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Sexual Coercion: The Role of Communication and Heteronormative Beliefs

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SEXUAL COERCION: THE ROLE OF COMMUNICATION
AND HETERONORMATIVE BELIEFS

by

Brianna Lindley Forbis

A dissertation submitted to the Graduate College
in partial fulfillment of the requirements
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Brianna Lindley Forbis
Sexual assault is a pervasive issue on college campuses, with large numbers of students experiencing sexual assault during their college careers (Fisher, Cullen, & Turner, 2000). Sexual assault is often perpetrated by a known offender, which has brought increased attention to forms of sexual assault that do not necessarily include violence or the direct threat of violence. Sexual coercion is one such construct that has received increased attention in the literature, with several studies finding associations between heteronormative beliefs and sexual coercion (Eaton & Matamala, 2014; Haworth-Hoeppner, 1998; Vanwesenbeek, 1998). Aims of the current study included further exploring the relationship between sexual coercion and heteronormative beliefs, as well as understanding the role of indirect sexual communication and sexual communication apprehension among college students. Specifically, it was proposed that indirect sexual communication would moderate the relationship between heteronormative beliefs and sexual coercion. It was also hypothesized that associations would exist between sexual communication apprehension and sexual coercion. Survey methods were used in a sample of 515 undergraduate students who self-reported their sexually coercive behavior, heteronormative sexual beliefs, communication styles, and beliefs about direct communication and consent in sexual encounters. Parametric statistics were used to analyze the patterns of responses. The results did not indicate that indirect sexual communication moderated the relationship between heteronormative beliefs
and sexual coercion. However, regression analyses revealed that while heteronormative beliefs likely play a role in sexually coercive behaviors, indirect sexual communication may be a more relevant variable. Additionally, the current study failed to demonstrate a relationship between sexual communication apprehension and sexually coercive behaviors. The findings from this study have implications for sexual assault prevention efforts. Future research may consider further exploring sexual communication patterns and seek to understand what psychological or skill-based barriers exist to using direct communication during sexual encounters. Future research directions may also include considering the type, degree of closeness, and length of relationship between partners with who individuals report engaging in sexually coercive behaviors.
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INTRODUCTION

Sexual assault is a serious public health and safety concern plaguing college campuses. It has been called, “one of the most violating experiences anyone can endure” (page vii, Krebs, Lindquist, Warner, Fisher, and Martin, 2007). It is known to have a host of serious effects including immediate psychological and physical harm such as genital trauma, non-genital trauma, sexually transmitted infections, unwanted pregnancy, suicidal ideation, depression, anxiety, fear, social isolation, sexual dysfunction, sexual dissatisfaction and Posttraumatic Stress Disorder (Breitenbecher, 2001; Kilpatrick, Resnick, Ruggerio, Conoscenti, & McCauley, 2007; Thompson & Kingree, 2010; Turchick & Hassija, 2014). It is also known to seriously impact the long-term physical, mental, sexual, and social health of survivors. Research that has focused on sexual assault among college students has found that approximately 72% of women have experienced some form of sexual assault since the age of 16, including unwanted touching, sexual coercion, and rape (Turchik & Hassija, 2014). While research has indicated lower prevalence rates among men, they also are at risk for experiencing sexual victimization. Making a direct comparison between male and female rates of victimization across studies often becomes problematic due to varied definitions adopted by researchers. However, Turchik (2012) used similar a definition as Turchik and Hassija (2014) and found that approximately 51% of men report having had such an experience since the age of 16. Given the high rate of unwanted sexual experiences, researchers have sought to increase their understanding of the factors that contribute to the perpetration of such acts and the contexts in which they occur. Factors such as who perpetrates, how sexual assaults are perpetrated, consent behaviors, communication during sexual encounters, and traditional gender beliefs as they relate to sex have been included in recent and historical research.
College Sexual Assault

Research focused on sexual assault that occurs during college years has found that up to one in three women who attend college will have an unwanted sexual experience prior to finishing their college careers (Fisher, Cullen, & Turner, 2000; Mellins et al., 2017). For men, the rates of sexual victimization are lower (Fisher, Cullen, & Turner, 2000; Mellins et al., 2017). Thus, research and resources dedicated to sexual assault have focused primarily on the victimization of women, but some of this research does not preclude variables that likely contribute to the victimization of men as well.

A great deal of research has been dedicated to studying different aspects of sexual assault among women on college campuses, including the context in which these situations occur. A study conducted for the Bureau of Justice Statistics investigated rape and sexual victimization of college-age females from 1995 to 2013, with emphasis on attributes of the victimization (Sinozich & Langton, 2014). Researchers found that women ages 18 to 24, both students and non-students in the Midwest, had higher rates of rape and sexual assault compared to any other region of the country (Sinozich & Langton, 2014). Results of this study and others have identified that approximately 80-90% of sexual assault cases are perpetrated by a known offender (Sinozich & Langton, 2014; Fisher, Cullen & Turner, 2000). Sexual assault of college women is most commonly perpetrated by a classmate, friend, acquaintance, boyfriend, or ex-boyfriend (Sinozich & Langton, 2014; Fisher, Cullen, & Turner, 2000).

The type of sexual assault perpetrated by persons who are known to the victim is often referred to as acquaintance sexual assault, or sexual assault by a known offender. Ullman, Filipas, Townsend, and Starzynski (2006) conducted a study in which they explored the context
of sexual assault with emphasis on the role of the victim-offender relationship. Researchers included approximately 900 adult women in a Midwestern urban area and investigated many factors related to victim characteristics, assault characteristics, and post-assault experiences, with a focus on how these characteristics and experiences differ with respect to the victim-offender relationship. To measure such factors, a modified Sexual Experiences Survey (SES; Koss & Gidycz, 1985) was used to identify assault characteristics including age of the victim at the time of the unwanted experience, physical injuries endured from the experience, sexual acts, and the relationship to the offender. While many instances of sexual assault may involve violence or threats of violence, there are a portion of instances that do not involve the use of force. Ullman, Filipas, Townsend, and Starzynski (2006) found in their sample that sexual assault perpetrated by a known offender was less likely to involve violence or be perceived as life-threatening when compared to assaults perpetrated by a stranger. These findings suggest that perpetrators of sexual victimization may use other coercive tactics to obtain sex that do not involve aggression but do not imply mutual consent, especially when they know the victim.

**Sexual Coercion**

*Sexual coercion* has been defined as “the act of forcing (or attempting to force) another individual through violence, threats, verbal insistence, deception, cultural expectations or economic circumstance to engage in sexual behavior against his or her will” (Heise, Moore, & Toubia, 1995 p. 6). Instances of sexual coercion do not always involve physical aggression, but often include behaviors like begging, physical persistence, social pressuring, and manipulation.

In one qualitative study conducted by Livingston, Buddie, Testa, and VanZile-Tamsen (2004), 114 community dwelling women were given a semi-structured interview in which information was gathered regarding tactics used to obtain intercourse in heterosexual encounters
that women reported were unwanted. Other characteristics of unwanted sexual encounters (resistance strategies, reasons for compliance, etc.) were also gathered to understand how and why some women acquiesce in these situations (Livingston et al., 2004). Among the most common coercive tactics used by the perpetrators in these situations were verbal persuasion followed by persistence and then physical persuasion. Verbal persuasion was differentiated by three distinct groups: negative, neutral, and positive. Negative verbal persuasion included threats to end the relationship, expression of dissatisfaction with the woman or their sex life, verbal aggression (e.g., swearing, put-downs), withdrawing (e.g. pouting), and attempts to elicit sympathy (Livingston et al., 2014). Neutral verbal persuasion included continual requests, nagging, or pleading without the use of any emotionally charged content. Positive verbal persuasion tactics included “sweet-talking” and the use of emotionally charged content (e.g., complimenting or making promises) to entice a woman into sex. Physical persuasion was defined as sexual contact that is physically non-aggressive and non-violent (e.g., kissing, touching sexually). Livingston et al. (2004) defined persistence as nagging or the use of any tactic used repetitively such as verbal persuasion or physical persuasion (e.g., kissing, touching). Over 80% of sexually victimized women in this study had been subjected to verbal persuasion in their unwanted sexual experiences, with most cases involving negative verbal persuasion (Livingston et al., 2004). Approximately half of the cases reporting persuasive verbal coercion tactics also involved physical persuasion tactics and one-quarter involved physical aggression (e.g., holding down).

Like other forms of sexual assault, sexual coercion can have long-lasting effects on a victim’s mental, physical, and sexual health. Effects of such experiences can include disordered eating behaviors, sexual dysfunction, suicidality, reduced self-esteem, social difficulties, and
greater risk for subsequent victimization (Young, Furman, & Jones, 2012). Rates of sexual coercion experienced by college females has remained almost unchanged over the past 50 years (Adams-Curtis & Forbes, 2004). In fact, in their review of college women’s experience with sexual coercion, Adams-Curtis and Forbes (2004) cited recent and historical pieces of literature that find the rates consistently range from 50-56% of college women having experienced sexual coercion.

Relatedly, researchers have found that college men report engaging in sexually coercive behavior in dating and other relationships at alarming rates. Struckman-Johnson, Struckman-Johnson, and Anderson (2003) conducted a study that explored several areas of sexual coercion including rates at which men in their sample of college students reported engaging in sexual coercion since the age of 16. To answer this question, participants were asked to report whether they had engaged in 19 commonly reported coercive tactics such as persistent kissing and touching, repeatedly asking, taking advantage of a drunken target, telling lies, and using physical restraint. In the sample of 118 men, 43% endorsed using of one or more of these tactics after their partner had refused sex (Struckman-Johnson, Struckman-Johnson, & Anderson, 2003).

Schatzel-Murphy, Harris, Knight, and Milburn (2009) also conducted a study examining sexual coercion in a college population. One of the factors the researchers assessed was rate at which men reported using sexual coercion. To do this, researchers used a modified version of the Multidimensional Assessment of Sex and Aggression (MASA). It was modified in manner that included forms of coercion that were considered “less severe”, including seductive and manipulative techniques. This modification was based on the literature that informed the assessment used in Struckman-Johnson, Struckman-Johnson, and Anderson (2003). In this
A sample of 93 men, 67.7% reported using one or more coercive tactic to obtain sex play, oral sex, or vaginal/anal sex (Schatzel-Murphy et al., 2009).

**Sexual Coercion of Men**

In literature related to coercion, the focus has predominantly been on male perpetration and female victimization. While there are many reasons for this focus, it is not because there is an absence of men who experience sexual coercion. In one study, Fiebert and Tucci (1998) assessed the rate at which men report experiencing coercion. The sample consisted of 182 college men who were assessed for victimization experiences. In this study, a variety of coercive tactics (e.g., insistence, force, threat) and a variety of what they termed “sexual and non-sexual activities” ranging from going on a date to intercourse or intercourse without a condom were included in their definition of victimization. Seventy percent of sample reported victimization by women on at least one occasion.

Similar rates of coercion were found in Struckman-Johnson, Struckman-Johnson, and Anderson (2003). In this study the authors assessed the rate at which men report experiencing sexual coercion and the rate at which women report using coercive tactics. Sexual coercion in this study was defined as “post-refusal persistence”, or “the act of pursuing sexual contact with a person after he or she has refused an advance” (Struckman-Johnson, Struckman-Johnson, & Anderson, 2003, p.78). Approximately 58% of men in this sample reported experiencing one or more instances of sexually coercive tactics perpetrated by women and approximately 26% of women reported utilizing at least one coercive tactic after their male partners had refused sex.
While the rates of male victimization vary across research literature, the behaviors that perpetrators use to engage in unwanted sexual activity are similar in some ways, regardless of gender. For example, Graham (2006) and Byers and O’Sullivan (1998), suggest that aggressive strategies to obtain sexual contact are endorsed by both male and females. These researchers point to the prevalence of verbal aggression and the tendency to take advantage after the victim is intoxicated reported by male victims with female perpetrators.

**Misinterpretation and Miscommunication in Sexual Consent**

There are several proposed theories that seek to explain coercive sexual behavior when perpetrated by men. One dominant explanatory model for male perpetrated sexual assault is the miscommunication model (Tannen, 1992). This model suggests that in some instances of sexual assault there is a major breakdown in communication, where men and women fail to interpret the other’s verbal and nonverbal cues. This model relies on a proposed difference in communication styles among men and women. Specifically, Tannen (1992) suggests that a dichotomy exists where men’s style of communication is direct in nature, and women’s style is more indirect. The dichotomy that Tannen (1992) identifies is said to result from differences in socialization of the two genders.

Studies that focus on sexual behavior of college-aged men and women provide some support for the dichotomy of sexual communication styles suggested by Tannen (1992). For example, Vanwesenbeek, Bekker, and Van Lenning (1998) conducted an in-depth analysis of heterosexual encounters in college aged students. This study collected self-report measures on a number of constructs from 386 men and women in the Netherlands, including interactional patterns (i.e., patterns of communication in interpersonal interactions). Results from this study
found that men were consistently more pro-active in their pursuit of sex. That is, they were more likely than women to actively and coercively “orchestrate” and shape sexual encounters per their own desires, particularly so when they felt anxious or unsure (Vanwesenbeek et al., 1998). This supports the notion that men will be more active in their pursuit of sex. Conversely, women in this study reported operating in a more defensive fashion. Women tended to set limits on sexual behaviors in which they will engage, and to make attempts to counter the proactive sexual pursuit seen in men (Vanwesenbeek et al., 1998). Women were found to be more insecure about how to deal with sex, and the authors point out their defensiveness does not reflect competence in ability to obtain their sexual wishes or sexual safety (Vanwesenbeek et al., 1998).

Kitzinger and Frith (1999) critically examined the interaction styles of women in heterosexual encounters with an aim of understanding difficulties women have in refusing unwanted sex. In their analysis, Kitzinger and Frith (1999) found that women do find it difficult to assertively refuse a sexual pursuit by men with a clear verbal “no”. Women in this study reported using other tactics to express their refusal such as excuses and the use of palliatives (e.g., “I am flattered, but …”, or, “I really do like you, and care about you, but…”). In fact, women in Kitzinger and Frith (1999) consistently reported that their indirect means of communicating refusal were perceived as more interactionally acceptable (i.e., more socially acceptable). This set of research is highly consistent with what are deemed by conversation analysts as typical interactional styles in Western culture (Kitzinger & Frith, 1999).

Research has also demonstrated consistently that compared to women, men tend to interpret the behavior of women more sexually (e.g., Abbey, 1982; Fisher & Walters, 2003; Harnish, Abbey, & DeBono, 1990; Muehlenhard, 1988;). Fisher and Walters (2003) collected
data from approximately 400 male and female students at a Southeastern university. This study used 17 pairs of written scenarios depicting social interactions between men and women. Each pair consisted of identical interactions but differed in the sex of the target individual. The scenarios depicted a variety of situations, ranging from innocuous situations like meeting someone for coffee, to more overt situations such as entering the apartment of someone who has answered the door naked. Each participant was presented with all 34 scenarios. The results of this study are consistent with many of the previous findings, that men are more likely to perceive sexual interest in male-female interactions. Fisher and Walters (2003) found that gender of the participant was a main effect in regard to perceived sexual interest of the target individual. Specifically, it was found that men were more likely than women to interpret the behaviors of the target individual as indicating sexual interest, particularly in situations that were considered more innocuous (e.g., holding hands) than those that were more obvious (e.g., those scenarios involving nudity or condoms).

In summary, the dichotomy of communication styles between men and women that is suggested by the miscommunication model as well as the tendency for men to over perceive sexual interest in females may work synergistically to create sexual encounters that quickly progress into sexual coercion. However, these models do very little to explain female perpetrated sexual coercion or sexual assault, and theories that seek to explain it are largely lacking due to the relative dearth of research on female perpetration against male victims.

**Traditional Sexual Scripts and Heteronormative Beliefs**

The progression of sexual encounters can be understood as following what is known as a *sexual script*. Simon and Gangon (1984) coined this term, and sexual scripts are conceptualized
as consisting of three levels: cultural-level sexual scripts, interpersonal-level sexual scripts, and intrapsychic-level sexual scripts. Cultural-level scripts are cultural norms that exist within society and are portrayed by entities like media, myth, or other forms of social transmission which guide the goals set, desirable qualities of interactions, and behaviors during sexual experiences. Individual life experiences and interpretation of socially transmitted norms are included at the interpersonal level (Simon & Gangon, 1984). When cultural-level scripts combine with interpersonal-level scripts they form an intrapsychic-level script which is viewed as the source of an individual’s desires and fantasies (Simon & Gangon, 1984). The most influential component of sexual script levels is presumed to be cultural-level sexual scripts which permeate the other levels. Simon and Gangon (1984) suggest that because of the relationship among levels, sexual scripts are best conceptualized as being a culturally guided course of progression in sexual encounters.

When sexual scripts conform with cultural norms, they are considered *traditional sexual scripts*. Traditional sexual scripts tend to follow a specific progression that is very congruent with the underlying theory of the miscommunication model (Tannen, 1992). Traditional sexual scripts and heteronormative beliefs place men and women in oppositional, or even hierarchical relationships. Heteronormative beliefs around sexual relationships are those standards which are in line with the cultural beliefs that men and women have opposite roles where men are characterized as aggressive in their pursuit of sexual contact and are the orchestrators of the sexual behavior (Jackson, 2006). Women, on the other hand, are characterized as passive, controllable, and responsive to male sexuality (Jackson, 2006). In traditional sexual scripts, men are scripted to always desire sex, have a strong sex drive, be initiator of sexual activity, and place value on sexual intercourse over the relationship itself. Women on the other hand are scripted to
have low sex drives, be defensive against advances, be more valued if they are less sexually experienced, and place a high value on commitment and monogamy.

Haworth-Hoeppner (1998) conducted research with students at a large Midwestern university. Researchers were interested in several factors including how attitudes conforming with traditional and gender roles about sex affect perception of the use of coercion (Haworth-Hoeppner, 1998). Findings suggested that both men and women who hold heteronormative sexual beliefs are more likely to consider physical and verbal coercion tactics as acceptable. Additionally, they are more likely to engage in or be permissive of such tactics.

Eaton and Matamala (2014) conducted similar research with a group of undergraduates, but rather than measuring the permissibility of physically coercive tactics asked students to report the support for and use of verbally coercive tactics in their most recent relationship. The findings from this study were consistent with those of the findings from Haworth-Hoeppner (1998). Individuals who held heteronormative beliefs were more supportive of sexual coercion, specifically verbal sexual coercion. Importantly, the use of verbally coercive tactics was found to have a positive relationship with endorsement of heteronormative beliefs.

Fisher and Pina (2013) discussed heteronormative beliefs in their overview of male sexual victimization, specifically the perceptions and beliefs related to male sex-drive and assertiveness or domination in sexual situations. Fisher and Pina (2013) and Doherty and Anderson (2004) suggested how these beliefs may dissuade people from believing the stories of male-victims and may also prevent men from coming forward to authorities or even sharing experiences of assault out of fear of being labeled effeminate or weak. These same beliefs may also help to explain female perpetration of sexual coercion because of the roles assigned to men as always ready for sex, valuing sex over the relationship, and being the orchestrator in sexual
encounters. For women who hold heteronormative beliefs it is reasonable to infer they may assume consent once a potential sexual encounter has begun.

**Sexual Communication**

There is an abundance of research on the progression of sexual encounters, and the verbal and non-verbal communication that leads to the sexual behavior. Communication in these situations can be referred to as *sexual communication*. In the literature on the psychology of sexuality and in the area of sexual studies, the term sexual communication can be used in reference to a wide variety of situations. For example, it could refer to educational exchanges between a parent and a child, or verbal communication between partners about sexually transmitted infections, sexual satisfaction, sexual desires, etc. Sexual communication for the remainder of this paper will specifically refer to interpersonal verbal communication that occurs between two individuals leading up to and during a sexual encounter which functions to signal sexual interest and negotiate sexual interactions.

Effective sexual communication has been suggested to have a variety of positive outcomes including more positive sexual health and well-being across a lifetime (Byers, 2011). It also influences overall satisfaction in romantic relationships. Conversely, poor sexual communication appears to lead to a range of negative outcomes like higher rates of sexual problems, sub-optimal sexual scripts, and an increased incidence of sexually coercive experiences (Byers, 2011). Jozkowski, Peterson, Sanders, Dennis, and Reece (2014) conducted a study in which they explored the way college students define consent, as well as the ways in which they actually give and interpret consent in their sexual encounters. The results of this study suggest that men are more likely to assume consent and rely on non-verbal cues, with only
10% of men in their sample reporting that they would look for verbal cues in their interpretation of consent compared to 30% of women. Jozkowski et al. (2014) have proposed that, despite the common misinterpretation of behaviors, individuals may not always be willing aggressors in coercive situations, but rather there may be apprehension with using clear verbal consent tactics.

While there is a great deal of research related to consent in sexual behaviors and tactics that are commonly used to gain consent, there is a relative lack of research related to apprehension to gain verbal consent. Behavior in sexual situations like those studied in Jozkowski et al. (2014) suggest that there is some barrier to this type of communication. Apprehension about sexual communication is regularly studied in relation to sexual satisfaction, relationship satisfaction, and other areas of sexual health. However, Byers (2011) suggests that poor sexual communication may play a significant role in the experience of sexual coercion. The role of sexual communication and apprehension about direct sexual communication in sexual coercion has yet to be explored.

The Current Study

One goal of the current study was to investigate the relationship between sexual communication strategies and self-reported tactics used in an effort to obtain or successfully obtain sexual contact among a sample of undergraduate participants. Men and women who lack skills or experience, and/or are uncomfortable with direct communication about sex may avoid interactions that ideally precede sexual contact and/or adopt tactics to obtain sex that rely on coercive strategies. Specifically, the current study sought to identify if high levels of apprehension about sexual communication were associated with self-reported use of coercive
tactics to obtain sexual activity. Furthermore, this study aimed to understand how high levels of
direct communication and heteronormative beliefs were associated with endorsement of
sexually coercive tactics. These coercive tactics may result in coerced sexual experiences that
could be categorized as sexual assault.

**Research questions.**

**Question 1.** What is the relationship between level of apprehension about sexual
communication as measured by the Sexual Communication Apprehension Scale (SCA) and the
endorsement of sexually coercive tactics as measured by the sexual coercion scale (CS)? Do
participants who reported a higher level of apprehension about sexual communication endorse
more coercive tactics in attempts to obtain sex?

**Question 2.** What is the relationship between level of apprehension about sexual
communication as measured by the SCA and the endorsement of sexual coercion perpetration as
measured by the Sexual Experiences Survey-Short Form Perpetrator version (SES-SFP)? Do
participants who reported a higher level of apprehension about sexual communication endorse
more coercive tactics used to obtain sex?

**Question 3.** What is the relationship between levels of indirect communication about
sexual consent as measured by the Sexual Consent Scale Revised (SCS-R) and the endorsement
of coercive tactics in attempts obtain sex as measured by the CS? Do participants who report
higher levels of indirect communication about sexual consent endorse more coercive tactics in
attempts to obtain sex?
**Question 4.** What is the relationship between levels of indirect communication about sexual consent as measured by the SCS-R and the endorsement of coercive tactics to obtain sex as measured by the SES-SFP? Do participants who report higher levels of indirect communication about sexual consent endorse more coercive tactics to obtain sex?

**Question 5.** Is the relationship between heteronormative beliefs as measured by the Heteronormative Sexual Belief Scale (HSB), and endorsement of sexually coercive tactics in attempts to obtain sex as measured by the CS, moderated by ineffective sexual communication as measured by the SCS?

**Question 6.** Is the relationship between heteronormative beliefs as measured by the Heteronormative Sexual Belief Scale (HSB), and endorsement of sexually coercive tactics used to obtain sex as measured by the SES-SFP, moderated by ineffective sexual communication as measured by the SCS?

**METHODS**

**Participants**

Participants were undergraduate students age 18 years or older enrolled at a large Midwestern university. Participants were recruited using mass email recruitment. Participants who were enrolled in psychology courses had an opportunity to receive extra credit for their participation depending on their instructor’s approval. Participants were also given an opportunity to enter in a drawing for one Visa gift card valued at $50.
A total of 1076 students initiated a response to the survey between October 2018 and January 2019. Some respondents initiated, but abruptly discontinued participation. Per the informed consent document, this was the primary means of indicating withdrawal from participation. Of the 1076 participants who initiated, 497 were removed for abruptly halting their completion of the measures. In terms of demographics, those who chose not to participate mirrored those who did complete the survey (see Table 1). There were no statistically significant differences between completers and noncompleters on demographics. Data was reviewed for the remaining 579 participants. There was a significant pattern of nonresponding on the SES for some participants. This may be the results of redundancy of items and tedium associated with responding to the measure. As such, an additional 52 participants were excluded from analysis.

Missing data on questions related to demographic information was not addressed statistically and participants with missing demographic data were included in all analyses. Exact figures for missing demographic data are included in Table 2 and are identified as “Missing.” Missing data (i.e., only missing a few items across all measures) were analyzed for a pattern of missingness using Little’s Missing Completely at Random (MCAR) test. Based on the outcome of Little’s MCAR test, data were presumed to have a random pattern of missingness. Missing data for questions unrelated to demographics were replaced with predicted values using expectation maximization technique (Tabachnick & Fidell, 2007). Data collected from 11 participants were removed due to having one or more outliers. Outliers were identified according to the Tukey (1977) interquartile range method of analysis.
Of the 515 participants whose data was analyzed for the purposes of the current study, 64.5% (n=332) identified as female, 34.8% (n=179) identified as male, and .6% (n=3) identified as transgender or nonbinary. Most participants identified their legal marital status as single, with 26.2% (n=135) identifying their relationship status as single and not dating, 24.1% (n=124) as
single and dating, and 41.7% (n=216) as in a long-term relationship, but not married. The sample was predominately Caucasian (78.9%) and heterosexual (77.8%) with an average age of approximately 21 (SD=4.6). For a full report of demographic data see Table 2.

**Table 2.** Demographics

<table>
<thead>
<tr>
<th>Demographic</th>
<th>n</th>
<th>%</th>
<th>M</th>
<th>SD</th>
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<td></td>
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<td>4.59</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single and not dating</td>
<td>135</td>
<td>26.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single and dating</td>
<td>124</td>
<td>24.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a long-term dating relationship</td>
<td>215</td>
<td>41.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engaged</td>
<td>14</td>
<td>2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>26</td>
<td>5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Race/ethnic group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (non-Hispanic)</td>
<td>406</td>
<td>79.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black or African American</td>
<td>35</td>
<td>6.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Indian</td>
<td>2</td>
<td>.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/ Pacific Islander</td>
<td>15</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>32</td>
<td>6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>6</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Class Standing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>104</td>
<td>20.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>130</td>
<td>25.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>134</td>
<td>26.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>142</td>
<td>27.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sexual Orientation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>400</td>
<td>77.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homosexual</td>
<td>15</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bi-sexual</td>
<td>95</td>
<td>18.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-sexual</td>
<td>4</td>
<td>.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Setting

All portions of participation in this study occurred in an online forum and at the discretion of the participant to ensure anonymity. The online survey software Qualtrics was used to collect all data. Any information collected on Qualtrics was kept secure through Transport Layer Security and encryption that was standard to the service.

Measures

Demographic questionnaire. A 7-item demographic measure was administered to gain standard demographic information such as age, gender, ethnicity, educational status, and class standing. It also assessed for relationship status and sexual orientation.

Coercion.

Sexual Coercion Survey (CS). The CS is designed to measure 19 commonly used post refusal coercive tactics. The survey was used in Struckman-Johnson, Struckman-Johnson, and Anderson (2003) and was designed based on research in sexual influence strategies conducted by McCormick (1979) and O’Sullivan and Byers (1993). The survey assessed 19 different coercive tactics that are commonly reported in both men and women. The 19 tactics have been categorized into four different categories that range in “severity”: sexual arousal, emotional manipulation and deception, exploitation of intoxication, and physical force, threats of force, or harm. Each of these tactics was rated on lifetime frequency of use on a 5-point Likert scale, ranging from 0 (never) to 4 (very often).
Sexual Experiences Survey- Short Form Perpetration (SES-SFP; Koss et al., 2007).

The SES-SFP is designed to assess whether a respondent has engaged in any sexual experiences that involved the use of force, threat of force, or coercion. It is a 10-item, gender-neutral measure that has been shown to have strong to moderate test-retest reliability and strong to moderate internal consistency. The measure classified experiences as non-perpetrator, coercion, non-contact, contact, attempted rape, and rape.

Sexual Communication.

Sexual Communication Apprehension Scale (SCA; Babin, 2013). The SCA is a 26-item scale that measures three areas of sexual communication apprehension: general sexual communication apprehension, safer sex communication apprehension, and negative disclosure apprehension. Respondents are asked to rate their level of agreement with statements on each item on a 6-point scale, ranging from 1 (Strongly disagree) to 6 (Strongly agree). Cronbach’s alpha coefficients for the scale range from .84 to .97 for the three areas of sexual communication.

Sexual Consent Scale Revised (SCS-R; Humphreys & Brousseau, 2010). The SCS-R is a 39-item measure pertaining to attitudes and behaviors of sexual consent between partners. The items are answered on a 7-point scale (ranging from 1-Strongly Disagree to 7 -Strongly Agree). There are four attitudinal scales: Positive Attitude Towards Establishing Consent, Lack of Perceived Behavioral Control, Relationship Length Norms, and (Pro) Assuming Consent. Additionally, there are two behavioral subscales: Indirect Consent and Awareness of Consent. The SCS-R has been found to have internal consistency of .89 and test-retest reliability
coefficients ranging from .63 to .71 for the 6 subscales. The Indirect Consent subscale was used in the current study to measure indirect sexual communication.

**Heteronormative Beliefs.**

*Heteronormative Sexual Belief Scale (HSB; Forbis & Naugle, 2017).* The HSB was designed for the current study and was inspired by an assessment created by Eaton and Matamala (2014). In Eaton and Matamala (2014) a selection of subscales from the Sexual Beliefs Scale (Muehlenhard & Felts, 1998) and Stereotypes about Male Sexuality Scale (Snell, Belk, & Hopkins, 1986) were combined with the Sexual Double Standard Scale (Muehlenhard & Quakenbush, 1998) and Ambivalent Sexism Inventory (Glik & Fiske, 1996). The HSB includes a number of items from each of the aforementioned measures but did not limit the subscales from which it drew. The final product was an 18-item measure that asks participants to rate their level of agreement with a variety of heteronormative beliefs on a 5-point scale (ranging from 1 *strongly disagree* to 5 *strongly agree*). Analyses conducted on this measure indicate strong internal consistency with an alpha coefficient of .881. The entire scale is available in Appendix A.

**RESULTS**

Descriptive statistics were used to analyze demographic data (see Participant section and Table 2), scores on the measures of interest, and endorsement of sexually coercive tactics. When looking at the rate of endorsement of sexually coercive tactics across participants, a combination of the SES and the CS was used to determine if one or more coercive behaviors had been endorsed in sexual situations regardless of the success. In doing so, the data became less
specific to the time frame of perpetration because the CS does not ask for a specific time frame as is the case in the SES. As such, the resulting statistics were classified as having occurred in participants’ lifetime.

Among the 515 participants, 73.4% (n=353) endorsed engaging in at least one coercive tactic in attempt to obtain sexual contact at some point in their lifetime. Among the 178 male participants, 74.3% (n=133) reported engaging in at least one sexually coercive tactic sexual activity cross their lifetime. Among the 332 female participants, approximately 72.9% (n=242) reported engaging in at least one sexually coercive tactic across their lifetime. For reports of endorsement of at least one coercive tactic across other demographic variables measured in this study see Table 3.

**Table 3. Sexual Coercion Across Gender and Relationship Status**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Endorsed ≥1 Coercive Behavior</th>
<th>Endorsed No Coercive Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>242 72.9</td>
<td>90 26.1</td>
</tr>
<tr>
<td>Men</td>
<td>133 74.3</td>
<td>46 25.7</td>
</tr>
<tr>
<td>Transgender or non-binary</td>
<td>2 66.7</td>
<td>1 33.3</td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single and not dating</td>
<td>90 66.7</td>
<td>45 33.3</td>
</tr>
<tr>
<td>Single and dating</td>
<td>93 75.0</td>
<td>31 25.0</td>
</tr>
<tr>
<td>In a long-term dating relationship</td>
<td>162 75.3</td>
<td>53 24.7</td>
</tr>
<tr>
<td>Engaged</td>
<td>13 92.9</td>
<td>1 6.1</td>
</tr>
<tr>
<td>Married</td>
<td>19 73.1</td>
<td>7 26.9</td>
</tr>
<tr>
<td>Class Standing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>78 73.6</td>
<td>28 26.4</td>
</tr>
<tr>
<td>Sophomore</td>
<td>91 70.0</td>
<td>39 30.0</td>
</tr>
<tr>
<td>Junior</td>
<td>96 71.6</td>
<td>38 28.4</td>
</tr>
<tr>
<td>Senior</td>
<td>111 78.2</td>
<td>31 21.8</td>
</tr>
</tbody>
</table>
A chi-square analysis was conducted to see if there were differences across gender identity (i.e., male, female, transgender, non-binary) on frequency of engaging in at least one coercive tactic in their lifetime. The chi-square value was statistically non-significant ($\chi^2=1.040$, df=3, $p=.792$), indicating the differences could be attributable to chance alone.

Statistical assumptions were tested prior to performing correlations. Skewness, kurtosis, and standard error were calculated on all measures, see Table 4. The SCA had questionable distribution upon visual analysis and the skewness statistic was trending toward non-normal and the CS failed to meet the assumption. However, given the large sample-size and robustness of planned statistics used in the present study, there was no need to rely on non-parametric statistical testing or transform the data. All other statistical assumptions, including linearity, homoscedasticity, absence of outliers, and independence of observations were not violated.

**Table 4.** Skewness and Kurtosis

<table>
<thead>
<tr>
<th>Measure</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteronormative Belief Scale (HBS)</td>
<td>.334</td>
<td>-.440</td>
</tr>
<tr>
<td>Sexual Communication Apprehension Scale (SCA)</td>
<td>.629</td>
<td>-.252</td>
</tr>
<tr>
<td>Sexual Consent Scale-Indirect Communication</td>
<td>-.516</td>
<td>-.105</td>
</tr>
<tr>
<td>Sexual Coercion Scale</td>
<td>.845</td>
<td>-.176</td>
</tr>
<tr>
<td>Standard Error</td>
<td>.108</td>
<td>.215</td>
</tr>
</tbody>
</table>

To investigate the relationship between sexual communication apprehension and coercive tactics in attempts to obtain sex (Question 1) a Pearson product-moment $r$ correlation was conducted on the SCA and the CS. There was no statistically significant correlation found between sexual communication apprehension (measured by the SCA) and Coercion (measured by the CS), $r(513)=-.02$, $p=.66$. To assess the relationship between sexual communication
apprehension and coercion perpetrator status (Question 2), a point-biserial correlation was conducted on the SCA and the SES-SFP. There was no statistically significant relationship found between sexual communication (measured by the SCA) and coercion perpetration status (measured by the SES-SFP) $r_{pb} (513) = .05$, $p=.25$.

To assess the relationship between indirect sexual communication and endorsement of sexually coercive tactics (Question 3) a Pearson $r$ correlation on SCS-R and CS was conducted. A statistically significant correlation was found, $r (513) = .22$, $p<.01$, indicating a weak positive relationship between indirect sexual communication and endorsement of sexually coercive tactics. To investigate the relationship between sexual communication and sexual coercion perpetration (Question 4) a point-biserial correlation on SCS-R and SES-SFP was conducted. A statistically significant correlation was found, $r (513) = .10$, $p=.02$, indicating a very weak positive relationship between indirect sexual communication and the coercion perpetration status. A correlation matrix for all measures of interest is reported in Table 5.
Table 5. Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Heteronormative Beliefs</th>
<th>Sexual Communication Apprehension</th>
<th>Indirect Communication (SCS-R)</th>
<th>Sexually Coercive Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteronormative Beliefs</td>
<td>1</td>
<td>.14**</td>
<td>.20**</td>
<td>.18**</td>
</tr>
<tr>
<td>Sexual Communication</td>
<td>.14**</td>
<td>1</td>
<td>-.01</td>
<td>-.03</td>
</tr>
<tr>
<td>Apprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Communication</td>
<td>.20**</td>
<td>-.01</td>
<td>1</td>
<td>.21**</td>
</tr>
<tr>
<td>(SCS-R)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually Coercive</td>
<td>.18**</td>
<td>-.03</td>
<td>.21**</td>
<td>1</td>
</tr>
<tr>
<td>Tactics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Coercion</td>
<td>.08</td>
<td>.04</td>
<td>.10*</td>
<td>.15**</td>
</tr>
<tr>
<td>Perpetration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p=.02, **p<.01

To examine the proposed moderating effect of indirect communication on the relationship between heteronormative beliefs and endorsement of sexually coercive tactics and perpetration status (Questions 5 & 6, respectively), Baron and Kenny moderation analyses were conducted. To complete the Barron and Kenny method of moderation analysis, multiple regression analyses were conducted. The predictor variables included indirect communication as measured by the SCS-R, heteronormative beliefs as measured by the HSB, and the interaction between indirect communication and heteronormative beliefs. The dependent variable was endorsement of coercive tactics as measured by the CS, and sexual coercion perpetration status the SES-SFP. Moderation is supported within the Barron and Kenny method if the interaction is statistically significant. Statistical assumptions were tested before the regression analyses were conducted.
conducted. The data did not violate the assumptions of linearity, homoscedasticity, collinearity, absence of outliers, and normality of residuals.

A multiple linear regression was conducted using the CS as the outcome variable (Question 5). The model that included heteronormative beliefs, indirect communication, and the interaction of heteronormative beliefs explained a statistically significant proportion of the variance in coercion, $R^2=.06$, $F(3, 511) =11.65$, $p=.001$. Heteronormative beliefs did significantly predict endorsement of coercive tactics, under the condition where all other variables were held constant $b=.06$, $t(511) =3.23$, $p<.01$. Indirect communication also significantly predicted coercive tactics under the condition where all other variables were held constant. $b=.11$, $t (511) =4.17$, $p<.001$. The interaction between indirect communication did not significantly predict endorsement of coercive tactics, $b=.04$, $t (511) =.18$, $p=.854$. These findings indicate that moderation was not supported in this model (see also Table 6).

Table 6. Summary of Multiple Regression Analysis for Variables Predicting the Use Sexually Coercive Tactics

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE&lt;sub&gt;B&lt;/sub&gt;</th>
<th>β</th>
<th>$R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteronormative Beliefs (HSB)</td>
<td>.06*</td>
<td>.02</td>
<td>.14</td>
<td>.06</td>
<td>11.65</td>
</tr>
<tr>
<td>Indirect Sexual Communication (IDC)</td>
<td>.11**</td>
<td>.03</td>
<td>.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction (HSB x IDC)</td>
<td>.04</td>
<td>.21</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$B=unstandardized$ regression coefficient; $SE<sub>B</sub>$ = Standard error of the coefficient; $β = standardized$ coefficient; *$p=.001$, **$p<.001$

A logistic regression was conducted using SES (dichotomously scored) as the outcome variable (Question 6). Heteronormative beliefs did not significantly predict odds of perpetration
classification, $b=0.02, p=0.11, OR=1.02$ (95% CI: 1.00, 1.04). Indirect sexual communication did predict perpetration status when holding all other variables constant, $b=0.04, p=0.03, OR=1.04$ (95% CI: 1.00, 1.08). The interaction of heteronormative beliefs and indirect sexual communication did not predict perpetration status, $b=-0.21, p=0.14, OR=0.814$ (95% CI: 0.619, 1.070). Thus, moderation was not supported in this model. These figures are also represented in Table 7.

**Table 7. Summary of Multiple Logistic Regression Analysis for Variables Predicting Coercion Perpetration Status**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>OR</th>
<th>95% CI for OR (Lower, Upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteronormative Beliefs (HSB)</td>
<td>0.02</td>
<td>1.02</td>
<td>996, 1.04</td>
</tr>
<tr>
<td>Indirect Sexual Communication (IDC)</td>
<td>0.04*</td>
<td>1.04</td>
<td>1.00, 1.08</td>
</tr>
<tr>
<td>Interaction (HSB x IDC)</td>
<td>-0.21</td>
<td>0.814</td>
<td>0.619, 1.070</td>
</tr>
</tbody>
</table>

B=unstandardized regression coefficient; SEB = Standard error of the coefficient; OR= Odds Ratio; CI=Confidence Interval *$p<.05$

Additional linear and logistic regressions were conducted to look at the independent contributions of heteronormative believes and indirect communication to sexually coercive tactics and sexual coercion perpetration. Figures of these regressions can be found in Tables 8-11. In a linear regression conducted exploring the contribution of heteronormative beliefs to endorsement of sexually coercive tactics, heteronormative beliefs did significantly predict endorsement of sexually coercive tactics, $b=0.07, t(513)=4.13, p<0.01$ (see Table 8).
**Table 8.** Summary of Regression Analysis for Heteronormative Beliefs Predicting the Use of Sexually Coercive Tactics

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE_b</th>
<th>β</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteronormative Beliefs (HSB)</td>
<td>.07**</td>
<td>.02</td>
<td>.18</td>
<td>.03</td>
<td>17.02</td>
</tr>
<tr>
<td>Y (constant)</td>
<td>16.12</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B=unstandardized regression coefficient; SE_b = Standard error of the coefficient; β = standardized coefficient; **p<.001

This model indicates that for every 15-point increase on heteronormative belief scale, we would expect a participant to endorse another type of coercive tactic, or higher rate of previously endorsed coercive tactic. In a linear regression using indirect communication as the independent variable, the model was also found to significantly predicted sexually coercive tactics, b=.13, t (513) =4.9, p<.001 (see Table 9). Indicating that for every 9-point increase on the measure of indirect communication we would expect the endorsement of one coercive tactic or a higher rate of use of a previously endorsed coercive tactic.

**Table 9.** Summary of Regression Analysis for Indirect Communication Predicting the Use Sexually Coercive Tactics

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE_b</th>
<th>β</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect Communication</td>
<td>.13**</td>
<td>.03</td>
<td>.21</td>
<td>.04</td>
<td>23.93</td>
</tr>
<tr>
<td>Y (constant)</td>
<td>15.42</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B=unstandardized regression coefficient; SE_b = Standard error of the coefficient; OR= Odds Ratio; CI=Confidence Interval

In a logistic regression with heteronormative beliefs as the independent variable, the model did not significantly predict odds of perpetration classification, b=.02, p=.09, OR=1.02 (95% CI: 1.0, 1.04) (see Table 10).
Table 10. Summary of Logistic Regression Analysis for Heteronormative Beliefs Predicting Coercion Perpetration Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>OR</th>
<th>95% CI for OR (Lower, Upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteronormative Beliefs (HSB)</td>
<td>.02</td>
<td>1.02</td>
<td>1.0, 1.04</td>
</tr>
<tr>
<td>Y(constant)</td>
<td>-2.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B=unstandardized regression coefficient; SEb = Standard error of the coefficient; OR= Odds Ratio; CI=Confidence Interval

In a separate logistic regression, using indirect communication as the independent variable the model was significant, \( b=.04, p=.02 \), OR=1.04 (95% CI: 1.00, 1.08), indicating that for every one-point increase on the SES-SFP, the chance of falling into the perpetration status increased by 1.04 times, or is 4% more likely (see Table 11).

Table 11. Summary of Logistic Regression Analysis for Indirect Communication Predicting Coercion Perpetration Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>OR</th>
<th>95% CI for OR (Lower, Upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect Sexual Communication</td>
<td>.04*</td>
<td>1.04</td>
<td>1.00, 1.08</td>
</tr>
<tr>
<td>Y (constant)</td>
<td>-3.03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B=unstandardized regression coefficient; SEb = Standard error of the coefficient; OR= Odds Ratio; CI=Confidence Interval

Further exploratory analyses were conducted to examine impact of gender in the regression models that included the CS and the SES as outcome variables. However, the results of those analyses indicated that gender was not a significant predictor. Additionally, exploratory analyses examined differences across binary genders (i.e., male and female) among different types of sexually coercive tactics. Sexually coercive behavior was separated into two categories, physical coercion and verbal coercion. To do this, the SES and CS items that pertained to either physically or verbally coercive behaviors were combined in each category. They were analyzed
using total raw score of relevant items from each measure and a total of dichotomously scored items from each measure. Totaling dichotomously scored items allowed for analysis of the number of different tactics within each category participant had used and totaling the raw scores provided information on the frequency of use of each category of coercive behavior. Independent-sample t-tests were used to determine if group (binary gender) differences existed. There were no statistically significant differences found. Given that the research questions proposed in the current study did not include differential predictions related to gender and there were no hypotheses related to gender differences, the results were not presented as part of the current study.

**DISCUSSION**

Overall, the present study was designed to investigate the relationship between sexual coercion and sexual communication apprehension, indirect sexual communication, and heteronormative beliefs among college students at a large Midwestern university. The first aim was to investigate the relationship between sexual communication apprehension and the endorsement of sexually coercive tactics and perpetration. It was hypothesized that higher levels of sexual communication apprehension would be associated with the endorsement of more coercive tactics and increased probability of having engaged in sexually coercive behaviors to obtain sexual contact. These hypotheses were not supported. The relationship between sexual communication apprehension, and endorsement of sexually coercive tactics was not statistically significant, and the level of association was virtually non-existent. Similarly, the relationship between sexual communication apprehension and perpetration status was non-significant, with
nearly no association. These results suggest that the small association observed could be due to chance alone.

This was the first time, to our knowledge, that the relationship between sexual communication apprehension and coercion has been addressed in literature. The research questions regarding the relationship between sexual communication apprehension and sexual coercion were formulated, in part, on the basis of suggestions of Jozkowski et al. (2003) and Vanwesenbeek et al. (1998). Jozkowski et al. (2003) postulated that the tendency of college students to rely on non-verbal cues may be due to apprehension toward open sexual communication. This suggestion was not supported in the current study. The relationship (or lack thereof) between sexual communication apprehension and sexual coercion observed in the current study suggest that anxiety or apprehension around sexual communication may not be a factor contributing to a lack of direct communication in college students’ sexual interactions. In their in-depth analysis of heterosexual encounters among college students, Vanwesenbeek et al. (1998) found that men were more likely to coercively orchestrate and shape sexual encounters, particularly when they felt unsure. Vanwesenbeek et al.’s (1998) findings in combination with those from the current study suggest that anxiety or sense of unsureness may be related to some factor other than communication. However, given the nature of the SCA, which asks about a broad range of sexual topics, it is also possible that apprehension specifically related to asking for consent could still be at play and not accurately measured by the SCA.

A second aim of the present study was to investigate the relationship between levels of indirect sexual communication, and the endorsement of coercive tactics and perpetration. It was hypothesized that higher levels of reported indirect sexual communication would be associated
with more sexually coercive tactics. There was a weak positive correlation between indirect sexual communication and endorsement of sexually coercive tactics indicating that as indirect sexual communication increases, the endorsement of coercive tactics also increases. It was also hypothesized that higher levels of reported indirect communication would be associated with reporting perpetration of sexual coercion which was supported by the findings. There was a small correlation between indirect sexual communication and reporting sexual coercion perpetration, indicating that those who report sexual coercion are also likely to report higher levels of indirection communication. It is important to note the strength of the associations were weak in both cases.

This is the first time, to our knowledge, that the relationship between indirect sexual communication and coercive tactics has been studied. The questions on the relationship between indirect communication and sexual coercion were developed, in part by Byers (2011), who suggested that, “difficulty clearly communicating… sexual boundaries is one important contributor to sexual coercion” (p.23). The relationship observed in the current study is not inconsistent with what Byers (2011) suggested. That is, there is a relation between these two variables. However, the relationship observed does not necessarily indicate causality, as Byers (2011) suggested. It merely indicates that relationship is present. However, theoretically, given the temporal order of communication about sexual contact and the engagement in sexual activities during sexual encounters, one can logically conclude that a lack of indirect communication could be causal factor.

The present study also assessed the relationship between heteronormative beliefs, endorsement of sexually coercive tactics and perpetration, and indirect communication. It was
hypothesized that indirect communication would modify the strength of the relationship between heteronormative beliefs and endorsement of sexually coercive tactics. The idea behind this hypothesis was that while heteronormative beliefs are thought to contribute to sexually coercive behaviors, indirect sexual communication may be an important and more easily modified factor that accounts for the strength of the relationship. This hypothesis was not supported. However, the additional linear regression analyses that were conducted did indicate that the heteronormative beliefs and indirect communication provided a unique contribution to the prediction of endorsement of coercive tactics, meaning that heteronormative beliefs and indirect communication do play independent roles in explaining the variance in the use of coercive tactics. This is consistent with Eaton and Matamala (2013) who found college students with higher levels of heteronormative beliefs are more likely to support and use verbally coercive tactics. This is what would be expected considering the research of Haworth-Hoeppner (1998) who found that those with higher heteronormative beliefs were more likely to rate sexually coercive behavior as being permissible and acceptable.

Lastly, it was hypothesized that indirect communication would modify the strength of the relationship between heteronormative beliefs and coercive perpetration. This hypothesis was not supported. However, indirect communication was associated with an increased probability of being a perpetrator of sexual coercion. It was a statistically significant result with low predictive power. Interestingly, heteronormative beliefs were not a significant predictor, meaning heteronormative beliefs did not predict whether an individual endorsed using coercive tactics to obtain sexual contact. This is contrary to expectations based on the results from Haworth-Hoeppner (1998) and Eaton and Matamala (2013) who found that heteronormative beliefs have
been associated with an increased use, support, acceptance, and perceived permissibility of coercive tactics. Based on their conclusion it would be expected that those with higher levels of heteronormative beliefs would also report obtaining sexual contact by using coercive tactics. These findings are contrary to what might be expected given the findings in the current study, which suggest heteronormative beliefs do, to a small degree, predict the use of coercive tactics.

The relationship between sexual coercion and heteronormative beliefs was not consistent across different analyses. There was a clear relationship between heteronormative beliefs and endorsement of sexually coercive tactics, but this relationship was non-significant when looking at perpetration status. There are several reasons this may have occurred, including the potential shortcoming of SES-SFP (see Limitations section). It may indicate that heteronormative beliefs do not predict the “success” of the coercive tactics used in an attempt to obtain sexual contact. An additional explanation is that it is possible that heteronormative beliefs may be associated with coercive tactics, but not the perception that coercive tactics were the reason for the success of the encounter one was trying to engage in. In some ways this may be consistent with the theoretical underpinnings of heteronormative beliefs. For example, heteronormative beliefs presume that males are always ready for sex, or that intercourse is their primary objective in any sexual encounter. As such, women may presume their coercive actions taken in order to obtain sexual contact were not instrumental to their success in having the desired sexual encounter, and instead believe that it was their partners’ readiness or drive to engage in that behavior that caused the outcome. Another related example is that heteronormative beliefs set forth that women may only be engaging in “token refusal”, or the tendency to say no to save face within the traditional sexual script. This may suggest a similar pattern where males do not believe it was their coercive
actions that resulted in the sexual encounter outcome, but instead the idea that women really mean yes when they say no.

The predictive power of indirect sexual communication was found to be stronger than heteronormative beliefs when both sexually coercive tactics and sexual coercion perpetration status were used as outcome variables. This an interesting and new finding that suggests a lack of skills, willingness, or ability by some other means to communicate directly about and during sexual encounters has more influence than the socially constructed beliefs that a person may hold.

Additional findings of interest in this study include the proportion of participants who endorsed using coercive tactics. Seventy-three percent of participants endorsed using at least one coercive strategy in attempt to obtain sexual contact at some point in their life. These rates were similar across male and female participants. Struckman-Johnson, Struckman-Johnson, and Anderson (2003) reported rates of perpetration nearing 43% in their sample of college men. However, only 26% of women participants in the same study endorsed engaging in coercive tactics. Schatzel-Murphy et al. (2009), found that 67.7% of men in their sample reported using one or more coercive strategy. Schatzel-Murphy et al. (2009) did use a scale that included less severe forms of coercion, seduction, or manipulation. In the current sample, the proportion of men who endorsed at least one behavior did not significantly differ from the proportion of women endorsing the behaviors. This finding is contrary to what was expected and the general wisdom of the subject area. The current study used a less restrictive measure of sexual coercion and did not require that the coercive behavior was effective in obtaining the desired sexual
behavior. It is possible that using a more stringent measure of coercion would have yielded results that were more consistent with the sexual assault literature at large.

**Limitations**

While there are several aspects of the current research that are interesting or provide new insight to areas previously unexplored, the study is not without limitations. The present study was based solely on self-report measures. This is likely one of the only means through which researchers will be able to collect data in the subject area of sexual assault, but it certainly can impact the validity of the data that was collected in the current study. Furthermore, this study had no experimental manipulation of the variables proposed as independent variables (i.e., heteronormative beliefs and indirect sexual communication). Similar to the use of self-report measures, this an inherent limitation on most research in the area of sexual assault. Another limitation was the distribution of the CS. While residuals of the CS were normally distributed, the raw scores were not. Thus, not every assumption of the statistical analyses run was met. Unfortunately, this is the nature of the sexual assault or sexual coercion research; the majority people do not report engaging in centrally located number of coercive actions and, while unlike due to the robustness of the parametric statistics used, this may have impacted the findings observed in the present study.

Another limitation of the research was found in the use of the SES-SFP. This scale was originally adapted from a gold standard measure of sexual assault victimization and is extremely thorough. As was previously noted, there was some difficulty in getting participants to complete entire measure, and over 50 participants had to be removed from the data set for failing to
complete large proportions of the questions on SES-SFP. The SES-SFP is also less discreet about the construct it is trying to measure. Every item that assesses for coercion also assesses for rape perpetration. It is reasonable to extrapolate that people may be less likely to endorse engaging in coercive behavior if they associate it with more extreme sexual assault behaviors. The SCA is another possible limitation to the current study in that it does not exclusively consider apprehension around consenting or negotiating in a sexual encounter. Instead, it also includes questions about things like talking with one’s partner about contraception or sexually transmitted infections. The construct of sexual communication apprehension, as measured in the current study, may not have had the level of precision that would be necessary to find such a relationship.

Finally, it is worth noting that the variables explored in the current study were by no means expected to independently nor in combination fully explain the tendency to engage in sexually coercive behaviors. There are innumerable factors that may contribute to any individual’s tendency to use coercive tactics in any given sexual encounter. Some factors may be more permanent such as a sense of morality or covert verbal behaviors in the form of rules established through early-life learning history, while others may be more dynamic and dependent on the immediate contingencies at hand. It was not the intention of the present study to explore every possible causal factor, instead simply to further explore and expand upon a specific niche that has been previously examined in the research literature.
Future Research

Considering the findings of the present study, future research may focus more on apprehension related specifically to consent as opposed to a broader sense of sexual communication apprehension. Future studies may also look at other factors that may contribute to college students’ difficulty with direct communication during sexual encounters. Vanwesenbeek et al. (1998) suggested that anxiety or unsureness may lead to increased coercive orchestration. Future researchers might consider anxiety about rejection, performance, or other common concerns expressed by college students. Focus groups or surveys, may be fruitful means of understanding the most common concerns expressed by college students in the current era and cultural context.

The relationship between coercion and indirect communication, and the rates of sexual coercion observed in the current study have implications for sexual assault prevention efforts. A focus on methods of increasing direct communication may prove fruitful for preventing sexually coercive behavior on college campuses. Given the findings, or lack thereof, on sexual communication apprehension, it may be important to make efforts to build direct communication into the behavioral repertoire of individuals as opposed to addressing anxiety or beliefs related to direct sexual communication. It is also important to dispel myths around male victimization by females. Many researchers and experts in the area of sexual assault, as well as the public, presume that men are more likely to perpetrate all forms of sexual assault. The current study suggests that differences in rates of coercive actions across males and females may not always be accurate and females should also be a primary target population of sexual assault perpetration prevention.
In addition to suggesting that indirect communication may contribute to sexual coercion, Byers (2011) suggested that indirect sexual communication may be related to the fact that coercion is often perpetrated by a dating partner, friend, or acquaintance. The current study did not attempt to differentiate the type of partner with whom coercive tactics are used; differentiating the relationship may have yielded different, or more powerful results. Future research may consider differentiating the relationship of the participants’ partner and ask about tendency toward indirect communication varies depending on closeness or some other quality of the relationship. Doing so may provide a level of nuanced information that could contribute to meaningful changes in sexual assault prevention efforts. Finally, based on the findings from the present study it is suggested that more research be dedicated to understanding the perpetration of sexual coercion by females and impacts of experiencing sexual coercion on males.
REFERENCES


Byers, E.S. (2011). Beyond the birds and the bees and was it good for you?: Thirty years of research on sexual communication. *Canadian Psychology, 52*(1), 20-28.


Koss, M.P., Abbey, A., Campbell, R., Cook, S; Norris, J., Testa, C., Ullman, S., West, C., &


Appendix A

Heteronormative Sexual Belief Scale
Heteronormative Sexual Belief Scale

We would like to know about your own personal beliefs about sex. Please rate your level of agreement with each of the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. The man should be in control of the sexual situation.
2. A man should be more sexually experienced than his wife.
3. Without an erection a man is sexually lost.
4. Guys should have the power in sexual situations.
5. Without an erection, sexual activity for a man will end in misery.
6. Women are too easily offended.
7. Girls who lead guys on deserve what they get.
8. Satisfying sexual activity for a man always includes increasing excitement and passion.
9. Girls say No just to make it seem like they’re nice girls.
10. During sex, men are always thinking about getting to intercourse.
11. Women seek to gain power by getting control over men.
12. For men, kissing and touching are merely the preliminaries to sexual activity.
13. Girls who act seductively really want sex, even if they don’t admit it.
14. Among men, touching is simply the first step toward sex.
15. Men are always ready for sex.
16. Women really get turned on by men who let them know who’s boss.
17. It really arouses girls when guys dominate them in bed.
18. Girls who are teases deserve what they get.
Appendix B
Human Subjects Institutional Review Board Letter of Approval
Date: April 13, 2018

To: Amy Naugle, Principal Investigator
    Brianna Forbis, Student Investigator for dissertation

From: Daryle Gardner-Bonneau, Ph.D., Vice Chair

Re: HSIRB Project Number 18-04-12

This letter will serve as confirmation that your research project titled “Sexual Coercion: The Role of Communication and Heteronormative Beliefs” has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., you must request a post approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study.” Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: April 12, 2019