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Predicting bystander attitudes using rape myth acceptance and adherence to the commodity model of sex

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Predicting Bystander Attitudes Using Rape Myth Acceptance and Adherence to the Commodity Model of Sex

Kimberly J. Johnson

A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

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Abstract

The high rate of sexual assault on college campuses has become a growing concern among college administrators. To combat the prevalence of sexual assault, colleges and universities have begun implementing mandatory bystander intervention training programs, which teach students to look for warning signs indicative of sexual assault and intervene before an assault occurs. Previous research has indicated that an individual’s endorsement of rape myths may play a role in whether or not that individual will intervene in a situation that may lead to sexual assault; however, little research has investigated from where belief in rape myths might stem. Sex educators have asserted that the cultural conception of sex, best defined as a “commodity model”, introduces a narrative surrounding sex that legitimizes and normalizes rape myths.

This study sought to quantify adherence to the commodity model of sex through the development of a Commodity Model of Sex Scale, and to identify whether adherence to the commodity model of sex and belief in rape myths could be used to predict participants’ attitudes towards intervening in situations that may lead to sexual assault. Results indicated a moderately strong correlation between rape myth acceptance and endorsement of the commodity model of sex, and that rape myth acceptance most strongly predicted bystander attitudes, given the predictors in the model. Implications of this finding for bystander intervention training and sex education curricula are discussed.
Introduction

On January 25, 2014, President Barack Obama announced the creation of a White House Task Force on Protecting Students from Sexual Assault. The task force was charged with “sharing best practices, and increasing transparency, enforcement, public awareness, and interagency coordination to prevent violence and support survivors” (Jarrett, 2014, p.1), and its formation marked a pivotal change in our country’s willingness to address sexual assault. The terms “sexual assault” and “rape” are used interchangeably, and are defined by the Federal Bureau of Investigation as “penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim” (Criminal Justice Information Services, 2012). National reports have indicated that as many as 1 in 5 women and 1 in 71 men (Black et al., 2011) experienced attempted or completed rape during the four to five years they attended an undergraduate institution, but these numbers likely under-represent actual occurrences of sexual assault. As many as 60% of sexual assaults are never reported to police (Justice Department, 2012); of those that are, 1 in 4 lead to an arrest, and less than a third of those arrests lead to a felony conviction and jail time (Rape, Abuse, and Incest Nation Network, RAINN, 2009). As a result, many rapists are never held accountable for their crime, and many survivors are denied justice for the crime committed against them.

These statistics are particularly jarring considering that the majority of rapists are repeat offenders. Lisak and Miller (2002) surveyed 1,882 college-aged men at a mid-sized university and found 120 “undetected rapists,” defined as individuals “whose self-reported acts met legal definitions of rape or attempted rape, but who were never
prosecuted by criminal justice authorities” (p. 73). Of those 120 “undetected rapists,” 63.3% reported committing multiple rapes; in fact, the “undetected rapists” who were also repeat offenders reported an average of 5.8 acts of sexual assault per person. The high rate of recidivism among offenders makes the necessity of reporting instances of assault all the more apparent, yet rape remains one of the most underreported crimes (Allen, 2007; Kruttschnitt, Kalsbeek, & House, 2014). Failure to report sexual assault may indicate a hostile reporting climate for survivors; many survivors have indicated feelings of discomfort with the idea of both reporting an assault to authorities and pursuing help to cope with and heal from the assault (Du Mont, Miller, & Myhr, 2003).

This reluctance has placed survivors at a significantly higher risk for a plethora of psychological disorders, including PTSD, substance abuse, self-harming behaviors, depression, eating disorders, sleep disorders, and suicide (Ackard, Neunark-Sztainer, & Hannan, 2003; Campbell, Sefl, & Ahrens, 2004; Coker, Mckeown, Sanderson, Davis, Valois, & Huebner, 2004; Kilpatrick, Ruggiero, Aciamo, Saunders, Resnick, & Best, 2003; Silverman, Raj, Mucci, & Hathaway, 2001). When attempting to address assaults on college campuses, it is imperative to foster a climate wherein survivors feel comfortable reporting assault. In an effort to combat the cultural climate that may give rise to a hostile reporting climate, many colleges and universities have begun implementing anti-rape education programs as part of incoming first-year students’ college orientation.

**Existing Anti-Rape Education**

A comprehensive review of anti-rape programming indicated that many prevention programs fall into two general categories: self-defense trainings and
educational programs (Sochting, Fairbrother, & Koch, 2004). Self-defense training seminars, typically geared towards women, have been widely criticized for putting the onus of responsibility for not getting raped on potential survivors and for failing to address the root causes of sexual assault. Due to these issues and oversights, most programming focuses instead on anti-rape education. In an expansive meta-analysis, Anderson and Whiston (2005) identified four primary types of content in sexual assault prevention programs: informative, empathy focused, socialization focused, and risk reducing. Informative programming provided participants with statistics, factual information, and information about myths and facts surrounding sexual assault; empathy focused education aimed at enabling participants to develop empathy for survivors of sexual assault; socialization focused programming emphasized the way in which gender roles and media influence participants’ perception of sexual assault; and risk-reducing programs taught participants specific strategies for reducing individual risk of sexual assault.

Anderson and Whiston (2005) indicated that educational programming was positively related to participants’ reported measure of rape knowledge and rape attitudes, with participants who attended anti-rape educational programming reporting a greater awareness of rape-related facts and less propensity towards victim-blaming and rape-myth supporting attitudes than participants who had not been exposed to anti-rape programming. However, changes in measures of behavioral intentions and incidence of sexual assault failed to reach clinical significance, indicating that the effectiveness of anti-rape educational programming in actually preventing instances of sexual assault remains unknown. A possible connection between exposure to anti-rape educational
programming and survivors’ willingness to report an assault has yet to be demonstrated in the research literature. Previous research, however, has indicated that belief in rape myths plays a substantial role in whether or not a survivor reports (Du Mont et al., 2003; Heath et al., 2011; Sable, Danis, Mauzy, & Gallagher, 2010), so it’s reasonable to suggest that educating survivors on the existence of rape myths would lead them to engage in less self-blame and increase the likelihood of reporting.

**Bystander Intervention Strategies**

Bystander intervention has become the standard for anti-rape education in colleges and universities. In cases of sexual assault, particularly on college campuses, the bystander intervention model aims to train bystanders to look for warning signs indicative of sexual assault risk and intervene in suspect situations. Latane and Darley’s (1970) bystander intervention model established a five-step decision-making outline that bystanders go through before intervening in a problematic situation. First, bystanders must notice the situation; second, they need to interpret it as potentially dangerous; third, they need to take responsibility for intervention; fourth, the bystander must decide how to help; and finally, they need to act to intervene. For example, bystanders who noticed a woman passed out on a couch at a party would have to interpret the situation as potentially dangerous to the woman, decide not to rely on someone else to get her home safely, plan to get her safely back to her apartment by paying for a cab, and then act on that plan.

In an analysis of this model, Burn (2009) sought to determine which steps to the bystander intervention model posed the greatest barrier to successful intervention, and discovered that both failure to notice the situation and failure to identify the situation as
high-risk played large roles in shaping participants’ willingness to intervene. Based on this finding, Burn suggested that bystander intervention curriculum should “include components designed to help participants identify real-world situations high in sexual assault risk” (p. 787), such as heavy intoxication on the part of the potential perpetrator or victim, a potential victim going to a secluded area with an acquaintance, and other “red flag” behaviors.

Burn also indicated that perception of potential victims played a role in bystander’s willingness to intervene in potentially problematic situations. In Burn’s (2009) study, both male and female participants indicated a greater reluctance to intervene if they perceived that the potential victim had made choices that increased their likelihood of being assaulted, such as dressing provocatively or being intoxicated; this effect was greater in men than in women. Previous research has also indicated that in sexual assault scenarios involving a male victim, both men and women were more likely to attribute blame to the male victim than in scenarios involving a female victim (Gerber, Cronin, & Steigman, 2006).

Both the idea that dressing provocatively increases women’s risk of being sexually assaulted, and that the natural consequence of certain behaviors is sexual violence are known as a “rape myths”. Lonsway and Fitzgerald (1994) defined rape myths as “attitudes and beliefs [about sexual assault] that are generally false but are widely and persistently held, and that serve to deny and justify male sexual aggression against women” (p. 134). Previous research by Banyard (2008) has indicated a correlation between an individual’s knowledge of sexual violence and their willingness to engage in bystander intervention, suggesting that it may be imperative to include
information about rape myths in bystander intervention training. Additionally, feminist scholars and cultural critics have posited that a widely held belief in rape myths among the general population may play a significant role in survivors’ reluctance to report instances of assault (Stein, 2005).

**Defining Rape Myths**

As previously noted, rape myths are defined as “attitudes and beliefs [about sexual assault] that are generally false but are widely and persistently held, and that serve to deny and justify male sexual aggression against women” (Lonsway & Fitzgerald, 1994, p. 134). Women make up a disproportionate percentage of rape survivors; as such, research focused on rape myth acceptance has historically focused on rape myths geared towards women.

Rape myths focused on female survivors tend to fall under one of three categories: (a) that the survivor enjoyed or wanted the assault (“victim masochism”), (b) that sexual assault only happens to certain types of people (“victim perception”), or (c), that survivors lie about or exaggerate their experiences (“victim fabrication”) (Ben-David & Schneider, 2005). For example, a popular rape myth reflecting the notion of “victim fabrication” is the idea that most accusations of rape are false. This sentiment is echoed by reporters and across internet message boards, becoming particularly vehement when the accused person wields status or power within their community. For example, in January 2013 Florida State University quarterback Jameis Winston was accused of raping a fellow FSU student. After the story broke, discussion of the incident “quickly lost any semblance of civility”; one female student noted that she “[was] ‘sad and ashamed to be part of a student body that is quick to support a man who is accused of sexual assault,
simply because he is a good football player, and even quicker to condemn the alleged victim of the crime as a liar.”” (Bogdanich, 2014, p. 1).

**Rape Myth Acceptance as a Social Norm**

The pervasive nature of rape myths has led many theorists writing on sexual assault to consider rape myth acceptance a socially normative belief. Social norms, defined as “rules and standards that are understood by members of a group” (Cialdini & Trost, 1998, p. 152) are used to guide and constrain our behavior, particularly when we are met with novel or morally ambiguous situations. The normalization of rape myths is often reflected in the way in which journalists report cases of sexual assault. In her studies of the language surrounding sexual assault reporting, Benedict (2005) noted that newspapers often referred to female victims of sex crimes appearance (describing them as “pretty,” “attractive,” “petite,” or “pert”), used demeaning or victim-blaming language to describe female survivors’ emotional states (“hysterical”, “vivacious,” and “flirtatious”), and often referred to female survivors as “girls”, even when they were grown women. Benedict argued that such language enables others to more easily dismiss survivors’ claims by portraying survivors as “sexual temptresses” who were somehow “asking for” rape by nature of their “attractive” appearance and “flirtatious” manner.

Similarly, rape myth ideology has manifested in how police officers investigate rape cases and have influenced judicial sanctioning of perpetrators. In the aforementioned Winston investigation, the accusing student stated that the investigating officer, Christopher Pate, “[first asked me] if I was sure this was rape or if I just didn’t want a baby or wanted the morning after pill” (Bogdanich, 2014). Likewise, a case in Montana in which a 47-year-old teacher pled guilty to “sex without consent” with a 14-
year-old student resulted in a 30 day jail sentence for the teacher; the judge presiding over the case argued that the victim was “older than her chronological age” because of the flirtatious manner in which she acted and dressed. The victim committed suicide while the case was pending trial (Associated Press, 2014).

These cases may reflect individual instances, but the ubiquitous belief that most survivors are lying about their experience or somehow invited assault has also been demonstrated in the research literature. Sawyer, Thompson, and Chicorelli (2002) surveyed 704 intercollegiate student athletes and reported that almost half believed up to 50 percent of rape reports are false; in contrast, Lisak, Gardinier, Nicksa, and Cote (2010) analyzed all cases ($n = 136$) of sexual assault reported to a major Northeastern university over a 10 year period, and found that only 8 (5.9%) reports were proven false. Based on their findings and previous research on the subject, the researchers estimated that the percentage of false reporting at universities overall is 2 to 10 percent, the same rate of false reporting for any other crime. This stark contrast between the assumptions college students make about rape accusations and the reality of survivors’ experiences attests to the pervasive cultural acceptance of rape myths, and sheds light on why survivors might be reluctant to report their experiences.

The effect of perceiving rape myths as a socially normative construct was further explored by Bohner, Siebler and Schmelcher (2006), who sought to determine whether men’s self-reported rape myth acceptance (RMA) and rape proclivity (RP) would vary based on false feedback from a confederate group. The researchers issued participants a packet of surveys meant to measure both their RMA and RP. In the false feedback conditions, the surveys participants were given also contained information about how
previous male participants had scored on each of the scales; for the “high” condition, the noted scores were 1 standard deviation above the actual mean, and for the “low” condition, the noted scores were 1 standard deviation below the actual mean. Participants in the control condition were administered surveys containing no information about how previous participants had scored. In accordance with the researchers’ hypothesis, participants in the “high” feedback condition scored significantly higher in both RMA and RP than participants in either the “low” feedback condition or control condition. According to the researchers, their results provided evidence for the idea that an individual’s RMA and RP may be affected by whether RMA and RP are perceived as socially normative beliefs and behaviors, and imply that rape propensity may be affected by perceived acceptance of rape myths.

**Implications of rape myth acceptance**

Lonsway and Fitzgerald (1994) noted that rape myths function to support “the denial and trivialization” of rape, which is achieved by “shifting the blame for the crime from the rapist to the victim” (p. 136). Indeed, research has indicated that survivors of sexual assault were only likely to report the assault to police if their experience was in line with the “classic rape”, or “real rape” scenario – that is, if the assault was a “violent attack by a stranger… [involving] the threat and use of force, injury, and the need for medical treatment” (Williams 1984, p. 459). The “real rape” stereotype delegitimizes actual instances of rape that fail to meet this definition, reinforcing rape myths and leading survivors to engage in self-blame.

In accordance with this idea, Du Mont, Miller, and Myhr (2003) indicated that survivors were more likely to report assault to the police if their experience matched the
“real rape” stereotype – if the survivors sustained demonstrable physical injuries, or experienced physical coercion that led to visible injury. Additionally, the “real rape” scenario asserts that perpetrators of sexual assault are always strangers, and survivors were indeed more likely to report an assault if the perpetrator was a stranger (McGregor, Wiebe, Marion, & Livingstone, 2000; Sudderth, 1998). However, 73% of sexual assaults are committed by someone known to the survivor (Department of Justice, 2005), so the majority of survivors’ experiences are inherently unlikely to meet the criteria set by the “real rape” stereotype, and are therefore inherently unlikely to be reported to police. The “real rape” scenario is a myth surrounding rape, but one that does not necessarily concern rape survivors; rather, the “real rape” stereotype narrows the definition of what is considered legitimate rape, making it more difficult for survivors to define their experience as assault and therefore decreasing the probability of reporting.

Because our cultural misconception of what constitutes “real rape” is so far removed from the majority of experienced assaults, many survivors are reluctant to label their experiences as rape and engage in self-blaming attitudes reflected in and bolstered by the widespread acceptance of rape myths. For example, in interviews with incarcerated women who were identified as sexual assault survivors, Heath, Lynch, Fritch, McArthur, and Smith (2011) reported that several women engaged in self-blaming behaviors that largely reflected popular rape myths. When asked why she had not reported being raped to police, one woman responded that she “was scared of being one of those women that…are out looking for it or got drunk and deserved it … one of these women who cry rape after the fact…according to everyone” (p. 602). Another woman interviewed noted that she “felt like it was [her] own fault…that I deserved it…because
of my drinking…it’s my fault because if I didn’t drink so much, if I wasn’t getting into
the situation. Or maybe I did something to lead him on” (p. 602).

Additionally, approximately a third of the 74 women interviewed in Heath et al.’s
study expressed fear of being blamed for the assault by others as a reason for not
disclosing. Paul, Gray, Elhai and Davis (2009) indicated that rape survivors tended to
significantly overestimate peers’ acceptance of rape myths, and that overestimation
significantly predicted the presence of posttraumatic symptoms in survivors. The cultural
support and subsequent internalization of rape myths may effectively deter survivors
from reporting assault, encourage self-blame and ultimately dissuade survivors from
seeking both legal adjudication and counseling to help cope with emotional trauma
related to sexual assault.

The Commodity Model of Sex and Rape Myth Acceptance

The pervasive nature of rape myths suggests that they are culturally normative,
but no research has sought to address from where the collective acceptance of these
myths might stem. The central hypothesis of this paper asserts that our cultural
conception of sex introduces a dominant cultural narrative that legitimizes and
normalizes rape myths. Sex researchers argue that our cultural conception of sex is best
defined as a “commodity model” of sex – that is, sex is presented as something analogous
to property, “a substance that can be given, bought, sold, or stolen…women have it, and
men try to get it” (Millar, 2008, p. 30). Under the commodity model of sex, sexual
relationships are defined in heterosexist and phallocentric terms; young women are
encouraged to save sex for marriage, and are warned that girls “lose their power” over
men by engaging in premarital sex (Kendall, 2013). Such a perspective posits women not
only as consumers, but as products which “lose value rapidly after they are ‘opened’” (Kendall, 2013, p. 215).

The commodity model of sex reinforces the narrative of men as aggressors and women as defenders of sexuality, further normalizing male sexual aggression and reproducing many of the already discussed myths surrounding rape. Millar (2008) noted that the logical conclusion of the commodity model of sex

   is that rape is narrowly understood and consent is presumed. Under the commodity model, consent is not necessarily enthusiastic participation, or even necessarily an affirmative act. If someone tries to take something and the owner raises no objection [or is incapable of raising any objection], then that something is free for the taking (p. 36).

Focusing on sex as a commodity may give rise to many of the aforementioned issues faced in adequately addressing and responding to sexual assault, including the narrow definition of what constitutes “real rape”, the assumption that women signal sexual availability through how they dress, and the idea that women who step outside of rigid sexual narratives are somehow “asking for” or “inviting” sexual victimization.

**Commodity Model of Sex and Abstinence Only Until Marriage Education.**

The pervasive and culturally-engrained nature of the commodity model of sex is exemplified by abstinence only until marriage education (AOUME) curricula. As of 2005, 30 U.S. states mandated sex education focused primarily on abstinence, with 13 requiring abstinence-only sex education curriculum (Stranger-Hall & Hall, 2011) and over $1.5 billion of federal funding allocated to the development of AOUME (Sexuality Information and Education Council of the United States, 2010).

A 2004 report evaluating the most widely used abstinence-only curricula in the country found that the values espoused in AOUME classes often reflected notions of
men’s proprietary ownership of women, including statements emphasizing the importance of a woman’s virginity in relation to finding a husband, such as “the Bride price [i.e. a woman’s virginity or sex] is actually an honor to the bride. It says she is valuable to the groom and he is willing to give something valuable for her [i.e., marriage]” (Filipovic, 2008, p. 16). This statement is a direct example of the commodity model of sex, as it posits a woman’s virginity as the source of her “value” to her future husband and implies that women’s sexuality can be bought through marriage.

The devaluation of women who engage in sexual activity before marriage is also a common theme in many AOUME curricula, with discussions framing women who engage in pre-marital sex as women who have lost their value or power over men. Abstinence educators maintained that “girls who had sex before marriage ceded power to men by ‘giving pieces of themselves away’ through sex” (Kendall, 2013, p.37). Similarly, Kendall’s (2013) investigation of sex education curricula across the country found that AOUME instructors “described boys as near-animals with barely leashed sexual impulses that only girls could tame,” and emphasized the idea that “girls’ abstinence saved boys from enslavement to their nature” (Kendall 2013, p. 37). This notion reflects not only the normalization of men’s sexual aggression, but also places responsibility for both abstinence and rape prevention on women.

Furthermore, when discussion of rape occurred in abstinence-only classrooms it was often framed as a situation in which men “misread” signs from their partner because she failed to “send the right messages through her dress and demeanor” (Kendall, 2013, p. 210). Although AOUME models also noted that “no means no” in sexual situations, the ultimate message of such a discussion is that survivors of sexual assault are at least
somewhat responsible for the assault for failing to send the “right” messages about their sexual availability. This idea reflects the rape myth of “victim perception” by insisting that rape only happens to a “certain kind” of person and that by sending the “right” messages, women can avoid being assaulted.

**Current Research**

The current research endeavored to examine possible relationships between the commodity model of sex, rape myth acceptance, and bystander attitudes. To evaluate these relationships, participants were given a series of measures evaluating (a) their endorsement of ideas related to the commodity model of sex, (b) their acceptance of rape myths, and (c), their willingness to intervene in situations that might lead to a sexual assault. Additionally, because no scale currently exists to directly measure the commodity model of sex, one was created using the theoretical framework outlined in the preceding literature review.

**Hypotheses**

The current study investigated the possible connection between endorsement of values related to the commodity model of sex and rape myth acceptance. First, I hypothesized that individuals showing greater endorsement of rape myths would also report greater endorsement of ideas related to the commodity model of sex. Second, I predicted that those individuals would also report being less likely to intervene in situations that may lead to sexual assault. Finally, using multiple regression analysis I determined whether acceptance of rape myths and adherence to the commodity model of sex could be used to predict bystander attitudes.
To better evaluate participants’ adherence to the commodity model of sex, I also laid the foundation for a Commodity Model of Sex Scale (CMSS). Validity evaluations of the CMSS were performed by examining correlations between scores on the CMSS and scores on the Illinois Rape Myth Acceptance Scale, short form (IRMAS; Payne, Lonsway, & Fitzgerald, 1999), Double Standards Scale (DSS; Caron, Davis, Halteman & Stickle, 1993), and the Bystander Attitudes Scale, Revised (BAS-R; Banyard, Moynihan, & Plante, 2007). Based on the theory of the commodity model of sex, I hypothesized that scores between the CMSS, DSS, and IRMAS would be positively correlated, while scores between the CMSS and BAS-R would be negatively correlated. Additionally, I postulated that the scale would have high reliability statistics, and used an exploratory factor analysis (EFA) to test the factor structure of the CMSS, and to evaluate the scale’s possible multidimensionality.

**Method**

**Quantifying Adherence to the Commodity Model of Sex**

Despite the theoretical framework, there currently exists no comprehensive scale measuring an individual’s endorsement of the commodity model of sex; however, scales measuring constructs related to the commodity model of sex have already been created. The DSS measures an individual’s endorsement of traditional sexist double standards in relation to men and women’s sexual activity. For example, the DSS includes statements related to (a) perceived value of women who engage in premarital sex (“A woman who is sexually active is less likely to be considered a desirable partner”), as well as (b) the role of gendered aggression in sexual scenarios (“In sex the man should take the dominant role and the woman should assume the passive role”). The ideals espoused in the
commodity model of sex are echoed in these statements, including the idea that women who have sex before marriage are less “valuable” than women who abstain, and positing men’s sexual dominance as normative (Kendall, 2013; Millar, 2008).

Based on the theoretical framework described I developed 29 items that directly reflected constructs related to the commodity model of sex. Because sexual double standards are an aspect of the commodity model of sex, it’s expected that scores on the CMSS and DSS will be highly correlated. However, double standards are a single aspect of the commodity model of sex, and fail to encompass a number of other attributes also explored in the literature, including the idea that women communicate sexual availability through dress, and that certain attributes or actions entitle men to sex with women. Based on the theoretical framework of the commodity model of sex I developed six initial facets for the CMSS that reflect values extolled by the commodity model of sex paradigm: *Women’s Value, Men as Aggressors, Status Achievement, Bargain Exchange, Availability Based on Dress, and Women as Exchangeable.*

*Women’s Value.* The first subscale contained questions related to the idea that a woman’s value decreases after she engages in sexual activity. This concept is exemplified in Kendall’s (2013) analysis of AOUME curricula by statements such as “women lose value rapidly after they are ‘opened’ [have sex for the first time]” (p. 215).

*Men as Aggressors.* As previously expressed in the research literature, the commodity model of sex posits men’s sexual dominance as normative (Kendall, 2013; Millar, 2008). For example, Kendall (2013) noted that popular sex education paradigms “described boys as near animals with barely leased sexual impulses” (p. 37), and placed the responsibility for refusing sex on women.
Status Achievement. The third subscale, Status Achievement, reflected the idea that men gain status by having sex with as many women as they can. This concept is explored less in the research literature, but serves as an inverse to the idea that women lose value and status by having sex with multiple partners.

Bargain Exchange. A central tenant of the commodity model establishes sex as an exchange analogous to property, in which sex is “a substance that can be given, bought, sold, or stolen” (Millar 2008, p. 30), and one that is “owed” after money is spent in dating scenarios.

Availability Based on Dress. Items for the Availability Based on Dress subscale reflected the idea that the way in which a woman is dressed acts as a signal for her sexual availability. This concept is expounded upon in Kendall’s (2013) investigation into AOUME curricula, in which young women were told that rape often occurs because women “failed to send the right messages through her dress and demeanor” (p. 210).

Women are Exchangeable. The final subscale for the CMSS, Women are Exchangeable, reflected the notion that under the commodity model of sex women are seen less as individuals and more as objects to be obtained by men. Table 1 represents a break-down of items by theoretical facet.

As with the other surveys, participants responded on a 5-point Likert-type scale, where 1 represented Strongly Disagree and 5 reflected Strongly Agree. Therefore, higher scores on the CMSS reflected greater agreement with the commodity model of sex paradigm. In analysis of the CMSS’s external validity, participants’ scores were correlated with their scores on the DSS and RMAS (see Table 2 for analysis).
Participants

Participants for this study consisted of 480 current undergraduate students at James Madison University (JMU) recruited through the Psychology Research Participant Pool. Participants were offered one class credit in exchange for their participation. Certain student groups, like athletics teams and members of Greek organizations, were also targeted for recruitment via personal invitation from a member of the research team. Data collection originally resulted in 524 respondents, but grossly incomplete surveys, defined as surveys in which participants failed to respond to one or more scales, were deleted from the data set, giving me a final sample size of 480 students. Of those 480, 309 identified themselves as first year students (64.4%), 90 as second years (18.8%), 40 as third years (8.3%), 33 as fourth years (6.9%), and 2 as fifth year students (.4%). Accordingly, most students were between the ages of 18 and 24, with an average age of 19.05.

An overwhelming majority of participants identified as white (426, or 88.8%), and 25 participants identified as African-American or Black (5.2%), 21 identified as Asian or Pacific Islander (4.4%), 20 identified as Latino/Latina (4.2%), and 8 identified as American Indian/Alaska Native (1.7%). Women also made up the majority of the sample, constituting 342 (71.3%) of respondents, while 91 men participated (19%). Only 1 participant identified as “genderqueer” (.2%), and 1 participant chose not to divulge their gender. Demographics analysis also indicated that 141 (29.4%) of respondents were members of a fraternity or sorority, and 39 (8.1%) reported being involved in intercollegiate athletics. Finally, 336 participants (70%) reported having received bystander intervention training during their time as undergraduates. This statistic is
reflective of the previously described shift towards bystander intervention training as the standard for rape prevention on college campuses.

**Materials**

**Double Standard Scale.** To determine participants’ endorsement of constructs related to the commodity model of sex, they were given a copy of the Double Standard Scale (DSS), which measures an individual’s endorsement of traditional sexist double standards in relation to men and women’s sexual activity. The DSS consists of 10 items, and responses are given on a 5-point Likert-type scale (1 – *Strongly Agree*, 5 – *Strongly Disagree*), with lower scores indicating greater adherence to traditional sexual double standards. Reliability measures conducted by Caron et al. (1993) indicated a coefficient alpha of .72 in a sample of 330 college-aged men and women. Additionally, validity measures conducted by Caron et al. revealed a correlation between endorsement of sexist double standards and condom usage. Reliability measures for this study indicated a coefficient alpha of .847.

**Illinois Rape Myth Acceptance Scale.** A short form of the Illinois Rape Myth Acceptance Scale (IRMAS) was used to evaluate participants’ endorsement of popular rape myths. The IRMAS is comprised of 7 subscales: the first, *She Asked for It*, explores myths related to the idea that some survivors “ask” to be assaulted (“If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control”); the second, *Not Really Rape*, reflects myths related to the “real rape” stereotype (“If the rapist doesn’t have a weapon, you really can’t call it rape”); the third, *Didn’t Mean To*, evaluates myths that exonerate perpetrators from accountability (“Rape happens when a man’s sex drive gets out of control”); the fourth, *Wanted It*, explores the
myth that some women secretly want to be raped (“Many women secretly desire to be raped”); the fifth, They’re Lying reflects myths related to victim fabrication (“Rape accusations are often used as a way of getting back at men”); the sixth, Trivial Event, addresses myths asserting that rape is not really a serious crime (“Women tend to exaggerate how much rape affects them”); finally, Deviant Event examines adherence to myths related to scenarios that may lead to a rape (“Men from nice middle-class neighborhoods never rape”).

Participants responded to 15 statements reflecting rape myths on a 7-point Likert-type scale, with 1 indicating strong disagreement with the statement and 7 reflecting strong agreement. Studies examining the construct validity of the IRMAS indicated that IRMAS scores were highly correlated with scores on the Sexism Scale (Rombough & Ventimiglia, 1981), Hostility Toward Women Scale (Lonsway & Fitzgerald, 1995), and Acceptance of Interpersonal Violence Scale (Burt, 1980). Reliability measures for this scale were also performed for this study, and resulted in a coefficient alpha of .851.

**Bystander Attitude Scale, Revised.** An abbreviated version of Banyard’s Bystander Attitude Scale, Revised (BAS-R) was used to evaluate participants’ willingness to intervene in situations that may lead to sexual assault. The revised scale is comprised of 28 statements that reflect intervention behaviors that can be used before, during, or after a sexual assault has occurred. Participants gave responses on a 5-point Likert-type scale, ranging from 1 (“not likely”) to 5 (“extremely likely”), with higher scores indicating a greater likelihood of intervening. Reliability testing for the original form of the BAS (Banyard, Plante, & Moynihan, 2004) produced a coefficient alpha of .94, and a coefficient alpha of .883 was reported for this study.
Commodity Model of Sex Scale. As previously described, a pilot version of the Commodity Model of Sex Scale (CMSS) was administered to participants. Items on the CMSS reflect constructs directly related to the Commodity Model of Sex; exploratory factor analysis was used to evaluate the internal consistency of the items. Additionally, I performed zero-order correlations between the CMSS, RMAS, and DSS to evaluate the external validity of the scale.

Demographics. A brief demographics survey was also administered to collect information about the participating students. They were asked to indicate their age, year in school, ethnicity/race, gender identity, status as an international student, membership in intercollegiate athletics, membership in Greek Life organizations, and whether or not they had received bystander intervention training through the university.

Procedure

Participants for this study were recruited online via the Psychology Research Participant Pool and through the aforementioned recruitment efforts of the research team. All participants gained access to the surveys online through Qualtrics survey systems, and Qualtrics served as a means of collecting responses. While the initial ordering of surveys was done through random assignment, because of the limitations of doing an online study, the surveys were taken in the same order across participants, beginning with the IRMAS, followed by the BAS-R, DSS, CMSS, and ending with the demographics survey. Completing the entire survey packet shouldn’t have taken participants more than 20 minutes. Surveys were available online from January 31, 2015 to February 27, 2015.
Data Analysis

Data were analyzed using correlational analysis as well as multivariate regression in SPSS Version 21. First, I correlated scores on the IRMAS with those on both the DSS and CMSS to evaluate whether individuals who were more likely to endorse rape myths were also more likely to validate ideals related to the commodity model of sex. Next, I correlated scores on the IRMAS and BAS-R to investigate whether those more likely to endorse rape myths would also report being less likely to intervene in situations that may lead to sexual assault. Finally, using a multiple regression analysis I sought to determine whether scores on the IRMAS, DSS and CMSS could be used to predict scores on the BAS-R.

The demographics information collected was used in exploratory analysis and utilized ANOVAs, with the goal of determining whether certain groups (for example, members of the Greek community versus non-members) scored significantly differently on any of the scales. Finally, an exploratory factor analysis (EFA) was conducted to test the factor structure of the CMSS. Principal axis factoring (PAF) was used for all EFA analyses. Results and implications are discussed.

Results

Correlations and ANOVAs

To evaluate possible relationships between the scales, I conducted zero-order correlations utilizing all of the scales and evaluated the results using Cohen’s cutoff-values for r, wherein r-values between .1 and .3 are considered “small”, r-values between .3 and .5 are “medium”, and r-values greater than .5 are considered “large” (Cohen, 1988). Considering the applied nature of the research and homogeneity of the sample
population, r-values were predicted to be significant, but small. Because some participants did not completely finish all of the surveys, data were analyzed using pairwise correlations, giving me final sample sizes for each scale as follows: IRMAS \( n = 480 \); BAS-R \( n = 480 \); DSS \( n = 477 \); and CMSS \( n = 474 \). See Table 2 for item correlations and Table 3 for effect sizes.

Unsurprisingly, analysis of scores on the DSS and CMSS indicated a high correlation between the scales, \( r = .701, p < .001 \), and \( r^2 = .494 \). The notably high correlation between the two scales was predicted based on the theoretical framework of the commodity model of sex; however, the high \( r^2 \) value may indicate high multicollinearity between the two scales, as almost 50 percent of the variance in CMSS scores can be explained by scores on the DSS.

ANOVARs were conducted to analyze the demographics information, and indicated no significant difference in responses based on athletics membership, membership in a Greek organization, or gender. However, individuals with previous bystander intervention training scored significantly higher on the BAS-R, \( F(2, 417) = 5.03, p = .007, \eta^2 < .001 \), and significantly lower on rape myth acceptance, \( F(2, 417) = 5.85, p = .003, \eta^2 = .003 \), than those who had not received bystander intervention training (see Tables 4a – 4d for further analysis).

**Hierarchical Regression Analysis**

Next, a multiple regression analysis was conducted to determine whether scores on the BAS-R could be predicted by using scores on the IRMAS, DSS, and CMSS. Out of these predictors, it was hypothesized that IRMAS would be the strongest predictor of BAS-R scores, but that both scores from the DSS and CMSS would add significantly to
the amount of variance explained. I began by centering the variables to mitigate the amount of multicollinearity between factors. Because scores were significantly different along lines of bystander intervention training, it was held as control variables in our initial regression analysis. However, in the final model bystander intervention training was dropped because it was not a significant predictor in the model, given the other predictors, nor was it significant in interactions with any other variables. Interactions among factors were also tested, and interactions between IRMAS and CMSS scores, IRMAS and DSS scores, and gender and IRMAS were found to be significant (see Tables 5a – 5c for graphs).

The final regression model was as follows: 

\[ \text{BAS-R} = 118.399 - 2.33 \text{ (gender)} - 0.679 \text{ (IRMAS)} - 0.312 \text{ (DSS)} - 0.056 \text{ (CMSS)} + 0.017 \text{ (IRMAS*CMSS)} - 0.021 \text{ (IRMAS*DSS)} + 0.232 \text{ (gender*IRMAS)} \]

This model accounted for a significant percentage of the variance in BAS-R, \( r^2 = .301, F(7, 425) = 26.14, p < .001 \). As hypothesized, IRMAS scores most significantly contributed to the prediction of BAS-R scores, \( b = -0.679, p < .001 \), but DSS scores also significantly contributed, \( b = -0.312, p = .003 \). Interestingly, CMSS on its own was not a significant predictor of bystander attitudes, \( b = -0.056, p = .187 \), but the interaction between CMSS and IRMAS was a significant predictor, \( b = 0.017, p < .001 \). Additionally, gender was not a significant predictor until it was evaluated as an interaction with IRMAS scores, \( b = 0.292, p = .021 \). Implications of these findings are discussed. See Table 6 for a full description of the predictor variables.
**Scale Development**

An analysis of the structural qualities of the CMSS was performed, including reliability and validity statistics and an exploratory factor analysis (EFA). Means, standard deviations, skewness and kurtosis levels can be found in Table 7, and the correlation matrix between all CMSS items can be found in Appendix F. The 29 items on the CMSS had an alpha value of .92, indicating high consistency across items. To determine the number of factors that should be used in the scale, a scree plot analysis was conducted (see Figure 1), revealing a drop in the amount of variance explained after the fourth factor. As mentioned before, all factor analyses were conducted using PAF, and utilized promax rotation, an oblique rotation method that allows for factors to be correlated with one another.

While the initial hypotheses suggested a total of 6 factors, both six-factor and five-factor models were clearly over-factored, with items cross-loading on two factors or low-loading on all factors. Further, in a three-factor model most items loaded onto the first factor, with very few on the second and third. Items loaded onto the four-factor model with relatively few cross-loading, and most loaded strongly onto one factor (loadings > .4). Therefore, it was determined that a four-factor model would be the most appropriate for the CMSS.

In all of the exploratory models, five items consistently cross-loaded or had low loadings on all factors. Examination of the correlation matrix indicated that two of the five items (“If a man gets turned down by one woman, he can just find another one” and “Men are naturally more sexually aggressive than women”) failed to correlate with the rest of the items very strongly, $r < .25$. The additional three items correlated strongly...
with nearly all of the other items, with an $r$-value of at least .2. These items were, “Sex is something that women have that men try to get”, “It’s not uncommon for women to use sex to get what they want,” and “Men have sexual impulses that women need to keep in check”. I assumed that these items reflected overarching concepts related to the commodity model of sex, and therefore correlated highly with multiple factors, but failed to fall into any specific subcategory.

The final model of the CMSS suggested by the EFA included 24 items. The four-factor, 24-item model explained 46.81% of the variance in scores, and all items loaded onto their respective factors with a loading value of at least .35 (see Table 8 for the pattern matrix of item loadings). Some of the factors grouped according to our initial hypothesis, while others offered a more difficult interpretation. Additionally, all four factors were highly correlated with one another (see Table 9).

The items in Factor 1 addressed the idea that a women’s value is based on her sexual activity, and posited women as passive gatekeepers to sex. Essentially, the items reflected the idea that women should be passive in sexual situations, and that women who do assert their sexual agency by engaging in sex with multiple partners are “dirtied” and less “valuable,” and therefore less worthy of commitment from a future partner. Based on the loadings, a revised title for Factor 1 items might be Women as Sexual Objects.

Items in Factor 2 most closely reflected concepts established in the theoretical subscale Men’s Value, but also addressed ideas related to men’s entitlement to women’s bodies; that is, the items essentially implied that certain attributes men have or actions men take entitle them to sex with women. For example, multiple items mentioned that being “rich,” “popular,” or “successful” entitle men to “attractive women”, or that men
who pay for dinner are entitled to sexual favors. Based on the items, a better descriptor for Factor 2 items might be *Men’s Entitlement to Sex*.

Factor 3 items were somewhat more mixed, reflecting notions from the *Men’s Value* subscale as well as *Men as Aggressors* and *Women are Exchangeable*. An overarching theme of the items in Factor 3 seemed to be the idea that men are aggressors in sexual situations, and that by engaging in sex, a man’s reputation only stands to increase. Conceptually, Factor 3 items might serve as a foil to Factor 1 items; for this reason, Factor 3 items might be best labeled as *Men as Sexual Agents*.

Finally, items that loaded onto Factor 4 were clearly related to the subscale *Availability Based on Dress*, and reflected the notion that women communicate sexual availability by dressing in a certain way. The importance of this scale lies in the idea that consent to sexual activity can be conferred based on dress or appearance, and that women invite sexual victimization by dressing in a certain way. Because these items loaded cleanly together, the original subscale name remained unchanged.

The 24-item, 4-factor model of the CMSS suggested by the EFA had an alpha value of .913, which was actually lower than the 29 item model, which reported a Cronbach alpha of .92. This difference can likely be attributed to the removal of the three items that loaded highly onto all four factors, which suggests that a one-factor model containing 27 items might be a superior model. Further analysis of the properties of the CMSS should be explored in future research, but for the purpose of this study, the one-factor, 29-item version of this scale was used in all relevant analyses.
**Discussion**

In conducting this study, I sought to lay foundational research that would provide support for the theory of the commodity model of sex. My first hypothesis stated that individuals showing greater endorsement of rape myths would also report greater endorsement of ideas related to the commodity model of sex. Zero-order correlations indicated that scores on the IRMAS and CMSS were highly correlated, which suggests a connection between adherence to the commodity model of sex and rape myth acceptance. Although correlation does not prove causation, this finding supports my initial theoretical supposition that adherence to the commodity model of sex may inform and sustain beliefs in rape myths.

It’s also worth noting that CMSS and DSS scores were highly correlated; however, the DSS was originally selected as a measure for this study because its items reflected statements that were indicative of the commodity model of sex. It could be argued that many of the principles of the commodity model of sex, like the idea that sex devalues women while empowering men, reflect cultural double standards surrounding sexual intimacy. Therefore, a certain amount of overlap between the constructs was expected, as double standards are an aspect of the commodity model of sex paradigm. It’s possible that the commodity model of sex represents a more complete understanding of our cultural conception of sex, one in which sexual double standards play an important role but fail to encompass the conception in its entirety.

I also predicted that individuals with high rape myth acceptance would report being less likely to intervene in situations that may lead to sexual assault. As hypothesized, scores on the IRMAS were negatively correlated with scores on the BAS-
R, indicating that individuals who more strongly accepted rape myths reported being less likely to intervene in situations that might lead to sexual assault. This finding has important implications for bystander intervention programs, which, as noted previously, are the current standard for rape prevention education. The strong, negative correlation between the constructs suggests that bystander intervention programs may be more effective if they also present trainees with information on rape myths. This finding was further confirmed in a regression model that was conducted to predict scores on the BAS-R using scores from the IRMAS, DSS, and CMSS.

**Predicting Bystander Attitudes**

Results from the regression model proved to be some of the most interesting findings from the dataset. Using scores from the IRMAS, CMSS, DSS, and demographics information, I hoped to determine what constructs could be used to predict scores on the BAS-R. In my final regression model, gender was controlled for. Results indicated that scores from the IRMAS were the best predictor for bystander intervention attitudes, followed by DSS scores. Interestingly, CMSS scores did not significantly contribute to the prediction of BAS-R scores, given the other predictors in the model.

However, a significant interaction was found between CMSS and IRMAS scores, indicating that the relationship between the commodity model of sex and bystander attitudes may be mediated by rape myth acceptance, an assertion further supported by the fact that CMSS failed to significantly contribute to the prediction of BAS-R scores on its own, given the other predictors in the model (Table 5a). The interaction indicated that rape myth acceptance was more predictive of bystander attitudes when scores on the CMSS were below average; essentially, if a participant were below the average on
CMSS, their IRMAS scores had a greater impact on predicted BAS-R scores than individuals who were at or above average on CMSS.

A second significant interaction was found between IRMAS scores and DSS scores, indicating that the slope between IRMAS and BAS-R became more negative when DSS scores were taken into account (Table 5b). For individuals scoring above average on the DSS, IRMAS scores more strongly predicted BAS-R scores. Finally, the regression model indicated a third interaction between gender and IRMAS scores (Table 5c). As was the case with CMSS scores, gender was not a significant predictor on its own given the other predictors in the model, but had a mediating effect between rape myth acceptance scores and bystander intervention scores; for men, increasing 1 point on the IRMAS altered BAS-R scores less than a proportionate increase in IRMAS scores for women.

Results from the regression model point to the importance of rape myth acceptance in an individual’s decision to intervene in a situation that may lead to sexual assault. This suggests that including a discussion of rape myths in bystander intervention training programs may be crucial to increasing the efficacy of the program. This finding is unsurprising, given that many of the central tenants of rape myths focus on the idea that rape survivors should have done something to prevent the assault. Holding rape myth supportive beliefs likely alleviates feelings of responsibility for preventing sexual assault by placing responsibility for prevention on the potential victim, thereby decreasing the probability of intervention.

A possible connection between adherence to the commodity model of sex and willingness to engage in bystander intervention was less clear; the interaction between
CMSS and IRMAS scores indicated that, while adherence to the commodity model of sex may not directly predict bystander attitudes, it does impact rape myth acceptance, which in turn affects bystander attitudes. The mediating effect of adherence to the commodity model of sex was somewhat expected, as the existing literature suggests that the commodity model of sex informs our understanding of rape myths, which in turn impacts bystander attitudes. Fundamentally then, this suggests that adjusting our cultural conception of sex from the commodity model to one that emphasized the importance of sexual agency, equitability, and consent might impact endorsement of rape myths, which may in turn affect bystander attitudes.

**Scale Development**

The factors created from the EFA align strongly with the theory of the commodity model of sex outlined in the literature. Specifically, results from the factor analysis suggest that the commodity model of sex may contain four key aspects: *Women as Sexual Objects, Men as Sexual Agents, Men’s Entitlement to Sex, and Sexual Availability Based on Dress.*

*Women as Sexual Objects.* The first CMSS factor suggested that women’s sexual objectification might be a tenant of the commodity model of sex, a finding that’s supported in the theoretical research literature. Items that loaded onto this factor included descriptions of women as passive in sexual situations (“It is expected that men make the first move”), implied that women who choose to engage in sex with more partners are “dirtied” or less valuable (“Women who have had sex with a lot of men are ‘dirty’”; “Men prefer to marry women who haven’t had sex with many men”), and asserted that a
woman’s power was inherently connected to her ability to refuse sex (“Women lose their power over men by having too many sex partners”).

Insisting that women remain passive denies women’s agency in sexual situations. Similarly, implying that women who flout the cultural norms regarding sexual behavior are “dirtied” and “less valuable” stigmatizes women who choose to engage as agents in their own sexuality. These sentiments are echoed in Kendall’s research on the commodity model of sex and AOUME curricula, in which women are described as products which “lose value rapidly after they are ‘opened’” (Kendall, 2013, p. 215). Additionally, the commodity model of sex insists that women who abstain from sex are more “valuable” than women who don’t (Fillipovic, 2008; Kendall, 2013). Taken together, the factors one items reflect the notion that, under the commodity model of sex, women’s sexual roles are relegated to that of a passive object.

**Men as Sexual Agents.** A second factor that emerged from the EFA was *Men as Sexual Agents*. Items that loaded onto this factor included statements linking men’s status to their sexual prowess (“The more women a man sleeps with the more other men respect him”, “The more ‘notches’ on a man’s belt the better his reputation”), and that described men as initiators in sexual encounters (“If a man goes up to a woman at a bar and starts a conversation, he’s probably interested in sex).

The idea of men as sexual agents is supported in the existing literature on the commodity model of sex. Kendall (2013) noted that AOUME curricula, which expounds the commodity model of sex, described boys as “near animals with barely leased sexual impulses” (p. 37), and insisted that it’s in men’s “nature” to “want to consume as much sex as possible, and at the lowest ‘price’” (p. 216). These statements normalize men’s
sexual aggression, as well as the seemingly “inherent” competition between men to “consume as much sex as possible”.

The factors *Women as Sexual Objects* and *Men as Sexual Agents* reflect inherently contradictory and, taken to their logical conclusion, dangerous ideas espoused under the commodity model of sex paradigm. The commodity model of sex posits men and women’s sexual roles as inherently combatant, insisting at once that a woman’s value hinges on her ability to refuse sex, and a man’s depends on his ability to obtain it regardless. In addition to establishing men and women’s roles in sexual encounters as inherently contradictory, these notions feed into popular rape myths that insist women who step outside of rigid sexual narratives are “inviting” sexual victimization; that assaults on women who do engage in sex outside of the narrow confines of marriage shouldn’t be taken seriously; and that men should always be ready and willing sexual participants.

*Men’s Entitlement to Sex.* A third factor that emerged in the EFA was *Men’s Entitlement to Sex*, which contained statements insisting that certain attributes men have (“Men who are rich should get any girl they want”, “Men who are successful deserve to be with an attractive woman”) or actions men take (“If a man pays for dinner it’s reasonable for him to expect sexual favors at the end of the night”) entitle them to sex. Such a notion removes women’s opinions and feelings from consideration, once again denying their agency in sexual situations, and asserts that women are objects that can be earned by virtue of men’s wealth and status.

The idea that men are entitled to sex may be a central tenant of the commodity model, as it conceptualizes sex as something analogous to property or money, that can be
“given” or “bought” (Millar, 2008, p. 30), and that is owed to a man in exchange for his wealth or status. Importantly, this idea reinforces that “under the commodity model of sex, consent is presumed…[and] not necessarily an affirmative act” by disregarding women’s individual agency and ability to make their own decisions regarding who they choose to have sex with. Further, insisting that certain attributes entitle men to sex reinforces the rape myth that only specific scenarios count as “real rape”; if a man feels entitled to sex after treating his partner to dinner, then taking it from her might be viewed as him getting what he’s owed.

**Availability Based on Dress.** The fourth factor established in the EFA, *Availability Based on Dress*, followed almost exactly the theoretical tenant of the same name hypothesized in the literature review. Items that loaded onto this factor included items stating that a woman’s sexual availability can be determined based on her dress (“Women who are wearing little clothing in public are signaling that they want sex”), and that women who experience harassment supposedly based on how they’re dressed are inviting victimization (“Women who ear suggestive clothes to a bar shouldn’t be surprised if men try to grab them”).

This concept is expounded on extensively in Kendall’s (2013) investigation into AOUME curricula, wherein young women were told that rape often occurs because a woman “failed to send the right messages through her dress and demeanor” (p. 210). Under the commodity model of sex, women should be protected from rape by dressing conservatively, which supposedly serves as a signal of their sexual virtue. Therefore when rape does occur, it’s explained as the result of a woman “misrepresenting her value and the aggressor therefore misreading the price of sex” (Kendall, 2013, p. 217).
Cross-Loaded Factors. As mentioned previously, three items correlated strongly with nearly all of the other items yet failed to load clearly onto a single factor. These items were, “Sex is something that women have that men try to get”, “It’s not uncommon for women to use sex to get what they want,” and “Men have sexual impulses that women need to keep in check”, all of which reflect notions seemingly inherent in the commodity model of sex. The most parsimonious explanation for the cross loading of these items might be that they reflect overarching concepts related to the commodity model of sex; therefore, they correlated highly with multiple factors, but failed to fall into any specific subcategory. Because the coefficient alpha for the scale actually drops with the deletion of these items, I assert that they represent overarching concepts crucial to fully explaining the commodity model of sex, and should therefore be kept in the scale, pending an item analysis that supports this assertion.

Limitations

Despite the statistical support behind our findings, this study was not without its limitations. One limitation of the present study is the homogenous sample of respondents. While the sample demographics were fairly representative of JMU, JMU’s population is by no means an accurate reflection of broader American culture. In order to assert that the commodity model of sex is a culturally engrained concept, similar results would have to be found in studies utilizing different sample groups from a variety of different populations. Further, the nature of the current study lends itself to the possibility of participants lying about their true feelings in order to appear “better” to the researchers; participants were reassured of the anonymity of their responses, which hopefully cut down on socially desirable responding.
Another limitation of the current study is the somewhat limited psychometric work on the Commodity Model of Sex Scale. Additional validity measures should still be performed, and an item analysis of the scale might result in additional items being removed if they have poor psychometric validity. If this occurs, a second EFA utilizing the remaining items should be performed to determine whether the suggested four-factor structure of the CMSS is upheld.

Additionally, an EFA is exploratory by nature, so while the suggested factors seem to align with the theoretical framework outlined in the literature on the commodity model of sex, a confirmatory factor analysis (CFA) would be beneficial to conduct. In fact, a CFA would help determine whether the CMSS factors are different enough to warrant scoring the items as separate subscales, or if a unidimensional scale and single score is more appropriate. Finally, conducting a CFA would also shed light on whether the suggested inclusion of the three cross-loaded items is valid, or if these items should be removed from the scale altogether.

Because a full evaluation of the properties of the CMSS has yet to be conducted, results from the zero-order correlations and regression analysis should be interpreted with caution. However, existing analysis of the scale suggests that the form of the CMSS utilized in the current study has appropriate validity and reliability measures to warrant the use of CMSS scores in the current analysis.

**Suggestions for Future Research**

The foundational nature of the current study lends itself to a plethora of future research possibilities. First, the present study did not ask participants to indicate their sexual orientation. Because the commodity model of sex defines sex in strictly
heteronormative terms, the scales also reflected heteronormative assumptions about sexual activity. It would be interesting to investigate whether a study of the commodity model of sex geared specifically towards LGBTQ+ identified people would result in similar correlational and predictive patterns, or whether being queer-identified moderates an individual’s adherence to the commodity model of sex and subsequent belief in rape myths.

Second, to limit the scope of the current study, the items also assumed men as potential perpetrators and women as potential victims of sexual assault, but it is crucial to address men’s experiences with sexual assault as well. One in 71 men in college have reported experiencing attempted or completed rape during their time as undergraduates; this statistic jumps to 1 in 33 men in the general population (RAINN). However, this number is likely grossly under-representative of actual instances of assault; in fact, Pino and Meier (1999) indicated that men are 1.5 times less likely to report sexual assault to police than women. The noted reluctance from male survivors to seek help makes it critical to address the specific barriers that male survivors experience when deciding to seek redress or psychological counseling after experiencing sexual assault.

Further, rape myths concerning male survivors reflect a unique set of stigmatizations associated with being a male survivor of rape, and include the idea that (a) male rape does not happen, (b) when male rape does happen, it’s the survivor’s fault for not escaping, and (c), men are not as traumatized by rape as women (Struckman-Johnson & Struckman-Johnson, 1992). These myths operate in much the same way rape myths geared towards women who are raped function, deterring survivors from reporting assault and encouraging self-blame. Previous research has indicated that the underlying
ideologies that facilitated rape myth acceptance would be the same in both male and female rape myth acceptance (Chapleau, Oswald, & Russell, 2008; Burt, 1980; Glick & Fiske, 1997; Viki & Abrams, 2002; Abrams, Viki, Masser, & Bohner, 2003). Therefore, it would be reasonable to assume that individuals who were more likely to endorse male rape myths might also be more likely to hold ideologies supportive of the commodity model of sex.

Finally, the results from this study could be used to better inform bystander intervention curricula and suggest appropriate interventions that may cut down on the prevalence of sexual assault. Based on the results of the current study, designing intervention programs that address both rape myths and the commodity model of sex should increase the probability of an individual choosing to engage in bystander intervention strategies. If possible, future studies should seek to investigate this connection using an experimental design framework, which would provide stronger evidence for a causal relationship between adherence to the commodity model of sex and rape myth acceptance, as well as between rape myth acceptance and bystander intervention.

Conclusions

The current study investigated whether a connection between the endorsement the commodity model of sex and adherence to rape myths exists, and whether these factors affect bystander attitudes. Results supported a connection between all three of these factors, and suggested that adherence to the commodity model of sex may influence rape myth acceptance, which in turn influences bystander attitudes. The idea that cultural conceptions of sex might bolster acceptance of rape myths is one that has substantial
theoretical backing, but has not been explicitly investigated in existing research literature until the current study.

The apparent connection between the two concepts has far reaching implications for how we teach young people about sex, and how these lessons influence our perception of rape. The commodity model of sex leaves little room for women to explore and develop their own sense of sexual agency, insisting instead that women deny sex and sexuality to promote their own sense of safety and protect themselves against assault. This model at once reinforces traditional double standards for men and women in sexual encounters while also placing the responsibility for rape prevention on women, so that if a woman does experience sexual violence, blame for the assault falls on her as opposed to the perpetrator. As explored in the literature review, fear of being blamed for an assault acts as a tremendous barrier in a survivor’s decision to seek redress and counseling after an assault, which in turn can have huge ramifications on survivor’s mental health and overall well-being.

Further, the commodity model of sex fails to address the necessity of consent in any and all sexual practices. Instead, under the commodity model consent is presumed, and “not necessarily enthusiastic participation, or even an affirmative act” (Millar, 2008, p. 36). The failure to teach young people about the necessity of consent, and how to ensure it’s been obtained from potential sexual partners, represents a gross and startling oversight in current sex education curricula, and may help to explain the prevalence of sexual assault on college campuses and beyond. These findings point to the importance of revising current sex education curricula from one that supports the commodity model to one that emphasizes the importance of consent and equitable roles between sexual
partners. Kendall (2013) also suggests that discussions about healthy sexual relationships include “discussions about…the social and institutional arrangements…that in practice support sexual abuse and rape” (p. 217 – 218), including addressing how the inherently unequal social and physical power dynamics between men and women influence perceptions of sexual assault.

Results from this study might be used to better inform not only sex education curricula, but bystander intervention training as well. Addressing rape myths is not a current standard for bystander intervention programs, although the curriculum for specific programs across the country varies greatly. Because scores on the rape myth acceptance scale played a substantial role in predicting bystander intervention scores, it is likely critical to address rape myths as a component of bystander intervention training in order to increase the efficacy of training programs.

This study represents the beginning of what must ultimately be a collective effort to adjust cultural thinking surrounding not only sexual assault, but also the way in which people are taught to conceptualize healthy sexual relationships. Such a movement would likely not only cut down on the prevalence of sexual assault, but would also help foster environments wherein survivors of assault feel comfortable and safe seeking legal adjudication and counseling for the crime committed against them. By addressing the possible underlying mechanisms and concepts that facilitate victim-blaming attitudes, we stand to help create a safer, more just and more equitable culture for all.
### Table 1. CMSS Items

<table>
<thead>
<tr>
<th>Facet</th>
<th>Number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>WV-1</td>
<td>1</td>
<td>Men prefer to marry women who haven’t had sex with many men.</td>
</tr>
<tr>
<td>WE-1</td>
<td>2</td>
<td>If a man gets turned down by one woman he can just find another one.</td>
</tr>
<tr>
<td>MA-1</td>
<td>3</td>
<td>Men are naturally more sexually aggressive than women.</td>
</tr>
<tr>
<td>AD-1</td>
<td>4</td>
<td>Women who wear little clothing in public are signaling that they want sex.</td>
</tr>
<tr>
<td>SA-1</td>
<td>5</td>
<td>Men who are successful deserve to be with an attractive woman.</td>
</tr>
<tr>
<td>BE-1</td>
<td>6</td>
<td>Women should hold out longer before having sex.</td>
</tr>
<tr>
<td>WV-2</td>
<td>7</td>
<td>Women lose their power over men by having too many sex partners.</td>
</tr>
<tr>
<td>WE-2</td>
<td>8</td>
<td>The best way for a guy to get over a girl is to get under a new one.</td>
</tr>
<tr>
<td>MA-2</td>
<td>9</td>
<td>Men will never turn down the chance to have sex.</td>
</tr>
<tr>
<td>AD-2</td>
<td>10</td>
<td>If a girl is wearing tight, skimpy clothes, she probably wants to have sex.</td>
</tr>
<tr>
<td>SA-2</td>
<td>11</td>
<td>Men who have sex with a lot of women are “studs”.</td>
</tr>
<tr>
<td>BE-2</td>
<td>12</td>
<td>Sex is something that women have that men try to get.</td>
</tr>
<tr>
<td>WV-3</td>
<td>13</td>
<td>It’s harder for a woman who sleeps around to find a husband.</td>
</tr>
<tr>
<td>WE-3</td>
<td>14</td>
<td>Men are more interested in having sex than who they have sex with.</td>
</tr>
<tr>
<td>MA-3</td>
<td>15</td>
<td>If a man goes up to a woman at a bar and starts a conversation, he’s probably interested in sex.</td>
</tr>
<tr>
<td>AD-3</td>
<td>16</td>
<td>Women who wear suggestive clothes to a bar shouldn’t be surprised if men try to grab them.</td>
</tr>
<tr>
<td>SA-3</td>
<td>17</td>
<td>The more women a man sleeps with the more other men respect him.</td>
</tr>
<tr>
<td>BE-3</td>
<td>18</td>
<td>If a man pays for dinner it’s reasonable for him</td>
</tr>
</tbody>
</table>
to expect sexual favors in return.

WV-4  19. Women who wait until marriage to have sex
will have a more successful marriage.

MA-4  20. Women shouldn’t pursue men they want to
have sex with; they should let men pursue them.

BE-4  21. It’s not uncommon for women to use sex to get
what they want.

WV-5  22. Men don’t want to get serious with a woman
who is known for having multiple sex partners.

SA-4  23. The more “notches” on a man’s belt the better
his reputation.

WV-6  24. A guy would never marry a woman who sleeps
around, but he would have sex with her.

MA-5  25. It’s expected that men make the first move.

SA-5  26. Among several guys, the most popular one
should have the best looking girlfriend.

MA-6  27. Men have sexual impulses that women need to
keep in check.

SA-5  28. Men who are rich should get any girl they want.

WV-7  29. Women who have had sex with a lot of men are
“dirty”.

Table 2. Means, Standard Deviations, and Intercorrelations

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>IRMAS</th>
<th>BAS-R</th>
<th>DSS</th>
<th>CMSS</th>
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<tr>
<td>IRMAS</td>
<td>26.3</td>
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<td>1.00</td>
<td>-0.452*</td>
<td>.396*</td>
<td>.482*</td>
</tr>
<tr>
<td>BAS-R</td>
<td>116.64</td>
<td>12.19</td>
<td>---</td>
<td>1.00</td>
<td>-0.411*</td>
<td>-</td>
</tr>
<tr>
<td>DSS</td>
<td>20.06</td>
<td>6.63</td>
<td>---</td>
<td>---</td>
<td>1.00</td>
<td>.703*</td>
</tr>
<tr>
<td>CMSS</td>
<td>69.83</td>
<td>17.61</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p correlations significant at p < .01

Table 3. Effect Sizes Among Scales ($r^2$)

<table>
<thead>
<tr>
<th></th>
<th>IRMAS</th>
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<th>DSS</th>
<th>CMSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRMAS</td>
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<td>.157</td>
<td>.232</td>
</tr>
<tr>
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<td>---</td>
<td>1.00</td>
<td>.169</td>
<td>.171</td>
</tr>
<tr>
<td>DSS</td>
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<td>---</td>
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<td>.494</td>
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<tr>
<td>CMSS</td>
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<td>---</td>
<td>---</td>
<td>1.00</td>
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</tbody>
</table>
Table 4a. Demographics ANOVA for BAS-R

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td>94.09</td>
<td>1</td>
<td>94.09</td>
<td>.712</td>
<td>.399</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Greek Life</td>
<td>144.19</td>
<td>2</td>
<td>72.06</td>
<td>.545</td>
<td>.58</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Gender</td>
<td>329.3</td>
<td>2</td>
<td>164.65</td>
<td>.25</td>
<td>.289</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>BIT</td>
<td>1329.22</td>
<td>2</td>
<td>664.61</td>
<td>5.03</td>
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<td>&lt; .001</td>
</tr>
<tr>
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<td>396</td>
<td>132.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>417</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant at p < .01

Table 4b. Demographics ANOVA for IRMAS

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
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<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td>115.55</td>
<td>1</td>
<td>115.55</td>
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</tr>
<tr>
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<td>13.91</td>
<td>.16</td>
<td>.852</td>
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<tr>
<td>Gender</td>
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<td>228.34</td>
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<td>.003</td>
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<tr>
<td>Error</td>
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<td>86.82</td>
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*significant at p < .01

Table 4c. Demographics ANOVA for DSS

<table>
<thead>
<tr>
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<th>F</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
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<td>1</td>
<td>25.01</td>
<td>.585</td>
<td>.445</td>
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</tr>
<tr>
<td>Greek Life</td>
<td>40.92</td>
<td>2</td>
<td>20.46</td>
<td>.479</td>
<td>.620</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Gender</td>
<td>171.21</td>
<td>2</td>
<td>85.60</td>
<td>2.00</td>
<td>.136</td>
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</tr>
<tr>
<td>BIT</td>
<td>34.98</td>
<td>2</td>
<td>17.49</td>
<td>.409</td>
<td>.664</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Error</td>
<td>16925.91</td>
<td>396</td>
<td>42.74</td>
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</tr>
<tr>
<td>Total</td>
<td>185121.</td>
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</table>
Table 4d. Demographics ANOVA for CMSS

<table>
<thead>
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<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td>209.96</td>
<td>1</td>
<td>209.96</td>
<td>.717</td>
<td>.398</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Greek Life</td>
<td>5.91</td>
<td>2</td>
<td>2.96</td>
<td>.010</td>
<td>.99</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Gender</td>
<td>461.69</td>
<td>2</td>
<td>230.84</td>
<td>.788</td>
<td>.455</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>BIT</td>
<td>812.58</td>
<td>2</td>
<td>406.29</td>
<td>1.39</td>
<td>.251</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Error</td>
<td>115989.0</td>
<td>396</td>
<td>292.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2162403.0</td>
<td>417</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5a. Interaction Term, CMSS*IRMAS

![Graph showing predicted BAS-R against IRMAS](image)

- Average CMSS
- +1 SD on CMSS
- -1 SD on CMSS
Table 5b. Interaction Term, DSS*IRMAS

Table 5c. Interaction Term, Gender*IRMAS
Table 6. Hierarchical Regression Model

<table>
<thead>
<tr>
<th></th>
<th>(b)</th>
<th>(\beta)</th>
<th>(r)</th>
<th>(F) Total</th>
<th>(\text{Sig.})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-2.33</td>
<td>-0.080</td>
<td>0.549</td>
<td>26.14</td>
<td>0.090</td>
</tr>
<tr>
<td>IRMAS</td>
<td>-0.679</td>
<td>-0.572</td>
<td>---</td>
<td>---</td>
<td>0.000*</td>
</tr>
<tr>
<td>DSS</td>
<td>-0.312</td>
<td>-0.173</td>
<td>---</td>
<td>---</td>
<td>0.003*</td>
</tr>
<tr>
<td>CMSS</td>
<td>-0.056</td>
<td>-0.083</td>
<td>---</td>
<td>---</td>
<td>0.182</td>
</tr>
<tr>
<td>Int1</td>
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<td>0.236</td>
<td>---</td>
<td>---</td>
<td>0.000*</td>
</tr>
<tr>
<td>Int2</td>
<td>-0.021</td>
<td>-0.120</td>
<td>---</td>
<td>---</td>
<td>0.041*</td>
</tr>
<tr>
<td>Int3</td>
<td>0.292</td>
<td>0.125</td>
<td>---</td>
<td>---</td>
<td>0.021*</td>
</tr>
</tbody>
</table>

\(Int1 = IRMAS*CMSS; \ Int2 = IRMAS*DSS; \ Int3 = gender*IRMAS\)

Table 7. CMSS Items Descriptive Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness(^a)</th>
<th>Kurtosis(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>q1</td>
<td>3.25</td>
<td>1.094</td>
<td>-0.368</td>
<td>-0.670</td>
</tr>
<tr>
<td>q2</td>
<td>3.23</td>
<td>1.014</td>
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<td>-0.420</td>
</tr>
<tr>
<td>q3</td>
<td>3.41</td>
<td>1.047</td>
<td>-0.754</td>
<td>-0.180</td>
</tr>
<tr>
<td>q4</td>
<td>2.07</td>
<td>1.028</td>
<td>0.717</td>
<td>-0.313</td>
</tr>
<tr>
<td>q5</td>
<td>2.08</td>
<td>1.011</td>
<td>0.636</td>
<td>-0.419</td>
</tr>
<tr>
<td>q6</td>
<td>2.56</td>
<td>1.183</td>
<td>0.224</td>
<td>-0.926</td>
</tr>
<tr>
<td>q7</td>
<td>2.23</td>
<td>1.057</td>
<td>0.544</td>
<td>-0.474</td>
</tr>
<tr>
<td>q8</td>
<td>1.88</td>
<td>0.995</td>
<td>0.973</td>
<td>0.162</td>
</tr>
<tr>
<td>q9</td>
<td>2.29</td>
<td>1.160</td>
<td>0.574</td>
<td>-0.756</td>
</tr>
<tr>
<td>q10</td>
<td>1.92</td>
<td>0.950</td>
<td>0.865</td>
<td>0.062</td>
</tr>
<tr>
<td>q11</td>
<td>1.78</td>
<td>0.969</td>
<td>1.174</td>
<td>0.672</td>
</tr>
<tr>
<td>q12</td>
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<td>1.118</td>
<td>0.382</td>
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<tr>
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<td>1.177</td>
<td>0.154</td>
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<td>1.123</td>
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<td>q15</td>
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<tr>
<td>q16</td>
<td>2.14</td>
<td>1.129</td>
<td>0.609</td>
<td>-0.831</td>
</tr>
<tr>
<td>q17</td>
<td>2.80</td>
<td>1.189</td>
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<tr>
<td>q18</td>
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<td>0.755</td>
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<td>1.462</td>
</tr>
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<td>1.137</td>
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<td>-0.064</td>
</tr>
<tr>
<td>q21</td>
<td>2.97</td>
<td>1.130</td>
<td>-0.340</td>
<td>-0.924</td>
</tr>
<tr>
<td>q22</td>
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<td>1.127</td>
<td>-0.046</td>
<td>-0.844</td>
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<tr>
<td>q23</td>
<td>2.22</td>
<td>1.037</td>
<td>0.433</td>
<td>-0.730</td>
</tr>
<tr>
<td>q24</td>
<td>2.71</td>
<td>1.140</td>
<td>0.080</td>
<td>-0.886</td>
</tr>
<tr>
<td>q25</td>
<td>3.28</td>
<td>1.148</td>
<td>-0.556</td>
<td>-0.635</td>
</tr>
<tr>
<td>q26</td>
<td>1.84</td>
<td>0.951</td>
<td>1.018</td>
<td>0.385</td>
</tr>
<tr>
<td>q27</td>
<td>2.22</td>
<td>1.085</td>
<td>0.377</td>
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</table>
Table 8. *Pattern Matrix of Item Loadings*

<table>
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<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>It's harder for a woman who sleeps around to find a husband.</td>
<td>0.71</td>
<td>-0.06</td>
<td>0.00</td>
<td>0.10</td>
</tr>
<tr>
<td>Men don't want to get serious with a woman who is known for having multiple sex partners.</td>
<td>0.70</td>
<td>-0.16</td>
<td>0.07</td>
<td>0.08</td>
</tr>
<tr>
<td>A guy would never marry a woman who sleeps around, but he would have sex with her.</td>
<td>0.67</td>
<td>-0.14</td>
<td>0.20</td>
<td>-0.04</td>
</tr>
<tr>
<td>Men prefer to marry women who haven't had sex with many men.</td>
<td>0.66</td>
<td>-0.07</td>
<td>-0.01</td>
<td>-0.03</td>
</tr>
<tr>
<td>Women who have had sex with a lot of men are &quot;dirty&quot;.</td>
<td>0.65</td>
<td>0.09</td>
<td>-0.12</td>
<td>0.11</td>
</tr>
<tr>
<td>Women lose their power over men by having too many sex partners.</td>
<td>0.64</td>
<td>0.21</td>
<td>-0.06</td>
<td>-0.01</td>
</tr>
<tr>
<td>Women should hold out longer before having sex.</td>
<td>0.63</td>
<td>0.17</td>
<td>-0.02</td>
<td>-0.12</td>
</tr>
<tr>
<td>It is expected that men make the first move.</td>
<td>0.57</td>
<td>-0.08</td>
<td>0.18</td>
<td>-0.12</td>
</tr>
<tr>
<td>Women who wait until marriage to have sex will have a more successful marriage.</td>
<td>0.56</td>
<td>0.03</td>
<td>-0.12</td>
<td>0.00</td>
</tr>
<tr>
<td>Women shouldn't pursue men they want to have sex with; they should let men pursue them.</td>
<td>0.53</td>
<td>0.18</td>
<td>-0.11</td>
<td>0.03</td>
</tr>
<tr>
<td>Men who are rich should get any girl they want.</td>
<td>-0.03</td>
<td>0.88</td>
<td>-0.11</td>
<td>-0.02</td>
</tr>
<tr>
<td>Men who have sex with a lot of women are &quot;studs&quot;.</td>
<td>-0.11</td>
<td>0.64</td>
<td>0.12</td>
<td>0.04</td>
</tr>
<tr>
<td>Among several guys, the most popular one should have the best looking girlfriend.</td>
<td>0.13</td>
<td>0.63</td>
<td>0.14</td>
<td>-0.09</td>
</tr>
<tr>
<td>The best way for a guy to get over a girl is for him to get under a new one.</td>
<td>-0.02</td>
<td>0.63</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>If a man pays for dinner it's reasonable for him to expect sexual favors at the end of the night.</td>
<td>-0.07</td>
<td>0.59</td>
<td>0.07</td>
<td>0.14</td>
</tr>
<tr>
<td>Men who are successful deserve to be with an attractive woman.</td>
<td>0.18</td>
<td>0.53</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>The more women a man sleeps with the more other men respect him.</td>
<td>-0.08</td>
<td>-0.02</td>
<td>0.73</td>
<td>-0.06</td>
</tr>
<tr>
<td>Men are more interested in having sex than who they have sex with.</td>
<td>0.13</td>
<td>-0.14</td>
<td>0.59</td>
<td>0.14</td>
</tr>
<tr>
<td>The more &quot;notches&quot; on a man's belt the better his reputation.</td>
<td>0.03</td>
<td>0.29</td>
<td>0.54</td>
<td>-0.17</td>
</tr>
</tbody>
</table>

*a SE = .114
b SE = .228
If a man goes up to a woman at a bar and starts a conversation, he's probably interested in sex.

Men will never turn down the chance to have sex.

Women who wear little clothing in public are signaling that they want sex.

If a girl is wearing tight skimpy clothes, she probably wants to have sex.

Women who wear suggestive clothes to a bar shouldn't be surprised if men try to grab them.

Table 9. Factor Correlations

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.50</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.56</td>
<td>0.40</td>
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</tr>
<tr>
<td>4</td>
<td>0.60</td>
<td>0.60</td>
<td>0.35</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 1. Scree Plot for CMSS Items
Appendix B

Illinois Rape Myth Acceptance Scale (Payne, Lonsway, & Fitzgerald, 1999)

Instructions: Please indicate your response to the following questions regarding your attitudes about the sex roles of men and women. Please keep in mind that there are no right or wrong answers. Please answer honestly.

Strongly Disagree = 1; Moderately Disagree = 2; Slightly Disagree = 3; Neither Agree nor Disagree = 4; Slightly Agree = 5; Moderately Agree = 6; Strongly Agree = 7

1. If a woman is raped while she is drunk, she is at least somewhat responsible for letting things get out of control.
2. Although most women wouldn’t admit to it, they generally find being physically forced into sex a real turn-on.
3. If a woman is willing to make out with a guy, then it’s no big deal if he goes a little further and has sex.
4. Many women secretly desire to be raped.
5. If a woman doesn’t physically fight back, you can’t really say that it was rape.
6. Men from nice middle-class homes almost never rape.
7. Rape accusations are often used as a way of getting back at men.
8. All women should have access to self-defense classes. (Filler item, not scored)
9. It’s usually only women who dress suggestively who are raped.
10. If the rapist doesn’t have a weapon, you really can’t call it rape.
11. Rape is unlikely to happen in the woman’s own familiar neighborhood.
12. Women tend to exaggerate how much rape affects them.
13. A lot of women lead a man on and then they cry rape.
14. Men don’t usually intend to force sex on a woman, but sometimes they get too sexually carried away.
15. Rape happens when a man’s sex drive gets out of control.
Appendix C

Double Standard Scale (DSS; Caron, Davis, Halteman, & Stickle, 1993)

Instructions: Please indicate your response to the following questions regarding your attitudes about the sex roles of men and women. Please keep in mind that there are no right or wrong answers. Please answer honestly.

Strongly Agree = 1; Agree = 2; Undecided = 3; Disagree = 4; Strongly Disagree = 5

1. It is expected that a woman be less sexually experienced than her partner.
2. A woman who is sexually active is less likely to be considered a desirable partner.
3. A woman should never appear to be prepared for a sexual encounter.
4. It is important that men be more sexually experienced so they can help teach women.
5. A “good” woman would never have a one-night-stand, but it is expected of men.
6. It is important for a man to have multiple sexual experiences in order to gain experience.
7. In sex the man should take the dominant role and the woman should assume the passive role.
8. It is acceptable for a woman to carry condoms.*
9. It is worse for a woman to sleep around than it is for a man.
10. It is up to men to initiate sex.
Appendix D

Bystander Attitude Scale Revised (BAS-R; Banyard, Moynihan, & Plante, 2005)

Instructions: Please indicate your response to the following questions regarding your attitudes about various scenarios that might require bystander intervention. Please keep in mind that there are no right or wrong answers. Please answer honestly.

Strongly Disagree = 1; Disagree = 2; Undecided = 3; Agree = 4; Strongly Agree = 5

1. Call 911 and tell the hospital my suspicions if I suspect that my friend has been drugged.
2. Try to get help if I suspect a stranger at a party has been drugged.
3. Talk to the friends of a drunk person to make sure they don’t leave their drunk friend behind at the party.
4. If I see someone at a party who has had too much to drink, I ask them if they need to be walked home so they can go to sleep.
5. If my roommate or friend said that they had an unwanted sexual experience but they don’t call it “rape” I question them further.
6. Walk a stranger home from a party who has had too much to drink.
7. Walk a friend home from a party who has had too much to drink.
8. If I saw a friend taking a very intoxicated person up the stairs to my friend’s room, I would say something and ask what my friend was doing.
9. If I saw several strangers dragging a passed out woman up to their room, I would get help and try to intervene.
10. If I hear an acquaintance talking about forcing someone to have sex with them, I speak up against it and express concern for the person who was forced.
11. Say something to a person whose drink I saw spiked with a drug even if I didn’t know them.
12. Grab someone else’s cup and pour their drink out if I saw that someone slipped something into it.
13. Call a rape crisis center or talk to a resident counselor for help if a friend told me they were sexually assaulted.
14. Call a rape crisis center or talk to a resident counselor for help if an acquaintance told me they were sexually assaulted.
15. Call a rape crisis center or talk to a resident counselor for help if a stranger told me they were sexually assaulted.
16. Let a friend I suspect has been sexually assaulted know that I am available for help and support.
17. Share information about sexual assault and violence with my friend.
18. Speak up in class if a professor explains that women like to be raped.
19. Speak up if I hear someone say “she deserved to be raped.”
20. Watch my drinks and my friends’ drinks at parties.
21. Ask for verbal consent when I am intimate with my partner, even if we are in a long-term relationship.
22. I won’t stop sexual activity when asked to if I am already sexually aroused.
23. I obtain verbal consent before engaging in sexual behavior.
24. If I hear that a teammate, dorm mate, fraternity brother, sorority sister has been accused of sexual violence, I keep any information I may have to myself.
25. Educate myself about sexual violence and what I can do about it.
26. I see a man talking to a woman at a bar. He is sitting very close to her and by the look on her face I can see she is uncomfortable. I ask her if she is ok.
27. I encourage people who say they have had unwanted sexual experiences to keep quiet so they don’t get others in trouble.
28. If I know information about an incident of sexual violence, I tell authorities what I know in case it is helpful.
Appendix E

Commodity Model of Sex Scale

*Instructions:* Please indicate your response to the following questions regarding your attitudes about the sex roles of men and women. Please keep in mind that there are no right or wrong answers. Please answer honestly.

Strongly Disagree = 1; Disagree = 2; Undecided = 3; Agree = 4; Strongly Agree = 5

1. Men prefer to marry women who haven’t had sex with many men.
2. If a man gets turned down by one woman he can just find another one.
3. Men are naturally more sexually aggressive than women.
4. Women who wear little clothing in public are signaling that they want sex.
5. Men who are successful deserve to be with an attractive woman.
6. Women should hold out longer before having sex.
7. Women lose their power over men by having too many sex partners.
8. The best way for a guy to get over a girl is to get under a new one.
9. Men will never turn down the chance to have sex.
10. If a girl is wearing tight skimpy clothes, she probably wants to have sex.
11. Men who have sex with a lot of women are “studs”.
12. Sex is something that women have that men try to get.
13. It’s harder for a woman who sleeps around to find a husband.
14. Men are more interested in having sex than who they have sex with.
15. If a man goes up to a woman at a bar and starts a conversation, he’s probably interested in sex.
16. Women who wear suggestive clothes to a bar shouldn’t be surprised if men try to grab them.
17. The more women a man sleeps with the more other men respect him.
18. If a man pays for dinner it’s reasonable for him to expect sexual favors at the end of the night.
19. Women who wait until marriage to have sex will have a more successful marriage.
20. Women shouldn’t pursue men they want to have sex with; they should let men pursue them.
21. It’s not uncommon for women to use sex to get what they want.
22. Men don’t want to get serious with a woman who is known for having multiple sex partners.
23. The more “notches” on a man’s belt the better his reputation.
24. A guy would never marry a woman who sleeps around, but he would have sex with her.
25. It is expected that men make the first move.
26. Among several guys, the most popular one should have the best looking girlfriend.
27. Men have sexual impulses that women need to keep in check.
28. Men who are rich should get any girl they want.
29. Women who have had sex with a lot of men are “dirty”.
Appendix F

Demographics

1. Please indicate your age in whole years: (open form)
2. Please indicate your year in school:
   - First year
   - Second year
   - Third year
   - Fourth year
   - Fifth year
   - Graduate Student
   - Other
3. Please indicate your ethnicity (check all that apply):
   - African American/Black
   - American Indian/ Native America/ Alaska Native
   - Asian/ Pacific Islander
   - Latino/ Latina
   - White
   - Other
   - Prefer not to respond
4. Please indicate your gender (select the identity that you most strongly identify with):
   - Man
   - Woman
   - Trans*
   - Agender
   - Intersex
   - Genderqueer
   - Other
   - Prefer not to respond
5. Are you an international student?
   - Yes (if “Yes”: In which country do you have citizenship? (Open form))
   - No
   - Prefer not to respond
6. Are you involved in intercollegiate athletics?
   - Yes
   - No
   - Prefer not to respond
7. Are you a member of a fraternity or sorority?
   - Yes
   - No
   - Prefer not to respond
8. Are you an active member of any of the following student organizations? Select all that apply:
• Campus Assault Response (CARE)
• Habitat for Humanity
• Orientation (eg: FROG, OPA, ANT)
• SGA
• Madison Equality
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