals should also take into account not only teaching effective communication and condom negotiation skills, but understanding the social context in which these women will have to later draw upon these skills in the midst of an emotionally and sexually charged moment (Vance et al., 2008; Weeks et al., 1995). This can be especially important when educating women on the importance of communicating condom use during various types of sexual activity. The current study showed that of the three types of sex that were measured (vaginal, oral, and anal sex), the percentage of women who never or almost never used condoms were highest for oral sex (82.7%) and anal sex (74.2%) as compared with vaginal sex (40%). Interventions focused on partner communication of condoms during specific sexual encounters (e.g., high risks of anal sex) are warranted.

The finding that sexual pressure had a negative moderating effect on the relationship between positive attitudes toward condom use and actual condom use, and between condom negotiation skills and condom use, also has important implications. When coercive and non-coercive pressures to engage in unwanted or unprotected sex (Jones, 2006) are encountered from an intimate partner, having a positive attitude and effective skills toward the use and negotiation of condoms may not be enough to counteract these advances. Interventions that target issues such as dynamics of the female-male relationship, including power struggles and gender norms, will benefit from addressing ways in which to increase resistance to sexual pressure in both coercive and non-coercive situations.

Furthermore, findings that negative attitudes toward condoms and low self-esteem predispose a woman to yield to sexual pressure bear mention. In addition to shaping
intrapersonal and interpersonal attitudes, interventions should also include a psychological element that assists women in having confidence and respect in themselves, while readily asserting these abilities in the context of the sexual relationship. Moreover, it is imperative to acknowledge that self-esteem does not necessarily coincide with other positive behaviors, as our findings revealed that although AAW had higher self-esteem than CW/Other, they had lower condom negotiation skills. Thus, interventions or programs that are inclusive of the above mentioned elements seek to serve at-risk women and their sexual health in approaches that are both effective and beneficial.

The study also found that AAW were more likely to experience sexual coercion than CW/Other, which can place them at an increased risk for HIV. Maman, Campbell, Sweat, and Gielen (2000) described three ways in which physical or sexual violence can increase HIV risk for women: 1) through forced or coerced sex with a partner who is infected; 2) by limiting a woman’s ability to negotiate safer sexual behaviors; and 3) by establishing a pattern of high sexual risk among those assaulted in childhood/adolescence. This also has important connotations for researchers. As found in the current study, many AAW and other minority women are at risk for sexual coercion and/or violence which, in turn, can lead to their HIV/STI risk (Champion et al., 2001; Hall et al., 2008; Wenzel et al., 2006). Based on the premises held by Maman et al. (2000), 1) AAW who are sexually coerced are at higher risk for HIV because of their sexual relationships with African American men (AAM), who have the highest HIV infection rates in the country (CDC, 2007); 2) AAW may lack the ability to effectively negotiate condom use, and being sexually coerced places them at even higher risk because this further limits their decision-making; and 3) patterns of sexually abusive or coercive
acts during childhood can also occur throughout adulthood and increase HIV risk (Gwandure, 2007; Wenzel et al., 2006). In previous research on sexual decision-making in young adult women, McCabe and Killackey (2004) found that sexual behavior was most predicted by past experience and perceived behavioral control, not intention. Thus, even if a woman has the best intentions to protect herself sexually, her past experiences with sexual coercion can limit her behavioral control. It is essential for researchers to be cognizant of areas of need such as coercion in dating vs. casual relationships and domestic violence so that interventions can be tailored to ensure their relevance and effectiveness for adolescent, young adult, and racial/ethnic groups.

Finally, future research should further explore the potential moderating effect of sexual pressure on other factors which are conducive to safer sexual behaviors. The sexual empowerment conceptual model served as a starting point in determining factors which can lower risk behaviors, but have the potential to be negated by outside influences, such as sexual pressure. Determining these relationships may provide explanations as to why women continue to engage in high-risk behavior in spite of possessing the necessary knowledge and skills to protect themselves from HIV and other STIs.

**Summary**

In conclusion, the study extends previous research by exploring the role that sexual pressure may play in the sexual risk behaviors of women. Most significant are the findings related to the role that sexual pressure may play in buffering the protective effects of sexual empowerment factors such as attitudes toward condom use and condom negotiation skills. The findings also suggest a new avenue for research and a new point
for targeting HIV and STI prevention interventions. The research also contributes to the literature by denoting racial differences between AAW and CW with respect to self-esteem, condom negotiation skills, and sexual coercion.
REFERENCES


Pulerwitz, J., Amaro, H., De Jong, W., Gortmaker, S.L., & Rudd, R. (2002). Relationship power, condom use and HIV risk among women in the USA. *AIDS Care, 14*(6), 789-800.


APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL
The IRB reviewed and approved the above named project on 8/20/03. The review was conducted in accordance with UAB's Assurance of Compliance approved by the Department of Health and Human Services. This project will be subject to Annual continuing review as provided in that Assurance.

This project received expedited review.

IRB Approval Date: 8-20-03

Date IRB Approval Issued: 8/20/03

Marilyn Doss, M.A.
Vice Chair of the Institutional Review Board for Human Use (IRB)

Investigators please note:

The IRB approved consent form used in the study must contain the IRB approval date and expiration date.

IRB approval is given for one year unless otherwise noted. For projects subject to annual review research activities may not continue past the one year anniversary of the IRB approval date.

Any modifications in the study methodology, protocol and/or consent form must be submitted for review and approval to the IRB prior to implementation.

Adverse events and/or unanticipated risks to subjects or others at UAB or other participating institutions must be reported promptly to the IRB.
APPENDIX B

JEFFERSON COUNTY DEPARTMENT OF HEALTH APPROVAL
Research Recruitment Request Review: Thursday, August 14, 2008

Protocol No.: None

TITLE: the Relationship of Sexual Empowerment and Sexual Pressure to Condom Use of Young Adult African American and Caucasian Women

PRINCIPAL INVESTIGATOR: Carrie Ann Long (doctoral Student)
COORDINATOR/CONTACT: Carrie Ann Long (doctoral Student)
205-724-4107
calongrn@hotmail.com

SPONSOR: UAB School of Nursing

Final Protocol: Thursday, August 14, 2008

<table>
<thead>
<tr>
<th>Reviewer</th>
<th>Recommend (Yes / No)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
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<tr>
<td>Richard J. Binsky, MB, DrPH</td>
<td>Yes</td>
<td></td>
<td>14 Aug 08</td>
</tr>
<tr>
<td>Epidemiological Analyst</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Public Health Policy, Grants and Assessment</td>
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</table>

Final JCDH Recommendation:
Claudia Outen, MD
Deputy Health Officer

Project Start Date: 8/19/08  Project End Date: 2/19/08

PROTECTING YOUR HEALTH
APPENDIX C

INFORMED CONSENT FORM
**Informed Consent Document**

**TITLE OF RESEARCH:** The Relationship of Sexual Empowerment and Sexual Pressure to Condom Use of Young Adult African American and Caucasian Women

**IRB PROTOCOL NUMBER:** X080721005

**INVESTIGATOR:** Carrie Ann Long, Doctoral Student

**SPONSOR:** UAB School of Nursing

---

**Explanation of Procedures**

You are being asked to take part in a research study. The purpose of this study is to explore young women’s sexual practices, feelings, and beliefs. It is hoped that the information gained from this study will help us understand how women feel about their sexual relationships with men, how women are sexually empowered to protect themselves against HIV, and women’s condom use choices.

If you decide to take part in the study, you will be agreeing to complete a questionnaire that will take approximately 30 minutes to complete. Your name or other identifying information will not be included on this questionnaire.

---

**Risks and Discomforts**

Participation in this study involves minimal risk to you. There is a minimal risk that in taking part in this study, you may experience anxiety or discomfort from sharing your personal sexual experiences.

---

**Benefits**

If you take part in this study, there will be no direct benefit to you. However, identifying factors that affect a woman’s decisions to use condoms with her sexual partner(s) may help us find out what could be done to improve the sexual health of women.

---

**Alternatives**

Your participation in this research is voluntary, and you may choose not to participate.

---

**Confidentiality**

Information obtained about you for this study will be kept confidential to the extent permitted by law. We will do everything we can to protect your privacy. Only members of the research team will know your name or contact you. You may refuse to answer any question on the questionnaire. The information you give as part of the

---

Participant’s Initials ______

---

UAB—IRB

Consent Form Approval 

Expiration Date
questionnaire will be private and will not be available to anyone except members of the research team. All of the questionnaires will be kept in locked files in the Center for Nursing Research, located in the UAB School of Nursing, and your name will not be used on these materials. Any reports or publications describing this study will be written so that individuals cannot be identified.

The following groups will have access to private information that identifies you by name: the Office for Human Research Protections (OHRP), and the University of Alabama at Birmingham (UAB) Institutional Review Board (IRB).

Withdrawal without Penalty

You are free to withdraw from this study at any time, without penalty. This will not affect your ability to enroll in other research studies in the future.

Significant New Findings

If you would like to know the results of the findings from the study, please let the Investigator, Carrie Ann Long know. Ms. Long can be contacted at (205) 934-6164.

Cost of Participation

There will be no cost to you from participation in the research.

Payment for Participation in Research

You will receive $10 after completing the questionnaire. This money is to reimburse you for your time and the contribution you make to the study.

Questions

If you have any questions about the research, Carrie Ann Long will be glad to answer them. Ms. Long can be contacted at (205) 934-6164. If you have questions about your rights as a research participant, or concerns or complaints about the research, you may contact Ms. Sheila Moore. Ms. Moore is the Director of the Office of the Institutional Review Board for Human Use (OIRB) at the University of Alabama at Birmingham (UAB). Ms. Moore may be reached at (205) 934-3789 or 1-800-822-8816. If calling the toll-free number, press the option for “all other calls” or for an operator/attendant and ask for extension 4-3789. Regular hours for the office of the IRB are 8:00 a.m. to 5:00 p.m. CT, Monday through Friday. You may also call this number in the event the research staff cannot be reached or you wish to talk to someone else.

Legal Rights

You are not waiving any of your legal rights by signing this consent form.

Participant's Initials _____
Your signature below indicates that you agree to participate in this study. You will receive a copy of this signed informed consent.

<table>
<thead>
<tr>
<th>Signature of Participant</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Signature of Investigator</td>
<td>Date</td>
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<tr>
<td>Signature of Witness</td>
<td>Date</td>
</tr>
<tr>
<td>Signature of person obtaining consent (if other than the investigator)</td>
<td>Date</td>
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</tbody>
</table>
APPENDIX D

DISSERTATION STUDY QUESTIONNAIRE
The Young Women’s Sexual Health Survey

(DO NOT place your name or contact information on this form)

Date: _____________________

A. Demographic Information

1. What is your date of birth? ___ ___ / ___ ___ / ___ ___

2. What race/ethnicity do you consider yourself?
   a. African-American/Black
   b. Caucasian/White
   c. Other ______________________________

3. Which of the following best describes your educational level? (Circle One)
   a. Did not graduate from high school
   b. High school graduate
   c. Some college
   d. College graduate
   e. Attended graduate school
   f. Other ______________________________

4. What is your occupation or the job you have worked at most of your adult life?
   ______________________________

5. What was your household income last year before taxes?
   a. $0 - $4,999
   b. $5,000 - $9,999
   c. $10,000 - $19,999
   d. $20,000 - $29,999
   e. $30,000 - $49,999
   f. $50,000 +
B. The following questions relate to how you feel about yourself. There are no right and wrong answers. Circle one response for each of the following ten items.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that I am a person of worth, at least on an equal basis with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I feel that I have a number of good qualities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. All in all, I am inclined to feel that I am a failure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I am able to do things as well as most other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I feel I do not have much to be proud of.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I take a positive attitude toward myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. On the whole, I am satisfied with myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I wish I could have more respect for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I certainly feel useless at times.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. At times I think I am no good at all.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
C. The following items relate to HIV and AIDS. Please circle whether you think the following statements are TRUE (T) or FALSE (F).

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HIV and AIDS are the same thing</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>2. There is a cure for AIDS</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>3. A person can get HIV from a toilet seat</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>4. Coughing and sneezing DO NOT spread HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>5. HIV can be spread by mosquitoes</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>6. AIDS is the cause of HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>7. A person can get HIV by sharing a glass of water with someone who has HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>8. HIV is killed by bleach</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>9. It is possible to get HIV when a person gets a tattoo</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>10. A pregnant woman with HIV can give the virus to her unborn baby</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>11. Pulling out the penis before a man climaxes keeps a woman from getting HIV during sex</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>12. A woman can get HIV if she has anal sex with a man</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>13. Showering, or washing one's genitals after sex keeps a person from getting HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>14. Eating healthy foods can keep a person from getting HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>15. All pregnant women infected with HIV will have babies born with AIDS</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>16. Using a latex condom or rubber can lower a person's chance of getting HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>17. A person with HIV can look and feel healthy</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>18. People who have been infected with HIV quickly show serious signs of being infected</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>19. A person can be infected with HIV for 5 years or more without getting AIDS</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>20. There is a vaccine that can stop adults from getting HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>21. Some drugs have been made for the treatment of AIDS</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>22. Women are always tested for HIV during their pap smears</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>23. A person cannot get HIV by having oral sex, mouth-to-penis, with a man who has HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>24. A person can get HIV even if she or he has sex with another person only one time</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>25. Using a lambskin condom or rubber is the best protection against HIV</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>True</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>------</td>
</tr>
<tr>
<td>26.</td>
<td>People are likely to get HIV by deep kissing, putting their tongue in their partner's mouth, if their partner has HIV</td>
<td>T</td>
</tr>
<tr>
<td>27.</td>
<td>A person can get HIV by giving blood</td>
<td>T</td>
</tr>
<tr>
<td>28.</td>
<td>A woman cannot get HIV if she has sex during her period</td>
<td>T</td>
</tr>
<tr>
<td>29.</td>
<td>You can usually tell if someone has HIV by looking at them</td>
<td>T</td>
</tr>
<tr>
<td>30.</td>
<td>There is a female condom that can help decrease a woman's chance of getting HIV</td>
<td>T</td>
</tr>
<tr>
<td>31.</td>
<td>A natural skin condom works better against HIV than does a latex condom</td>
<td>T</td>
</tr>
<tr>
<td>32.</td>
<td>A person will NOT get HIV if she or he is taking antibiotics</td>
<td>T</td>
</tr>
<tr>
<td>33.</td>
<td>Having sex with more than one partner can increase a person's chance of being infected with HIV</td>
<td>T</td>
</tr>
<tr>
<td>34.</td>
<td>Taking a test for HIV 1 week after having sex will tell a person if she or he has HIV</td>
<td>T</td>
</tr>
<tr>
<td>35.</td>
<td>A person can get HIV by sitting in a hot tub or a swimming pool with a person who has HIV</td>
<td>T</td>
</tr>
<tr>
<td>36.</td>
<td>A person can get HIV through contact with saliva, tears, sweat, or urine</td>
<td>T</td>
</tr>
<tr>
<td>37.</td>
<td>A person can get HIV from a woman's vaginal secretions (wetness from her vagina)</td>
<td>T</td>
</tr>
<tr>
<td>38.</td>
<td>A person can get HIV if having oral sex, mouth on vagina, with a woman</td>
<td>T</td>
</tr>
<tr>
<td>39.</td>
<td>If a person tests positive for HIV, then the test site will have to tell all of his or her partners</td>
<td>T</td>
</tr>
<tr>
<td>40.</td>
<td>Using Vaseline or baby oil with condoms lowers the chance of getting HIV</td>
<td>T</td>
</tr>
<tr>
<td>41.</td>
<td>Washing drug-use equipment with cold water kills HIV</td>
<td>T</td>
</tr>
<tr>
<td>42.</td>
<td>A woman can get HIV if she has vaginal sex with a man who has HIV</td>
<td>T</td>
</tr>
<tr>
<td>43.</td>
<td>Athletes who share needles when using steroids can get HIV from the needles</td>
<td>T</td>
</tr>
<tr>
<td>44.</td>
<td>Douching after sex will keep a woman from getting HIV</td>
<td>T</td>
</tr>
<tr>
<td>45.</td>
<td>Taking vitamins keeps a person from getting HIV</td>
<td>T</td>
</tr>
</tbody>
</table>
D. The following items relate to your feelings about condoms. Please answer how strongly you disagree or agree with the following statements. Circle one response for each of the following 13 items. There are no right and wrong answers.

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is a hassle to use condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. People can get the same pleasure from &quot;safer&quot; sex as from unprotected sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Using condoms interrupts sex play.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. The proper use of a condom could enhance sexual pleasure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Condoms are irritating.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I think &quot;safer&quot; sex would get boring fast.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. &quot;Safer&quot; sex reduces the mental pleasure of sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. The idea of using a condom doesn't appeal to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Condoms ruin the natural sex act.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Generally, I am in favor of using condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Condoms interfere with romance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. The sensory aspects (smell, touch, etc.) of condoms make them unpleasant.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. With condoms, you can't really &quot;give yourself over&quot; to your partner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
E. The following statements relate to how you communicate with your partner about condom use. Please answer how likely you would be to use each of the strategies with your current or most recent main sexual partner. Think about how likely you would do the following, *even if you had not done some of these things*. Circle one response for each of the following 36 items.

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Likely</th>
<th>Somewhat Likely</th>
<th>Unlikely</th>
<th>Very Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tell my partner that I will not have sex with him if we do not use condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Make it clear that I will not have sex if condoms are not used.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Let my partner know that <em>no condoms means no sex.</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Refuse to have sex with my partner unless condoms are used.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Tell my partner that we are going to use a condom… there’s no question about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Tell my partner that I have made the decision to use condoms, and so we are going to use them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Request that my partner go along with the use of a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Ask that we use condoms during sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Make a direct request to use condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Be clear that I’d like us to use condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Tell my partner that I would be more comfortable using a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Say that since we’re going to have sex, I’d like to use condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Start “fooling around” and then pull out a condom when it was time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Very Likely</td>
<td>Likely</td>
<td>Somewhat Likely</td>
<td>Unlikely</td>
<td>Very Unlikely</td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>--------</td>
<td>----------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>14. Take out a condom to use without saying a word.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Begin putting a condom on at the appropriate time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Get my partner very sexually excited and then take out a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Take a condom out during foreplay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. In the heat of the moment, I would take a condom out to use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Tell my partner that is he really loves me than he will use a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Tell my partner that since we love and trust one another, that we should use condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Let my partner know that using a condom would show respect for my feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Tell my partner that it would really mean a lot to our relationship if he would use a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. Tell my partner that using a condom would really show how he cares for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Stress that my partner should accept my request to use a condom because we care about each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Tell my partner that we both would be safer from disease if we used a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. Tell my partner that if we don’t use condoms, then one of us could end up with a sexually transmitted disease (STD).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very Likely</td>
<td>Likely</td>
<td>Somewhat Likely</td>
<td>Unlikely</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-------------</td>
<td>--------</td>
<td>-----------------</td>
<td>---------</td>
</tr>
<tr>
<td>27. Explain to my partner that there are too many sexually transmitted diseases (STDs) going around to not use a condom.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. Let my partner know that there are so many sexual diseases out there that we should use condoms.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29. Tell my partner that using a condom will protect us from sexually transmitted diseases (STDs).</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30. Tell my partner that we need to use condoms to protect ourselves from AIDS.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. Tell my partner that we should use a condom to prevent pregnancy, even though my real worry is sexually transmitted diseases (STDs).</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. Make up a reason why I want him to use a condom, even though my real reason is to protect myself against diseases.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. Tell my partner I only have sex with condoms, even though sometimes I don’t.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. Make up a reason why we should use condoms to get my partner to use them.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. Make my partner think I always use condoms when I have sex, even though sometimes I don’t.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36. Pretend that I’m really concerned about pregnancy, when my real concern is sexually transmitted diseases.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
F. The following statements relate to condom use. Circle the number that shows how sure you are that you could do the following things. There are no right and wrong answers.

<table>
<thead>
<tr>
<th></th>
<th>Very unsure</th>
<th>Unsure</th>
<th>Somewhat sure</th>
<th>Sure</th>
<th>Very sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I could carry a condom with me in case I needed one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I could use a condom each time I and my partner had sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I could use a new condom each time I and my partner had sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I could stop to put a condom on myself or my partner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I or my partner could unroll a condom all the way to the base of the penis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I could use a condom without it slipping.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I or my partner could get rid of a condom in the garbage after sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I or my partner could hold the condom at the base of the penis while withdrawing after sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I could use a condom if drinking beer, wine or other liquor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I could talk about using condoms with any sexual partner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I could talk about using a condom if I were unsure of my partner’s feelings about condoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I could talk about using condoms with a potential sexual partner before we started to hug and kiss.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I could talk a partner into using a condom when we have sexual intercourse.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I could say no to sex if my partner refused to use a condom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
G. The following questions ask about your sexual experiences with your current or most recent main sexual partner. Circle one response for each of the following 19 items.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Don’t know</th>
<th>Sometimes</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How many times have you felt your partner would leave you if you asked him to use a condom?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>How many times were you afraid to ask your partner to use a condom because he might yell or curse at you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>How many times has your partner become violent (like push, slap, choke, pull your hair, hit or kick you) AFTER you asked him to use a condom?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>How many times were you afraid to ask your partner to use a condom because he might say NO?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>How many times has your partner threatened to physically hurt you (for example, push, slap, choke, pull your hair, hit, or kick you) AFTER you told him you would not have sex with him?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>How many times has your partner become violent physically (for example, push, slap, choke, pull your hair, hit, or kick you) AFTER you told him you would not have sex with him?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>How many times has your partner yelled or cursed at you AFTER you told him you would not have sex with him?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Definitely do not feel</td>
<td>Don’t know</td>
<td>Feel occasionally</td>
<td>Feel most of the time</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>----------------------</td>
<td>-----------</td>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>8.</td>
<td>12.</td>
<td>definitely do not feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>11.</td>
<td>definitely feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>12.</td>
<td>feels it is my responsibility</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>12.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>13.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>14.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>15.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>16.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>17.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>18.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>19.</td>
<td>feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
H. The following items will ask questions about your sexual activity and condom use in the past 6 months.

1. What types of sexual activity have you engaged in, for the past 6 months (circle all that apply)?
   a. Vaginal sex (or, penis in your vagina)
   b. Oral sex
   c. Anal sex

2. In the past 6 months, how often have you used a condom when you have had vaginal sex with your current or most recent main sexual partner?
   a. Never
   b. Almost never
   c. Sometimes
   d. Almost always
   e. Always
   f. I have not had vaginal sex in the past 6 months

3. In the past 6 months, how often have you used a condom when you have had oral sex with your current or most recent main sexual partner?
   a. Never
   b. Almost never
   c. Sometimes
   d. Almost always
   e. Always
   f. I have not had oral sex in the past 6 months

4. In the past 6 months, how often have you used a condom when you have had anal sex with your current or most recent main sexual partner?
   a. Never
   b. Almost never
   c. Sometimes
   d. Almost always
   e. Always
   f. I have not had anal sex in the past 6 months

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY!