MEN’S AND WOMEN’S IMPLICIT SEXUAL DOUBLE STANDARDS:
AN APPLICATION OF SEXUAL SCRIPT THEORY

By Sarah R. Londo

Although sexual encounters occurring with a non-committed partner are fairly common among young adults (Bisson & Levine, 2009; Puentes, Knox, & Zusman, 2008), research reveals a sexual double standard in attitudes toward CSRs, with women being judged more harshly than men (e.g., Crawford & Popp, 2003). However, recent studies have demonstrated inconsistencies in the sexual double standard, with some researchers suggesting that these findings are a byproduct of biased responding in survey paradigms used in sexual double standard research. As a result, researchers have encouraged innovative methodological procedures to assess the sexual double standard. Thus, the current thesis employed the Implicit Association Test (IAT) and a gender priming task to evaluate the endorsement of the sexual double standard among 138 U.S young adults (60 men, 78 women). Overall, results from the IAT revealed that participants endorsed a small implicit sexual double standard, as evidenced by their ability to more efficiently and accurately pair sexual images with pleasant words after receiving a men priming procedure as compared to a women priming procedure. In addition, gender differences in the endorsement of an implicit sexual double standard were revealed, with the gender prime influencing men participants to a greater extent than women participants. The current thesis has generated new information related to our understanding of the sexual double standard in today’s society and demonstrates the importance of incorporating the IAT (and other innovative measures). Several important implications stem from this thesis, particularly those related to the promotion of gender equality in sexual contexts.
THE ASSESSMENT OF MEN’S AND WOMEN’S IMPLICIT SEXUAL DOUBLE STANDARDS: AN APPLICATION OF SEXUAL SCRIPT THEORY

by

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**Introduction**

Sexual encounters occurring with a non-committed partner, often referred to as casual sexual relationships (CSRs), are fairly common for young adults in Western cultures (Bisson & Levine, 2009; Puentes, Knox, & Zusman, 2008). In fact, according to the Online College Social Life Survey (OCSLS), 72% of young adults in college have engaged in at least one instance of CSRs during their collegiate career (Hamilton & Armstrong, 2009). Although fairly common among both men and women, research reveals that gender differences in attitudes toward CSRs are among the largest and most extensively documented of all gender differences related to sexuality (see Peterson & Hyde, 2010 for a review). In particular, research indicates that women are more conservative and less accepting in their attitudes towards CSRs than are men (Allison & Risman, 2013; Hald & Høgh-Olesen, 2010). Research has not only revealed gender differences with respect to attitudes toward CSRs, additional studies also confirm a double standard in attitudes toward CSRs, with participants reporting harsher judgments toward women (relative to men) for engaging in heterosexual CSRs (Crawford & Popp, 2003; Reid, Elliott, & Webber, 2011; Rudman, Fetterolf, & Sanchez, 2012).

**Gender Differences in Attitudes toward Casual Sex**

As stated above, researchers have consistently found that men hold more permissive attitudes toward CSRs than do women (Askun & Ataca, 2007; Clark & Hatfield, 1989; Hald & Høgh-Olesen, 2010; Hendrick, Hendrick, Slapion-Foote, &
Foote, 1985; Petersen & Hyde, 2010; Sümer, 2013). For instance, in Clark and Hatfield’s classic study (1989), confederates of both genders were instructed to approach students of the opposite gender on campus one of three questions, “Would you like to go out tonight?”, “Would you like to come over to my apartment?”, or “Would you like to come to bed with me?”. Although an equal number of men and women agreed to go on a date (approximately 50%), as soon as the confederate’s advances became more personal, the difference between men’s and women’s compliance increased. In particular, when asked back to the confederate’s apartment, only 6% of women obliged as compared to 69% of men. When the confederate requested casual sex no women obliged as compared to 75% of men. Although this study did not assess attitudes directly, because of the positive relationship that exists between attitudes and interest (Thompson & Byers, 2016; Gomez, Hartofelis, Finlayson, & Clark, 2015), one can infer that the men in this study would have more permissive attitudes toward CSRs than would women.

In a more relevant study directly examining gender differences in attitudes, Petersen and Hyde (2010) conducted a meta-analysis of articles published from 1993 to 2007 that examined differences in sexuality by gender. Their meta-analysis examined studies that had assessed attitudes towards 30 reported sexual behaviors for 834 individual samples. What they found, overall, is that men have more permissive attitudes toward engaging in CSR’s than do women. Of the attitudes and behaviors assessed in this meta-analysis, the gender differences in attitudes towards CSR’s was the most robust, \( d = 0.45 \) (Petersen & Hyde, 2010). Thus, the current thesis also assessed gender differences in attitudes toward CSR’s.
The Sexual Double Standard

In addition to gender differences in individuals’ sexual attitudes, research indicates that there is also a difference in how a target’s sexual behaviors are evaluated based on his/her gender. This double standard in sexual behavior has been referred to in the literature as the sexual double standard (Milhausen & Herold, 1999). The sexual double standard is the tendency for men and women alike to judge other women “more harshly than [other] men for comparable sexual behavior” (Papp et al., 2015, p. 57). Literature investigating the sexual double standard is vast and has been found when examining a variety of sexual behaviors, including sexual debut (Sprecher, McKinney, & Orbuch, 1991), number of sexual partners (Sheeran, Spears, Charles, Abraham, & Abrams, 1996), and the type of behavior (e.g., multi-person sex; Jonason & Marks, 2008). However, studies examining the sexual double standard with respect to attitudes toward CSRs have produced some of the most robust findings (Jonason, 2007).

Kreager and Staff (2009) examined the sexual double standard by analyzing data retrieved from the National Longitudinal Study of Adolescent Health (Add Health), which is an ongoing longitudinal study assessing the social, economic, physical, and psychological well-being of adolescents in grades 7-12 in the United States during the 1994-1995 academic year. By using the Add Health data, the authors were able to assess the potential relationship between the number of sexual partners adolescents report and peer acceptance (which was measured by the number of times peers listed an individual as one of their top five best friends in their high school at the time of assessment). Their
results revealed that the correlation between self-reported number of sexual partners and peer acceptance was positive for boys and negative for girls, indicating that girls are derogated and boys are commended for participating in comparable sexual behaviors. Although this study was not directly assessing CSRs, the results clearly suggest that endorsement of a sexual double standard occurs as early as adolescence.

Another study sought to document the endorsement of the sexual double standard relating specifically to CSRs. In this study, Conley, Ziegler, & Moors (2013) recruited 195 undergraduate students and had them read vignettes depicting either a man or a woman accepting a casual sex offer from a stranger and asked participants to evaluate the target in the vignette on a number of different dimensions (e.g., intelligence, promiscuity, attractiveness). Both men and women evaluated women in the hypothetical vignette more harshly for accepting an offer to participate in casual sex than they did men (Conley et al., 2013). These findings, again, demonstrate an endorsement of the sexual double standard, particularly with regard to participation in CSRs.

**Reverse sexual double standard.** Despite support for the sexual double standard, there is also evidence revealing what is considered a reverse sexual double standard, that is, “the extent to which people judge the sexual behaviors of men more harshly than women” (Milhausen & Herold, 2001, p. 66). Although the sexual double standard has been more widely supported, evidence for a reverse sexual double standard has become increasingly more common. For instance, in a study assessing desire to initiate relationships with hypothetical targets, Sprecher and colleagues (1991) recruited 750 undergraduate students to participate in an experimental procedure with which they were
asked to judge hypothetical targets of both genders on items pertaining to dating desirability by manipulating the amount of previous sexual activity of the target. Their results revealed that, among all male targets, those with a moderate number of sexual partners were judged as most desirable to date. However, among female targets, those with a higher number of sexual partners were judged as most desirable to date. This study provided some of the first evidence to support the existence of a reverse sexual double standard (Sprecher et al., 1991).

More recently, Papp and colleagues (2015) investigated the endorsement of an SDS by using a popular social media website, Facebook®. The researchers had 308 young adults read a vignette depicting a hypothetical male or female target (i.e., “shamer”) who was shaming another male or female target (identified as the “slut”). After reading the vignettes, participants were asked a series of questions that evaluated both the “shamer” and the “slut.” The results indicated that male “sluts” were judged more negatively than their female “slut” counterparts. In addition, the “shamer” was judged more harshly when the “slut” they were shaming was female than when the “slut” they were judging was male. The results of this study support the presence of a reverse sexual double standard, whereby men are judged more harshly than women for participation in comparable sexual behaviors.

Despite support for a reverse sexual double standard, research has not yet produced evidence of a reverse sexual double standard within the context of CSRs. Thus, the current thesis examined the sexual double standard in the context of CSRs in order to contribute a more thorough understanding of this double standard with regard to CSRs.
Sexual Script Theory: A Theoretical Framework

Although researchers have adopted many theories when explaining the gender differences in attitudes toward CSRs and the sexual double standard, including: sexual strategies theory (Buss & Schmitt, 1993), stigma theories (Dovidio, Major, & Crocker, 2000), and the backlash effect (Rudman, 1998; Rudman & Fairchild, 2004), sexual script theory is most commonly used to explain the role of gender in sexual attitudes (Simon & Gagnon, 1986). Sexual script theory explains “sexual behavior is a result of elaborate prior learning that teaches us an etiquette of sexual behavior” (Hyde & DeLamater, 2014, p. 38). These sexual scripts have been described as a social agent and as an intrapsychic map (LaPlante, McCormick, & Brannigan, 1980; Gagnon & Simon, 1987). In particular, as a social agent, these scripts can provide details about what is normative as a culture. For example, sexual script theory depicts sexuality within the context of committed heterosexual relationships with which intimacy is considered to be acceptable or appropriate (Aubrey, 2004). Consequently, people often approach “non-normative” relationships (e.g., non-heterosexual relationships or CSRs) with discomfort (Armstrong & Reissing, 2014; Grunt-Mejer & Campbell, 2016). On the other hand, as an intrapsychic map, these scripts can provide guidance for how to think, feel, and act in specific situations. For example, sexual script theory depicts the progression of intimacy in one’s romantic relationship (e.g., the baseball analogy), whereby a heterosexual couples generally progress from romantic kissing to breast stimulation, genital contact, and lastly
sexual intercourse (Smith, Udry & Morris, 1985; O’Sullivan, Harris, Chen, & Brooks-Gunn, 2007).

Although sexual scripts are well integrated into society and pervasive across cultures (Kim et al., 2007; O’Sullivan et al., 2007; Tolman, Kim, Schooler, & Sorsoli, 2007), the role men and women play in these scripts differs (Simon & Gagnon, 1973; Wiederman, 2005). Generally speaking, men are socialized to value short-term relationships and adopt a pleasure-oriented approach to sexuality, whereas women are socialized to prefer long-term/commitment-oriented relationships with an emotional/relational approach to sexuality (Bowleg, Lucas, & Tschann, 2004; Frith & Kitzinger, 2001; Tolman, 2002).

Empirical studies have provided researchers with evidence supporting these gender differences in sexual script theory. In particular, research reveals that people often describe men as adopting a physical/sexual approach to relationships and as the initiators of sexual behavior (Oliver & Hyde, 1993; Dworkin & O’Sullivan, 2005). In contrast, people tend to describe women as the “gatekeepers” of sexual activity by providing a boundary for men to overcome (Wiederman, 2005). People believe that women accomplish this “gatekeeping” by waiting until a more intimate and emotional relationship is established before engaging in sexual acts (Dworkin & O’Sullivan, 2005; Meston & O’Sullivan, 2007).

Not only can sexual script theory explain gender differences in sexuality, but it can also help to explain the presence of the sexual double standard in our society. For instance, Greene and Faulkner (2005) administered a survey to 698 heterosexual couples
examining their sexual scripts and their attitudes toward a double standard. They found that couples endorsing a more traditional sexual script tended to hold a stronger double standard, in comparison to couples that adopted less traditional sexual scripts (Greene & Faulkner, 2005). Despite the importance of the aforementioned study, no research to date has applied sexual script theory when explaining the sexual double standard with regard to CSRs specifically. Thus, the current thesis examined differences in attitudes toward CSRs and the endorsement of the sexual double standard in CSRs as an application of sexual script theory.

**Shifts in sexual script theory and the sexual double standard.** Recent research has revealed that sexual script theory may have begun to shift (McCormick, 2010). As a result, scripts that used to be commonplace have become less salient in recent years. For example, gender roles were traditionally very rigid and depicted men as the primary source of financial support in the family, whereas women were responsible for caring for the children at home. However, recent evidence indicates that in society today this may no longer be the case, and as a result may be impacting the sexual double standard (Mason & Lu, 1988).

In fact, in recent years, some researchers have suggested that the sexual double standard has narrowed or even disappeared entirely (Milhausen & Herold, 1999; Milhausen & Herold, 2001; Zaikman & Marks, 2014; Marks & Fraley, 2005). Many argue that this change in the sexual double standard may be a result of these shifts in sexual scripts, however others argue that these inconsistencies in the sexual double
standard may be a byproduct of the methods used to measure sexual double standard endorsement.

In particular, Jonason & Marks (2008) support the hypothesis that this narrowing of the sexual double standard is a result of shifts in sexual scripts and increased permissiveness among recent generations (particularly when evaluating traditional sexual behaviors). To test their theory, 120 undergraduate students were asked to evaluate hypothetical targets that had engaged in a mixed-gender threesome, as well as targets who engaged in a dyadic sexual act. The results indicated that participants did not report a sexual double standard when evaluating targets what were described as participating in the traditional behavior (dyadic sexual activity) but did report a double standard for the unconventional behaviors (mix-gendered three-person sexual acts), with women being rated more harshly than men. This finding provides evidence for the recent changes in sexual scripts and indicates that peoples’ views are becoming more liberal and accepting of more traditional acts, but that people still hold a sexual double standard for more uncommon or non-traditional sexual behaviors.

However, as mentioned above, another explanation for sexual double standard inconsistencies is that the methods employed by researchers to assess the sexual double standard are no longer capturing peoples’ true judgments and attitudes. To test this theory, Crawford and Popp (2003) conducted a meta-analysis examining studies that assessed the existence of the sexual double standard. Although they found evidence for a sexual double standard among these 30 studies, support for the sexual double standard appeared to be stronger in studies adopting more innovative and less traditional
methodologies. Thus, Crawford & Popp (2003) encouraged researchers to pursue new and innovative methodological procedures to assess the sexual double standard. Specifically, they suggested that researchers refrain from exclusively using explicit measures (i.e., surveys) to assess the sexual double standard due to the fact that self-report measures are often plagued by issues relating to social desirability biases (defined as people’s tendency to “over or understate responses to be represented in a more favorable way;” Haberecht, Schnuerer, Gaertner, John, & Freyer-Adam, 2015, p. 405), demand characteristics (“cues that make participants aware of what the experimenter expects to find or how participants are expected to behave;” Nichols & Maner, 2008, p. 151), and other types of influenced responses (Crawford & Popp, 2003). Response biasing can greatly influence the results of a study, in that participants may be influenced to respond in ways that are inauthentic, thus other means of measurement should be considered in order to decrease the occurrence and influence of these biased responses.

**Implicit Measures**

One alternative approach to measuring the sexual double standard is through the use of implicit measures. Implicit measures assess automatic associations that people make between stimuli. These implicit associations are described as occurring “without the performer’s awareness of the influence” (Greenwald & Banaji, 1995, p. 11). Unlike explicit measures, which require introspective thought processing, responses on implicit measures require very little if any conscious effort (Petty, Fazio, & Briñol, 2012). Because of their automatic nature, measuring implicit associations can potentially help
researchers bypass the possible issues associated with responses contaminated by demand characteristics and social desirability biases (Greenwald & Banaji, 1995).

**Implicit Association Test.** One implicit measure that has been widely used to bypass the issue of response biasing is the Implicit Association Test, or IAT (Greenwald, McGhee, & Schwartz, 1998). The IAT is a computer-based task that measures the associative strength between concepts by assessing speed and accuracy. In particular, two groups of concepts are paired in the test, with faster and more accurate pairings indicating greater associative strength. For example, in the first study utilizing the IAT, Greenwald and his colleagues (1998) had participants pair images of black faces and white faces with positive and negative words and found that participants were more efficiently and accurately able to pair positive words with the white faces than they were positive words with the black faces, indicating a stronger automatic preference for white faces in comparison to black faces (Greenwald et al., 1998).

Among other contexts, the IAT has been successfully used to capture implicit associations in a number of studies within the topic of sexuality. For example, the IAT has been used to understand associations and biases related to condom use (Czopp, Monteith, Zimmerman, & Lynam, 2004), homosexuality (Banse, Seise & Zerbes, 2001), older adult sexuality (Thompson, O’Sullivan, Byers, & Shaughnessy, 2014), as well as gender differences in attitudes toward sex and romance (Thompson & O’Sullivan, 2012).

The IAT has been used in these and other contexts in part because it regularly produces large effect sizes, but also because of its strong implications for people’s attitudes and behaviors related to the evaluated stimulus. In fact, the IAT has
demonstrated adequate construct validity, with moderate correlations between implicit and explicit measures (Nosek, Greenwald, & Banaji, 2004). It has also demonstrated excellent predictive utility (Greenwald, Poehlman, Uhlmann, & Banaji, 2009), with scores on the IAT predicting White Americans’ friendliness towards African Americans (Dovidio, Kawakami, & Gaertner, 2002), provoked aggression (Richtin, Richardson, & Mason, 2010), and alcohol use (Ostafin, Marlatt, & Greenwald, 2008). In fact, performance on the IAT has been documented to better predict behavior than performance on explicit measures. Finally, studies assessing the psychometric properties of the IAT have also demonstrated good internal consistency (i.e., split-half and Cronbach’s alphas), with estimates ranging from 0.70 to 0.90 (Nosek et al., 2007).

Despite the many studies demonstrating the IAT’s commendable validity and reliability, there are a notable number of studies that have revealed several shortcomings to the IAT. For example, the test-retest reliability of the IAT has been found to be less than satisfactory, with intra-class correlations ranging from 0.25 to 0.69 (Lane, Banaji, Nosek, & Greenwald, 2007). Consequently, the extent to which the IAT can capture temporally stable implicit constructs is unknown. In addition, although research has consistently documented small-to-moderate correlations existing between the IAT and related explicit measures, many researchers have noted low consistency between the IAT and other implicit measures (e.g., Olson & Fazio, 2003; Rudolph, Schröder-Abé, Schütz, Gregg, & Sedikides, 2008). These weak to non-existent correlations between implicit measures raise concerns about whether the IAT (and all implicit measures, for that matter) is actually measuring biases and attitudes. In fact, some critics of the IAT have
suggested that those who are more familiar with certain stereotypes may score higher on the IAT (whether they unconsciously endorse those stereotypes or not). Along those same lines, other critics have argued that those who empathize with out-group members (i.e., those more aware of the negative treatment and stereotypes that out-groups are victimized by) have an easier time forming the quick negative associations with minority groups than do those who empathize to a lesser extent.

Taken together, the IAT has been deemed a viable option for bypassing response biases, particularly when assessing socially sensitive topics such as sexual attitudes and the sexual double standard. Consequently, because of the sensitive nature of the sexual double standard and the need to adopt alternative measures when assessing this phenomenon, the current thesis used the IAT to assess the sexual double standard with respect to CSRs (as well as associated gender differences). In addition, the relationship between implicit and explicit endorsement of the sexual double standard was explored as well as the potential moderating role of socially desirable responding.

**Previous Use of the Implicit Association Test Assessing the Sexual Double Standard**

Because of its ability to protect against response biasing, the IAT may be a useful tool in evaluating the sexual double standard; however, this measure has already been used in this context. In particular, Sakaluk & Milhausen (2012) recruited 103 participants from a university in southern Ontario, consisting of 15 young men and 88 young women. The researchers had participants take an IAT by using “male” and “female” as their target categories and “sexually positive” and “sexually negative” as their associated attributes.
Participants also filled out the Sexual Double Standard Scale (Muehlenhard & Quackenbush, 1996 as an explicit measure for comparison. Contrary to their hypotheses and what the sexual double standard would suggest, Sakaluk and Milhausen (2012) discovered that participants of both genders explicitly endorsed the sexual double standard, but found inconsistencies in their implicit results. Specifically, men did not demonstrate differences in the accuracy and efficiency of pairing male and female words with sexually positive words, but women more accurately and efficiently paired female words with sexually positive words. In summary, the IAT scores revealed that men did not endorse an implicit sexual double standard, whereas women endorsed a reverse sexual double standard.

Although this study was an important step in using alternative methods to assess the sexual double standard, there were a few crucial limitations to their study. One obvious limitation was the gender balance of their sample. With men only accounting for 15 of the 103 participants in their sample, it is difficult for the researchers to draw valid conclusions about gender differences in implicit sexual double standard endorsement. Sampling a more gender-balanced group of participants is necessary to make more valid conclusions and generalizations resulting from their study.

Because the sexual double standard is an evaluation of two different target concepts (gender and sexuality), the methods used by Sakaluk & Milhausen (2012) may have failed to adequately assess both of these concepts. In particular, the IAT can only accommodate evaluations for one target concept at a time (i.e., gender or sex). To overcome this concern, Sakaluk & Milhausen (2012) collapsed their two concepts by
having participants categorize gendered words to sexually positive and sexually negative words. Despite this attempt to assess both concepts simultaneously, the construct validity of their study may be in question, particularly relating to the stimuli chosen to represent their attribute dimensions of “sexually positive” and “sexually negative”. In fact, many of the words selected to represent these attributes were not sexual in nature. Examples of the words they used for the “sexually positive” category include: “virtuous,” “healthy,” and “intelligent;” some words used to define “sexually negative” in their IAT included “unacceptable” and “stupid.” Based on the words they chose, instead of assessing endorsement of the sexual double standard, it could be argued that their results reflect implicit attitudes toward gender broadly.

A final potential limitation in their methodology is the sensory modality (i.e., visual or lexical) of the stimuli chosen to represent the target concept category. Specifically, the researchers used words (or lexical stimuli) to portray their target concept categories of “male” and “female.” Although words have been used successfully in past IAT studies (Snowden & Gray, 2013; Czopp et al., 2004; Banse et al., 2001), proponents of the IAT argue that visual stimuli (or images) elicit a stronger effect (Greenwald et al., 1998).

**The Current Thesis**

Thus, the primary objective of the current thesis was to advance previous research by assessing young adults’ implicit endorsement of the sexual double standard, specifically with respect to CSRs, using the IAT. Besides being a convenient population
to sample, young adults’ attitudes are influenced by their parents and other superiors, as well as the changing cultural environment in which they live, which makes them a unique and important population to evaluate. In particular, the current thesis aimed to address the limitations of Sakaluk and Milhausen’s (2012) study. To accomplish this, a more gender-balanced sample was recruited. Additionally, to address the issues related to the dichotomous nature of the two concepts in the sexual double standard, the current thesis used the IAT with a priming task to prime participants to either “men” or “women.” Finally, concerns relating to stimuli modality were addressed by using images, rather than words, to depict the target concept category in the IAT.

**Gender Priming Task.** The purpose of incorporating a priming task into the current thesis was to alleviate the issue of simultaneously incorporating two different binary concepts into the IAT. A number of priming tasks exist, including the lexical decision task (Kroll & Potter, 1984), associative priming tasks (Matsukawa, Snodgrass, & Doniger, 2005), and the word stem completion task (Warrington & Weiskrantz, 1970). However, the scrambled sentence task was used in the current thesis because it has been successfully used to prime for gender in previous research (Bargh, Chen, & Burrows, 1996; Steele & Ambady, 2006). The scrambled sentence task (Bargh et al., 1996) requires that participants create 4-word sentences using five arbitrarily presented words. The words chosen for each sentence can only create one grammatically correct 4-word sentence. Within the five word options, one of the words that can be logically used to build the sentence introduced the gender prime.
For example, in a classic study conducted by Bargh and colleagues (1996), the scrambled sentence task was used to prime participants for “elderly.” In particular, the researchers had participants create 4-word sentences from five words and within the correct sentence, words associated with the elderly were introduced. An example exercise from this particular priming task includes the scrambled sentence “shirt is ran my wrinkled,” which would unscramble to create the sentence “my shirt is wrinkled.” As evidence of the effectiveness of this task, after completing the scrambled sentence task, those who were primed for “elderly” (via the word “wrinkled”) walked significantly slower out of the testing site than did those who received a neutral prime.

**Implicit Association Test.** In order to accomplish the objectives of the current thesis, participants were asked to take an IAT. Participants were primed for either “men” or “women” via the scrambled sentence task, and then took the IAT. The IAT had participants pairing “positive” and “negative” words with “sexual” and “neutral” images.

**Primary research questions and hypotheses.** Based on the theory guiding this thesis as well as previous research, the following research questions and hypotheses were developed.

RQ1 - Do young adults report endorsing an explicit double standard and are there gender differences in the extent to which it is endorsed?

H1 – Although the research is inconsistent, based on recent research it was hypothesized that participants will not endorse a sexual double standard, and no gender differences will be present.
RQ2 - Do young adults endorse an implicit double standard and are there gender differences in the extent to which it is endorsed?

H2 - Based on the SDS, a main effect of gender prime on the accuracy and efficiency of pairing sexual images with positive words in the IAT is hypothesized, with those primed for men being able to more accurately and efficiently pair sexual images and positive words than those primed for women, thus indicating endorsement of an implicit sexual double standard.

H3 - Based on sexual script theory, I hypothesized a main effect of the gender of the participant on the accuracy and efficiency of pairing sexual images with positive words in the IAT, with men being able to more accurately and efficiently pair sexual images and positive words than women.

H4: Based on previous research examining the sexual double standard, it was hypothesized that no gender differences in endorsement of an implicit sexual double standard will be present; in other words, men and women were expected to endorse the sexual double standard to the same extent (i.e., the men prime and women prime will have the same effect on men and women).

RQ3 - Is there a relationship between implicit and explicit measures of the sexual double standard, and is this relationship moderated by the likelihood of engaging in socially desirable responding?

H5 - Due to the socially sensitive nature of sex-related topics (Milhausen & Herold, 2001; Thompson & O’Sullivan, 2012), it was hypothesized that there will be a small-to-moderate positive relationship between our explicit and implicit measures of the
sexual double standard. However, it is also expected that social desirability will moderate this relationship, with those less likely to engaging in socially desirable responding having a larger relationship between our explicit and implicit measures than those more likely to engage in socially desirable responding.
Method

Participants

A total of 141 participants were recruited from introductory psychology courses at a mid-sized Midwestern university for the study. This number of participants was deemed appropriate as it resulted in more than 20 participants per experimental condition, which is consistent with guidelines suggested by Simmons, Nelson, and Simonsohn (2011). However, three participants failed to respond to the gender item on the demographics questionnaire and were omitted from all analyses. Thus, the final sample was comprised of 138 young adults (60 men, 78 women) with an average age of 19.42 years ($SD = 1.45$). The majority of participants identified as heterosexual (92.8%), White/Caucasian (85.5%), and as currently single (52.9%). When asked about sexual experiences, 71 participants reported having engaged in casual vaginal sex. On average, those who had engaged in a casual sex relationship had 4.43 casual sex partners in their lifetime.

Materials

Gender Priming Task (Bargh et al., 1996). Participants were primed for either men or women by completing the Scrambled Sentence Task (Bargh et al., 1996). Consistent with previous research, this task had participants create ten, four-word sentences using five provided words. Each scrambled sentence item had only one solution, with each solution containing a word associated with the gender prime. The words to be employed for the gender-priming task were an adaptation from the study
conducted by Steele and Ambady (2006), as previously discussed. For example, words used for the women prime included “aunt,” “dress,” and “miss,” whereas words for the men prime included “brother,” “beard,” and “uncle.” Piloting was conducted with 18 participants, using 15 scrambled sentences, and these participants were interviewed regarding the priming task to determine the 10 best scrambled sentences for the gender-priming task, selected based on the ability to correctly structure the sentences (see Appendix B for the gender-priming task stimuli).

**Implicit Association Task.** The current thesis employed the IAT (Greenwald et al., 1998). The IAT was adapted to have participants pair target-concept categories of “sexual” and “neutral” in the form of images with associated attributes of “positive” (e.g., “intelligent,” “beautiful,” and “healthy”) and “negative” words (e.g., “stupid,” “ugly,” and “unhealthy”). All stimuli were piloted prior to conducting the study, using 18 participants engaging in a version of the IAT consisting of 10 pre-selected stimuli for each category. The 5 stimuli per category that were most quickly and accurately sorted were selected for the purpose of the current thesis.

Participants were seated in a private laboratory room, and sat 40-45 cm away from the computer screen. The IAT was administered on a computer with a 15” monitor. Inquisit® 4 software was used to construct and administer the IAT which consisted of five blocks, with blocks three and five used to collect critical data. The IAT displayed all stimuli in the middle of a black screen and had participants pair the stimuli with their respective categories based on the specific block’s instructions.
The first two blocks introduced the participant to the two sets of categories, one at a time, with one category displayed on the left side of the screen and the other displayed on the right side of the screen. These blocks asked participants to pair stimuli to their respective categories using the corresponding keys (“E” and “I”) on the keyboard to indicate placement of the stimuli. For example, a participant may have been instructed to assign sexual images to the “sexual” category on the left side of the screen using the “E” key, and neutral images to the “neutral” category on the right side of the screen with the “I” key. The second block was similar to the first block, but instead it introduced the associated attribute categories and had participants pair associated attribute stimuli to their respective categories. The third and fifth blocks, also known as the test blocks, had both target concept categories and the associated attribute categories paired and displayed on opposite sides of the screen. For example, if “sexual” and “positive” were displayed on the left side of the screen, and “neutral” and “negative” on the right side of the screen, then a participant would have used the “E” key to categorize an image of two individuals engaging in oral sex to the left side of the screen, to correspond with the “sexual” target category. Likewise, the participant would have categorized the word “unhealthy” to the right side of the screen using the “I” key to correspond with the “negative” attribute category. The fourth block looked identical to the first block, except this block had the target concept categories shown on the opposite side of the screen from where they were displayed in the first block. After completion of the fifth block, or the second test block mirroring the reversal of the target concept categories, participants were instructed to move on to the next task in the study.
IAT scores were computed using a latency-based algorithm that accounted for response time and the number of errors made in responses (Schnabel, Asendorpf, & Greenwald et al., 2008). The computed score, called a $D$ score, is calculated by first computing the “inclusive” standard deviation for the test trials, and then computing the mean latency for the responses in the test trials. Then mean difference scores are calculated, and divided by its associated “inclusive” standard deviation. The score itself is the equal-weight average of the two resulting ratios.

There are several variants to $D$ score calculation, which are calculated very similarly and interpreted in the same way, but one of the main differences is with how sorting errors are dealt. For the current thesis, $D$ scores were computed by incorporating a built-in error penalty, which meant participants were penalized using a response latency equal to the time it took them to correct their stimuli sorting mistakes. Any latencies less than 300 ms and any latencies greater than 3,000 ms were flagged for the purpose of recoding and any latencies longer than 10,000 ms were removed (Nosek, Greenwald, & Banaji, 2005).

For the current thesis, $D$ scores ranged from -2.00 to +2.00, with positive scores indicating that participants were most efficiently able to pair positive words with sexual images and negative words with neutral images; negative scores indicating that participants were most efficiently able to pair negative words with sexual images and positive words with neutral images; and zero indicating no polarity. Essentially, the $D$ scores derived from the IAT provide a measure of the strength of a person's automatic
association between mental representations of concepts in memory (i.e., sexual/neutral and positive/negative). Please see Appendix C for list of stimuli used in the IAT.

**Sexual Double Standard Scale (SDSS; Muehlenhard & Quackenbush, 1996).**

The Sexual Double Standard Scale is a 26-item scale that measures the endorsement of the SDS. This measure had participants respond to all items using a four-point Likert scale ranging from 0 (*disagree strongly*) to 3 (*agree strongly*). Total scores on the Sexual Double Standard Scale range from 48 (*strong acceptance of sexual double standard*) to -30 (*strong acceptance of reverse sexual double standard*), with 0 indicating no endorsement of an SDS. This scale was scored using a computation method described in detail by the authors, which can be found at the bottom of Appendix D below the scale items. Example items include “I question the character of a woman who has a lot of sexual partners,” and “A man should be more sexually experienced than his wife.” Previous research indicates that the Sexual Double Standard Scale has adequate internal consistency ($\alpha = .70$; Sakaluk & Milhausen, 2012). In addition, this scale demonstrated adequate internal consistency for the purposes of this thesis ($\alpha = .74$). The items and instructions for this measure can be found in Appendix D.

**Brief Social Desirability Scale (BSDS; Strahan & Gerbasi, 1972).** The BSDS, or the brief version of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960), is a ten-item scale that is designed to capture any socially desirable responding using a true-false response format. Results from the BSDS were assessed in order to allow for the ability to control for social desirability in later analyses. This measure was scored out of 10 points; responding “true” to items 1, 2, 4, 7, and 8 is scored
with one point, and responding “false” to items 3, 5, 6, 9, and 10 is scored with one point. Sample items include “I never hesitate to go out of my way to help someone in trouble,” and “There have been times when I was quite jealous of the good fortune of others.” The scale in the current thesis demonstrated less than adequate internal consistency ($\alpha = .54$), therefore results including the BSDS need to be interpreted with caution. Items included in this scale can be found in Appendix E.

**Demographics Questionnaire.** The demographics questionnaire asked participants to provide basic background information including gender, age, ethnicity/race, sexual orientation, relationship status, and sexual history. Please see Appendix F for the full demographics questionnaire.

**Procedure**

Participants enrolled in the current thesis study through the SONA recruitment program at the University of Wisconsin Oshkosh. At their assigned time, participants were directed by a research assistant to enter the private laboratory room. The research assistant requested informed consent from the participant via a signature on the informed consent form (see Appendix G). After consent was obtained, participants were instructed to complete a gender priming task, the IAT, and finally the demographics questionnaire via Qualtrics®. Upon completion of the study, participants were debriefed and released from the study (see Appendix H for the debriefing form). Participants were allowed an hour to complete the study and were granted two class credits for their participation.
Analytic Strategy

To investigate the first hypothesis (H1; endorsement of a sexual double standard), responses on the SDSS were used to calculate an average score as well as to conduct an independent-samples $t$-test, with gender included as the independent variable and scores on the SDSS as the dependent variable.

In order to evaluate H2 (main effect of gender prime), H3 (main effect of participant gender), and H4 (interaction effect), a $2 \times 2$ (gender of participant) between-subjects factorial ANOVA was conducted, with $D$ scores derived from the IAT as the dependent variable. Any significant main effects were followed up by examining the descriptive statistics and interaction effects using simple effects analysis (Soper, 2010). All effect sizes (Cohen’s $d$) were computed using an online effect size calculator (Lipsey & Wilson, 2001).

Finally, to evaluate H5 (relationship between explicit and implicit sexual double standard) a hierarchical multiple regression was conducted. All variables included in the model were centered to reduce the effects of multicollinearity. The first step included SDSS, the second step included scores on the BSDS, and the third step included the interaction term computed between SDSS scores and BSDS scores. Interaction effects produced at step three were to be followed up using simple slopes analysis (using Interaction! ® software; Soper, 2010).
Results

Prior to data analysis, missing data were evaluated both at the item level and the participant level using procedures outlined by Tabachnick and Fidell (2013). No participants were missing more than 5.1% of their data. Therefore, all missing values were treated by employing mean substitution.

Explicit Endorsement of the Sexual Double Standard

Overall, contrary to H1, SDSS scores indicated that participants endorsed a small explicit sexual double standard as evidenced by a mean score of 7.65 (SD = 5.46). In addition, an independent samples t-test was conducted, but Levene’s test of equality of variances was violated, so equal variances could not be assumed. Based on this, the results from the independent-samples t-test revealed that men (M = 9.10, SD = 6.16) scored significantly higher on the SDSS than women (M = 6.54, SD = 4.58), indicating that men endorsed an explicit sexual double standard to a greater extent than did women, t(105.26) = 2.70, p = .01, d = 0.53.

Implicit Endorsement of a Sexual Double Standard

To examine H2, H3, and H4, D scores were calculated using data obtained from the IAT. The mean D score was 0.30 (SD = 0.49), indicating that participants were more quickly and accurately able to pair positive words with sexual images (and negative
words with neutral images) than they were negative words with sexual images (and positive words with neutral images, regardless of the prime received). According to widely accepted cut-off points of $D$ scores (slight preference: +/-0.15, moderate preference: +/-0.35, and strong preference: +/-0.65; Greenwald et al., 2009), the majority of our participants were best able to pair sexual images with positive words (and neutral images with negative words), demonstrating a slight preference for sexual images in comparison to neutral images. See Table 1 for the proportion of participants classified into each category of $D$ scores.

In addition, two one-sample $t$-tests were conducted to determine if the average $D$ scores were significantly different from zero, or the no-preference point. Two $t$-tests were necessary in order to assess the average $D$ scores separately for those primed with men and those primed with women. The $t$-tests revealed that the average $D$ scores for those primed with men ($M = 0.37, SD = 0.49$) as well as those primed with women ($M = 0.26, SD = 0.49$) were both significantly different from zero ($t[69] = 5.76, p < .001$, and $t[67] = 4.44, p < .001$, respectively).

To examine gender differences in implicit endorsement of a sexual double standard, a 2 (participant gender) x 2 (gender prime received) between-subject factorial ANOVA was conducted with $D$ scores entered as the dependent variable. Contrary to expectations, the results revealed that none of the effects were significant. In particular, the type of gender prime received did not influence performance on the IAT (H2), $F(1, 134) = 1.32, p = .25$, $partial \eta^2 = 0.01$. Additionally, men did not perform significantly different on the IAT than did women (H3), $F(1, 134) = 0.43, p = 0.51$, $partial \eta^2 = 0.00$. 
Lastly, the interaction of participant gender and gender prime was also not significant (H4), $F(1, 134) = 2.23, p = .14$, partial $\eta^2 = 0.02$. Simple effects analysis was not conducted.

**The Relationship between Explicit and Implicit Endorsement of the Sexual Double Standard**

The results of the hierarchical multiple regression assessing H5 indicated that there was no relationship between the explicit and implicit endorsement of a sexual double standard. In particular, the first block did not contribute significantly to the model, $R^2 = 0.00; F(1, 136) = 0.01, p = .93$. Although the second block of the regression did account for a significant amount of the variance, $R^2$ change = 0.04; $F$ change $(1, 135) = 6.19, p = .01$, the third and final block (with the interaction effects) failed to account for a significant portion of the variance, $R^2$ change = 0.01; $F$ change $(1, 134) = 1.10, p = .30$. Therefore, because the interaction term was not significant, simple slopes analysis was not conducted. Please see Table 3 for details for each variable on each block of the regression.
Discussion

To address the discrepancy between dated research on the sexual double standard and more recent research, as well as to incorporate alternative measurement methods, the current thesis employed the IAT to evaluate the endorsement of an implicit sexual double standard among young adults. To accomplish this, previous research was improved upon by incorporating a priming procedure to examine variations in implicit attitudes toward sexuality after being primed for men or women. Despite discrepancies in existing research, the results from this thesis indicated that young adults endorsed a small explicit sexual double standard, but not an implicit sexual double standard, and that differential implicit judgments of men and women engaging in casual sex are not influenced by social desirability.

Explicit Endorsement of a Sexual Double Standard

Although several recent studies have failed to find evidence of a sexual double standard in today’s society (e.g., Sprecher et al., 1991; Papp et al., 2015), the results from the current thesis revealed that in a sample of Midwestern young adults, a small explicit sexual double standard was endorsed. It is unclear why participants in the current thesis endorsed an explicit sexual double standard. However, one explanation may relate to the demographic characteristics of the sample, primarily the location of residence. Because the sample was comprised of students residing in a Midwestern U.S. state, our results may not reflect those obtained from other areas of the U.S. In fact, research reveals that individuals living in the midwest often report more traditional and conservative views
toward sexuality, politics, and religion as compared to those from other regions of the U.S. (Harkins, 2016; Rentfrow et al., 2013). Therefore, it is possible that the sexual double standard still exists in regions marked by traditional social values and beliefs (especially those related to gender) but not in more liberal or progressive areas.

Implicit Endorsement of a Sexual Double Standard

The overall finding and perhaps the most intriguing, was that Midwest young adults did not endorse a sexual double standard at the implicit level. The lack of difference in scores on the IAT between those primed for men and those primed for women indicate that men and women are perceived similarly in casual sexual contexts, and that no differential judgment is cast upon individuals based on gender. This finding was particularly interesting because performance on the explicit measure revealed evidence for slight sexual double standard. Although the reason for this inconsistency is not clear, one may speculate that by the time participants were asked to complete the explicit measure of the sexual double standard, participants may have had an idea of what the study was assessing, and responded in a way that would confirm the researcher’s supposed hypothesis. Although not as common as socially desirable responding, this type of response biasing, called “confirmation bias”, is common in situations where the hypothesis may be detected by the participant (Beattie & Baron, 1987).

Although the current thesis did not find evidence for an implicit sexual double standard, I argue that the methods used in the current thesis more accurately measure the implicit sexual double standard than those used by Sakaluk and Milhausen (2012). In
particular, Sakaluk and Milhausen (2012) had participants pair men and women words with “sexually” positive and negative words. But as one may recall, most of these “sexually” positive and negative words were not actually sexual in nature – words such as “healthy”, “virtuous”, and “intelligent”, or “unhealthy” and “stupid”, are more generally positive and negative. Thus, it could be argued that, rather than evaluating attitudes toward men and women in sexual contexts, participants were implicitly evaluating their preference for men and women generally. Furthermore, because it is possible that Sakaluk and Milhausen’s study (2012) was measuring implicit evaluations of gender, their results may reflect people’s desire to maintain a positive social identity by favoring their ingroup over out-groups (Social Identity Theory; for a review please see Tajfel & Turner, 2004). This alternate explanation (using Social Identity Theory) for Sakaluk and Milhausen’s (2012) work can help to explain why they found evidence of a reverse sexual double standard. In particular, because their sample was comprised of predominantly women, the tendency to implicitly judge women less harshly than men could have been a byproduct of women’s tendency to judge their in-group less harshly than their out-group. Therefore the results from the current thesis, supporting the disappearance of the sexual double standard, are argued to be more valid than those obtained by Sakaluk and Milhausen (2012).

Despite the plethora of research documenting gender differences in attitudes toward CSRs (Askun & Ataca, 2007; Clark & Hatfield, 1989; Hald & Høgh-Olesen, 2010; Hendrick et al., 1985; Petersen & Hyde, 2010; Sümer, 2013), no differences in men’s and women’s implicit evaluations of casual sex were found. This is particularly
interesting, because in previous research, men are consistently found to be more permissive than women in their attitudes toward casual sex (Askun & Ataca, 2007; Clark & Hatfield, 1989; Hald & Høgh-Olesen, 2010; Hendrick et al., 1985; Petersen & Hyde, 2010; Sümer, 2013). This finding may provide evidence supporting the Gender Similarities Hypothesis (Hyde, 2005), which posits that men and women are more alike than they are different. In fact, in Hyde’s meta-analysis (2005), 78% of the effect sizes reflecting the magnitude of the gender differences associated with many psychological variables (e.g., aggression, leadership, reasoning, sexuality), were close to zero or could be classified as small (according to Cohen’s guidelines; Cohen, 1977). Thus, consistent with studies investigating gender differences in other areas, perhaps gender differences in attitudes and judgments relating to casual sex have been overstated.

The Relationship Between Implicit and Explicit Sexual Double Standard

No relationship was found between the explicit and implicit measures of the sexual double standard. Although there may be a number of explanations for this finding, the possibility stands that the IAT failed to capture the sexual double standard, as the validity and reliability of the SDSS is much more established. The lack of a relationship between measures may also relate to differences in the constructs being assessed by each measure. In particular, the explicit measure (the SDSS) assessed the explicit endorsement of the sexual double standard, whereas the implicit measure (the IAT) simply assessed attitudes toward casual sex (the addition of the prime is how the sexual double standard was captured). Thus, because the raw scores obtained from the explicit and implicit
measures depict two different constructs, these scores could not be compared directly to assess for convergent validity.

**Limitations and Future Directions**

Although this thesis provided further insight into utilizing alternative methods to measure the endorsement of the sexual double standard, there were a number of limitations worthy of consideration. One major limitation of this study is the exploration of CSRs, and whether or not the current thesis accomplished this task. The images were selected with the intention of depicting CSRs, but there is no way to be certain that the images were perceived as actually depicting casual sex. In fact, it could be argued that the images actually represented sexuality more generally, and reflected attitudes toward the act of sex (not just CSRs). Future research should utilize additional adaptations of the IAT to explore endorsement of the sexual double standard, utilizing other methods to depict casual sex or other uncommon sexual experiences.

Another limitation of the current thesis is the uncertainty surrounding the validity of the IAT. Although face validity was established via pilot work, additional forms of validity must be satisfied in order to make generalizations from our results (e.g., convergent, predictive validity). However, in the current thesis, there was virtually no way to assess these other forms of validity, as the evaluations of the convergent validity of my implicit measure with the pre-established explicit measure were not appropriate. As mentioned before, this was due to the dissimilarity in the meaning of the explicit scores and the implicit scores, thus deeming them non-comparable. Therefore, future
research should consider adopting an explicit measure that is more similar to the IAT, where the scores represent variations in positive and negative associations with casual sex according to the gender of the target.

Finally, the questionable internal consistency of the social desirability scale (BSDS) is a limitation that must be acknowledged. Although the BSDS has demonstrated adequate internal consistency in previous studies (Riedera & Ruderman, 2007), it failed to meet an adequate level of reliability in the current thesis. Future research should consider other options to measure the likelihood of engaging socially desirable responding, perhaps longer more comprehensive scales like the original 33 item scale developed by Crowne and Marlowe (1960).

**Conclusions and Implications**

The current thesis adds to the growing body of literature assessing variations in the endorsement the sexual double standard. Although the sexual double standard did not appear to be endorsed on the implicit level, the current thesis did reveal explicit endorsement of the sexual double standard, which warrants further research. Although these shifts in the endorsement of the sexual double standard do require further research, it is clear that society is shifting toward more equal evaluations of men and women in sexual contexts, thus alleviating the potentially damaging scrutiny of the double standard.
Appendix A

Tables
Table 1.  
*Descriptive Information for the Magnitude of Participants D Scores Based on Gender Prime Received*

<table>
<thead>
<tr>
<th></th>
<th>Men Prime N (%)</th>
<th>Women Prime N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong preference for neutral</td>
<td>2.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Moderate preference for neutral</td>
<td>5.7%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Slight preference for neutral</td>
<td>5.7%</td>
<td>14.7%</td>
</tr>
<tr>
<td>No preference</td>
<td>18.6%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Slight preference for sex</td>
<td>14.3%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Moderate preference for sex</td>
<td>28.6%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Strong preference for sex</td>
<td>24.3%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

*Note. N = 70 primed for men, and 68 primed for women. Number and percentage reflect the number of participants classified into each D score category. Values may not add up to 100% due to rounding.*
Table 2. *Means and Standard Deviations for Men’s and Women’s D Scores based on the Gender Prime Received*

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Primed for Men</td>
<td>0.37 (0.47)</td>
<td>0.30 (0.51)</td>
</tr>
<tr>
<td>Primed for Women</td>
<td>0.15 (0.54)</td>
<td>0.33 (0.45)</td>
</tr>
</tbody>
</table>

*Note. N = 60 men, and 78 women.*
Table 3.
Results from the Hierarchical Multiple Regression Predicting D Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE(B)</th>
<th>β</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDSS Score</td>
<td>.00</td>
<td>.01</td>
<td>-.01</td>
<td>.00</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
</tr>
<tr>
<td>SDSS Score</td>
<td>.00</td>
<td>.01</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Social Desirability*</td>
<td>.05</td>
<td>.02</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td>.05</td>
</tr>
<tr>
<td>SDSS Score</td>
<td>.00</td>
<td>.01</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Social Desirability</td>
<td>.05</td>
<td>.02</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>SDSSxSocial</td>
<td>.00</td>
<td>.00</td>
<td>.09</td>
<td></td>
</tr>
</tbody>
</table>

Note. Total $R^2 = .05; F(3, 132) = 2.44, p = .07. * = p < .05
Appendix B

Adapted Scrambled Sentence Task
Appendix B
Adapted Scrambled Sentence Task (Bargh, Chen, & Burrows, 1996)

Listed below are scrambled sentences, each problem including one word that does not belong to the sentence. Using the words in each problem, please create a sentence for each problem from the five words given using only four of the words provided.

Men prime stimuli:

1. likes uncle my into pizza
2. work father tree to goes
3. shaved Tom apple beard his
4. fanning son baseball plays my
5. grandpa steak catch likes eating
6. windy Jason a uses hammer
7. Paul cigar a smokes kite
8. hockey watches brother my pencil
9. ran their sunny nephew away
10. fish likes Timmy snowing to

Women prime stimuli:

1. likes aunt my into pizza
2. supper mother tree us cooks
3. plays Tina chewing dolls with
4. fanning daughter nice dresses my
5. grandma sweaters catch likes knitting
6. windy Jessica her uses make-up
7. Pamela hair her brushes water
8. gymnastics watches sister my pencil

9. ran their sunny niece away

10. dance likes Sharon snowing to
Appendix C

IAT Description
Appendix C
IAT Description

The Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) has become a very popular method to use for measuring the strength of associations between concepts in an indirect way. In this study, this IAT will be used to measure the strength of associations between an attitude object (e.g., sexual and neutral) and attributes (e.g., positive or negative).

This IAT procedure consists of five blocks. In these blocks, participants have to react as quickly as possible to words that appear on a computer screen by pushing two buttons that refer to a certain category (“I” and “E” keys). The images to be categorized are the target images (images relating to sex), the control images (neutral images), and the positive or negative words. The more easily the participants associate a target word with a positive word, the more positive the association. Research suggests that the IAT is successful with as few as five words per category.

The blocks look like this (the key to which categories are paired are counterbalanced):

<table>
<thead>
<tr>
<th></th>
<th>Left button (“E”)</th>
<th>Right button (“I”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Target images (sex)</td>
<td>Control images (neutral)</td>
</tr>
<tr>
<td>2</td>
<td>Positive words</td>
<td>Negative words</td>
</tr>
<tr>
<td>3</td>
<td>Target images or positive words</td>
<td>Control images or negative words</td>
</tr>
<tr>
<td>4</td>
<td>Negative words</td>
<td>Positive words</td>
</tr>
<tr>
<td>5</td>
<td>Target images or negative words</td>
<td>Control images or positive words</td>
</tr>
</tbody>
</table>

The stimuli that will be used in the current thesis are shown below.

“Sexual” images –
“Neutral” images –
“Positive” words – “good,” “pleasant,” “nice,” “intelligent,” satisfying”

“Negative” words – “bad,” “unpleasant,” “evil,” “stupid,” “nasty,”
Appendix D

Sexual Double Standard Scale
Appendix D
Sexual Double Standard Scale (Muehlenhard & Quackenbush, 1998)

Please read each statement carefully and then rate each statement according to how much you agree with it using a number from 1 (strongly agree) to 4 (strongly disagree). An answer is correct to the extent it truly reflects how much you agree with it.

1 2 3 4
Strongly disagree Strongly agree

1. It’s worse for a woman to sleep around than it is for a man.
2. It’s best for a guy to lose his virginity before he’s out of his teens.
3. It’s okay for a woman to have more than one sexual relationship at the same time.
4. It is just as important for a man to be a virgin when he marries as it is for a woman.
5. I approve of a 16-year-old girl’s having sex just as much as a 16-year-old boy’s having sex.
6. I kind of admire a girl who has had sex with a lot of guys.
7. I kind of feel sorry for a 21-year-old woman who is still a virgin.
8. A woman’s having casual sex is just as acceptable to me as a man’s having casual sex.
9. It’s okay for a man to have sex with a woman with whom he is not in love.
10. I kind of admire a guy who had sex with a lot of girls.
11. A woman who initiates sex is too aggressive.
12. It’s okay for a man to have more than one sexual relationship at a time.
13. I question the character of a woman who had had a lot of sexual partners.
14. I admire a man who is a virgin when he gets married.
15. A man should be more sexually experienced than his wife.
16. A girl who has sex on a first date is “easy.”
17. I kind of feel sorry for a 21-year-old man who is still a virgin.
18. I question the character of a guy who had had a lot of sexual partners.
19. Women are naturally more monogamous (inclined to stick with one partner) than are men.
20. A man should be sexually experienced when he gets married.
21. A guy who sex on a first date is “easy.”
22. It’s okay for a woman to have sex with a man she is not in love with.
23. A woman should be sexually experienced when she gets married.
24. It’s best for a girl to lose her virginity before she’s out of her teens.
25. I admire a woman who is a virgin when she gets married.
26. A man who initiates sex is too aggressive.
Appendix E

Brief Social Desirability Scale
Appendix E
Brief Social Desirability Scale (BSDS; Marlowe & Crowne, 1960; Strahan & Gerbasi, 1972)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. I never hesitate to go out of my way to help someone in trouble. T F
2. I have never intensely disliked anyone. T F
3. There have been times when I was quite jealous of the good fortune of others. T F
4. I would never think of letting someone else be punished for my wrong doings. T F
5. I sometimes feel resentful when I don’t get my way. T F
6. There have been times when I felt like rebelling against people in authority even though I knew they were right. T F
7. I am always courteous, even to people who are disagreeable. T F
8. When I don’t know something I don’t at all mind admitting it. T F
9. I can remember “playing sick” to get out of something. T F
10. I am sometimes irritated by people who ask favors of me. T F
Appendix F

Demographics Questionnaire
Appendix F
Demographics Questionnaire

1. How old are you? __

2. What is your sex?
   __ male
   __ female
   __ other

3. What state do you live in? _________________________

4. What state were you born in? _______________________

5. What do you consider yourself to be? (Choose all that apply)
   __ American Indian/First Nations
   __ Asian
   __ Native Hawaiian or other Pacific Islander
   __ South American
   __ Black/African American
   __ Caucasian/European Descent
   __ East/Southeast Asian
   __ Other (specify): ____________________

6. What language do you use most often at home?
   __ English
   __ Spanish
   __ Other; please specify: ________________

7. What is the highest level of education you have completed?
   __ Some high school
   __ High school or equivalent
   __ Some college/university
   __ Completed college/university
   __ Post graduate training/degree
   __ Other: please specify: ____________________

8. What is your family or household's income level?
   __ Less than $10,000
   __ $10,000-$20,000
   __ $20,000-$55,000
   __ $55,000-$75,000
   __ $75,000-$100,000
___ $100,000+
___ Don’t know or prefer not to answer
9. Which of the following best describes the structure of your immediate family during most (or all of) your childhood?
   ___ a two-parent household – original parents
   ___ a two-parent household – one original parent one step parent
   ___ a single-parent household
   ___ adopted

10. If your biological parents are no longer in a relationship with one another, please explain why:

11. Which of the following best describes your sexual orientation?
   ___ Heterosexual (Straight)
   ___ Gay
   ___ Lesbian
   ___ Bisexual
   ___ Queer
   ___ Pansexual
   ___ Unlabeled
   ___ Don’t know
   ___ Other, please specify: ___________________________

12. Circle the number that best describes your sexual experience:
   Entirely with Women   1  2  3  4  5  6  7    Entirely with Men

13. Circle the number that best describes your current feelings of sexual attraction:
   Entirely to Women   1  2  3  4  5  6  7    Entirely to Men

14. With how many people have you engaged in oral, anal, and/or vaginal sex? ______

15. How old were you the first time you engaged in (put a zero if you have never engaged in this activity):
   oral sex _____
   vaginal sex _____
   anal sex _____

16. Which of the following best describes your current relationship status?
   ___ Single and not dating right now
   ___ Dating but not committed to one person
   ___ In a committed relationship with one person
   ___ In a committed relationship with more than one person
__ In an open relationship
__ Married/living with partner
__ Other, please specify: ___________________________

**Please end the survey here if not in a committed relationship**

17. Is your partner: _____Male _____Female _______ Other

18. Which of the following best describes the sexual orientation of your partner?
   _____ Heterosexual (Straight)
   _____ Gay
   _____ Lesbian
   _____ Bisexual
   _____ Queer
   _____ Pansexual
   _____ Unlabeled
   _____ Don’t know
   _____ Other, please specify: ___________________________

19. How long (in months) have you been involved in your current relationship? ____

20. Are you currently in a sexual relationship with your current romantic partner? By "sexual relationship," we mean a relationship in which you engage in some type of sexual activity (any form of physically arousing contact, such as kissing, oral sex, or intercourse) at least on occasion.
   __ yes
   __ no

21. If yes, for how long have you been in a sexual relationship with this partner?
   ____ months

22. How sexually satisfied are you in your current relationship?
   __ not at all
   __ a little bit
   __ somewhat
   __ a lot

23. How romantically satisfied are you in your current relationship?
   __ not at all
   __ a little bit
   __ somewhat
   __ a lot

24. How interested are you in engaging in casual sex (defined as “sexual encounters occurring with a non-committed partner;” Bisson & Levine, 2009; Puentes, Knox, & Zusman, 2008)?
25. With how many people have you engaged in casual sex? ____

26. How old were you when you had your first casual sex encounter? ____

27. How satisfied are you with your casual sex encounters?

28. Based on previous experience, how much do you enjoy engaging in casual sex?

29. How many times have you experienced orgasm during a casual sex encounter? ____

30. To what extent do you think the sexual double standard (defined as the tendency for people to judge women “more harshly than men for comparable sexual behavior;” Papp et al., 2015, p. 57) still exists?

Little to No Extent  1  2  3  4  5  6  7  To a Great Extent
Appendix G

Consent Form
Appendix G
Consent Form

Master’s student Sarah Londo, under the supervision of principal investigator Dr. Ashley Thompson, from the Department of Psychology at the University of Wisconsin Oshkosh, is conducting a study that explores peoples’ perceptions of sexual behavior. The following information is provided for you to decide whether you wish to participate in the present study. **THIS STUDY CONTAINS SEXUALLY EXPLICIT IMAGES AND ADULT CONTENT ** You should be aware that if you agree to the study, you are free to withdraw at any time without penalty.

Why is this study being done? This study is being conducted to learn more about young adults’ feelings and perceptions of casual sexual behavior. Due to the sexually explicit nature of this study, only those who are 18 years of age or older are eligible to participate.

What do you want me to do? You will be asked to take computer tests and electronic surveys. The computer test will ask you to categorize images and words as efficiently as possible and the surveys will assess your background, relationship/sexual history, sexual attitudes, religiosity, personality, opinion on sexual relationships, etc. Additionally, some of you will be asked to participate in a scrambled sentence task, where you will sort words to create a grammatically correct sentence. Completion of all study components will take about 60 minutes.

Are there any benefits to participating? Yes. You will receive 1 credit toward your course grade per half hour of participation in our study (2 credits in total). In addition, you can choose to receive a summary of the findings of this research by providing your email at the bottom of this consent form.

Are there any risks? Yes. You may be asked to participate in a computer task containing sexually explicit images, which may cause discomfort during the study. It is important to remember that participation in this study is completely voluntary, and you may withdraw from the study at any time without penalty. You may also feel free to skip any questions that make you feel uncomfortable. Any information collected from you that makes you feel uncomfortable can be destroyed if you so desire.

Are my answers confidential? Yes. Although the researchers will be asking for your signature on the consent form, it will in no way be connected to your survey responses. As a participant, you will be given a participant ID number that will be used to ensure confidentiality. Be assured that your name will not be associated with your participant ID or the research findings. If you do choose to provide your email address for a summary of the results, it will not be connected with your survey responses in any way.
Who will have access to my data? Only the principal investigator, Dr. Ashley Thompson, and thesis student Sarah Londo, will have access to your information and answers (but not your identities). Your consent form (containing your signature and email address, should you choose to provide them) will be stored separately from your survey responses, thus any identifying information will not be connected with your survey responses in any way.

How can I get more information about this research project? If you have any questions before, during, or after the study, or if you would like to learn more about our research, please feel free to contact the principal investigator Dr. Ashley Thompson (thompsae@uwosh.edu). If you would prefer to speak with an individual who is not directly involved with the research, please contact the director of the UWO Institutional Review Board:

Dr. Anca Miron
Chair, Institutional Review Board for Protection of Human Participants
c/o Grants Office
UW Oshkosh
920-424-1415

By signing your name in the space provided below, you are agreeing to the following statement: “I have read the above description and volunteer to participate in the study. I understand that I can decide to discontinue my participation or not to provide any personal information at any time without question and without penalty. I am 18 years of age or older, and am therefore eligible for participation in this study.”

________________________________________________________________________

PRINTED NAME   SIGNATURE    DATE

If you would like to receive a final copy of the study findings, please list the email or postal mailing address below where you would like a copy of the final study findings sent.

Email or Postal Mailing Address: ________________________________

This research project has been approved by the University of Wisconsin Oshkosh IRB for Protection of Human Participants (#972910) for a 1-year period, valid until 10/23/2017.
Appendix H

Debriefing Form
Traditionally, our culture as a whole has held what is called a sexual double standard (SDS; that is, the tendency for people to judge women “more harshly than men for comparable sexual behavior”; Papp, Hagerman, Gnoleba, Erchull, Liss, Miles-McLean, & Robertson, 2015). However, recent studies looking at the SDS have found that the SDS is not always consistently endorsed, or that it may even be disappearing (Milhausen & Herold, 1999; Milhausen & Herold, 2001; Zaikman & Marks, 2014). Yet other researchers have suggested that the normal survey methods used to examine the SDS may permit biased responding, and that researchers should try using new and innovative methods to continue work on the SDS. Thus, the study you just participated in was designed to assess the endorsement of the SDS using a number of innovative methods to understand the extent of present day SDS endorsement.

If you are interested in learning more about this research, you can look at (or request from us) the following peer-reviewed articles that are the basis of our research:


Given the sexually explicit nature of this study, you may experience discomfort after leaving the study. The content of this study may illicit emotional distress, particularly with those who may have experienced sexual trauma, abuse, or other emotional situations. If you are experiencing emotional distress, please contact the Counseling Center at (920) 424-2061 and they would be pleased to assist you.

If you would like to seek further support after participation in this study, you may refer to the following on-campus, community, and online resources:

- Overcoming Sexual Abuse: [http://overcomingsexualabuse.com](http://overcomingsexualabuse.com)
- UW-Oshkosh LGBTQ Resource Center: [http://www.uwosh.edu/lgbtqcenter](http://www.uwosh.edu/lgbtqcenter)
- Planned Parenthood: 378 S. Koeller St., Oshkosh, WI 54902. P: 920-235-0115

Thank you again for taking the time to complete this study. If you have any questions or comments, please feel free to contact the principal investigator Dr. Ashley Thompson.
(thompsae@uwosh.edu). This study is on file with the University of Wisconsin Oshkosh Institutional Review Board, #972910.
References


