Humans have long been preoccupied with sex, nude images, and sexuality. Long before the invention of writing, there were cave drawings and primitive sculptures of sexual acts or reproductive body parts (Lo Duca, 1966). As technology advanced, so did the ways to create pornography. Greek artists began to focus on the nude human body. As soon as the camera was invented, there were pictures taken of naked men and women engaging in sexual acts. The human fascination with erotica has not changed. More recently, the term sex was the most frequently searched word on the Internet (“‘Sex’ is the most searched term on the web,” 2002). However, society’s opinion on the acceptability of viewing pornography has changed over time. Some extreme examples of society’s change in opinion are the licentious days of the Greeks and Romans and the prudish days of the Victorian Period. Recently, it appears that the extremes of sexual experimentation and strict regulation of sexual practices exist at the same time, especially in America.

In many ways, American society is sexually restrictive and narrow-minded. The prude stigma of America exists because there are strict laws regulating promiscuity in America and sexually reserved cultural practices. For example, nude beaches are rare and have age limits, much of the media must comply with censorship rules, and abstinence is still a widely used form of sexual education. Viewing America as sexually restrictive is ironic because America is the number one producer of pornographic videos and websites (Ropelato, 2011). Also, an estimated 40 million Americans view pornography on a regular basis (Ropelato, 2011). It seems that America as a community is divided in its beliefs about the acceptability of pornography.

**ABSTRACT.** There is a persistent belief that viewing pornography has a wide range of negative consequences, but recent research has also indicated positive effects. The purpose of this experiment was to study the immediate effect of pornography on relationship satisfaction. The experimenters randomly assigned participants (N = 98) to one of three groups: Group 1 viewed neutral images of people, Group 2 viewed pornographic images, and Group 3 viewed images of scenery. Immediately after viewing the images, participants answered questions about their relationship and sexual satisfaction. In general, results indicated that participant responses did not differ among the three groups for either relationship or sexual satisfaction; however, an interaction existed in the sexual satisfaction subscales between gender and group assignment. Men and women indicated sexual dissatisfaction on different subscales depending on their group assignment. The results also indicated gender differences among pornography viewing and sexual satisfaction responses.

**Pornography’s Immediate Effect on Relationship Satisfaction**

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Defining Pornography
The Attorney General’s Commission on Pornography defined pornography as “material predominantly sexually explicit and intended for purposes of sexual arousal” (1986, pp. 228-229). The Attorney General’s definition is not often used in research because it lacks clarity. For example, it is arguable that many advertisements are aimed at sexual arousal by using provocative images to sell products; however, sexually appealing advertisements are generally not considered pornography.

Because of the ambiguity of the definition provided by the Attorney General’s Commission, most experimenters individually define pornography. The variety of definitions has left a divide among researchers. Although one researcher may allow participants to construct their own definitions of pornography (Benjamin & Thlusten, 2010), another researcher may strictly define the difference between erotic images and pornography (Senn & Desmarais, 2004).

The definition of pornography is often skewed by the predicted outcome of the research. For example, Senn and Desmarais (2004) distinguished between nonviolent degrading pornography and violent degrading pornography. Narrowing the definition of pornography in this manner restricted pornography to degrading versions and did not include the nondegrading pornography options. “Degradation” is often used as a criterion to distinguish differences among types of pornography. Degradation describes belittling or humiliating behavior during a sexual act, such as name-calling or domination of the sexual partner. Senn and Demaris’s findings indicated that all pornography is harmful. The narrow definition of pornography used by these researchers may explain why they found all pornography to be harmful.

Conversely, some researchers avoid defining pornography explicitly and instead use questionnaires that ask about specific behaviors (e.g., how often the participant has seen oral sex on the Internet; Morrison, Harriman, Morrison, Bearden, & Ellis, 2004). The definition of pornography used in the current study was images containing nudity (i.e., exposing a breast or visible genitalia of either men or women). The definition applied only to images chosen for the pornographic image group.

Negative Influence of Pornography
One of the many problems associated with studying pornography’s effects is eliminating confounding variables. Commonly discussed variables are the amount of degradation and aggression associated with pornography. Although attitudes supporting rape and other sexually aggressive behavior are associated with pornography, they are equally associated with degrading material that does not include nudity (Golde, Strassber, Turner, & Lowe, 2000). Therefore, it is necessary to determine the extent to which pornography and aggression/degradation occur together in the environment. Bridges, Wosnitzer, Scharrer, Sun, and Liberman (2010) examined 304 scenes from popular explicit adult videos. Results indicated that 88% of the scenes contained physical aggression. The most common forms of aggression were spanking, gagging, and slapping. In addition, 49% of the scenes contained verbal aggression, mainly name-calling. The frequent co-occurrence of pornography and aggression/degrading material may explain why previous researchers have focused on the negative consequences of pornography viewing.

One such negative consequence frequently cited is the link between pornography use and participants’ aggressive attitudes (Golde et al., 2000; Malamuth, Addison, & Koss, 2000) and actions (Simmons, Lehmann, & Collier-Tension, 2008). Researchers found an increase in sexually aggressive attitudes and behaviors followed pornography exposure. The more violent the pornography, the more negative attitudes participants exhibited. Similarly, the more pornography individuals reported viewing, the higher their sexual aggression levels were (Malamuth et al., 2000). After degrading pornography exposure, men reported beliefs that sex with women creates masculine domination and female submission (Golde et al., 2000). The previous research shows a strong link between aggressive beliefs and pornography, but not necessarily aggressive actions.

Simmons et al. (2008) found links between pornography and aggressive behaviors through questionnaires completed by women from interpersonal violence shelters. Their results indicated that the degree of controlling behavior demonstrated by the batterer correlated positively with the amount of pornography used. Although this research indicates aggressive behavior may be linked with pornography, it is not clear if there is a third variable mediating the connection, such as personality. Individual differences, such as low intelligence and high aggressive antisocial tendencies, may account for a personal preference of violent pornography (Bogaert, 2001).

Aggressive beliefs and behaviors are not the
only negative side effects associated with pornography viewing. Hald and Malamuth (2008) found that participants reported pornography use affected different types of self-esteem. Male and female participants believed that their pornography consumption negatively impacted their sexual knowledge, attitudes toward sex, perceptions of the opposite sex, general quality of life, and sex life. Also, men’s satisfaction with their penis and sexual esteem (i.e., how valuable they rated themselves as a sex partner) was inversely correlated with the amount of pornography they had viewed (Morrison, Ellis, Morrison, Bearden, & Harriman, 2006).

Similarly, many individuals report that pornography use affects their relationship satisfaction. Partners frequently discuss pornography use with a therapist during couples’ counseling (Ayres & Haddock, 2009). Additionally, compulsive cybersex users, individuals who seek sexual gratification through Internet experience (i.e., pornography, chat rooms), reported relationships as the number one area in their life that was affected by pornography (Cooper, Delmonicco, & Burg, 2000). Because compulsive cybersex users are frequently single, it is unclear if they are single because of their addiction or because they chose to be single.

Pornography viewing also affected the interactions between men and women who were not in a relationship (Mulac, Jansma, & Linz, 2002). Male participants who viewed pornographic videos, both degrading and nondegrading, demonstrated more dominant and anxious behaviors, such as more often ignoring their partner’s contributions, touching their partner for longer periods of time, and averting their partner’s gaze more often compared to the men who watched the nonsexual films (Mulac et al., 2002). Although this research showed a clear connection between pornography and negative partner interactions, it does not necessarily indicate that pornography exposure will negatively affect interactions within a relationship. Therefore, the field of research that examines the cause and effects of pornography on relationships remains insufficient.

Positive Influences of Pornography
Some of the same research that found negative influences of pornography also showed positive effects. For example, in addition to the link between pornography and aggressive beliefs, exposure to nudity alone significantly decreased reported aggression levels (Malamuth et al., 2000). In fact, even the highest levels of pornography exposure are not associated with high levels of sexual aggression in the majority of American men (Malamuth et al., 2000). This finding may not be positive, but it does suggest that pornography does not necessarily have a negative impact on its viewers.

Likewise, exposure to pornography was positively correlated with sexual esteem for both male and female participants (Morrison et al., 2004). Both sexes also reported levels of pornography exposure that were inversely correlated with sexual anxiety, indicating that the more pornography viewed, the less anxiety the participant reported experiencing during sexual activity (Morrison et al., 2004). Findings indicating positive effects of pornography are in stark contrast to the previously mentioned findings of negative effects on self-esteem.

Playboy readers also indicated positive effects of pornography (Beggan & Allison, 2003; Beggan, Gagne, & Allison, 2000). Male readers concluded that continual exposure to Playboy served as a source of information about sex and helped develop sexual self-concepts (Beggan & Allison, 2003). An analysis of Playboy indicated a lack of stereotyping women and correct information about women, sex, and relationships (Beggan et al., 2000), suggesting that pornography accompanied by correct information can be educational.

There is little evidence of the positive influence of pornography in research. This finding may be due to a lack of researchers who are looking for positive effects, a deficit of research in this field in general, the possibility that there are few benefits from viewing pornography, or some other mediating factor. However, one preliminary study by Benjamin and Tlusten (2010) indicated a positive impact of partners viewing pornography together. Participants reported a neutral attitude to viewing pornography and said that their partner’s use did not impact their satisfaction within the relationship. When participants reported viewing pornography with their partner, they claimed that the practice enhanced learning more about satisfying their partner and themselves sexually and the practice enhanced passion for sexual activity (Benjamin & Tlusten, 2010). The results of this study are intriguing and warrant further research of the positive effects of pornography on a relationship.

Problems Associated With Pornography Research
The threat of a volunteer bias for experiments involving pornography is high (Gaither & Sellbom,
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2003). One study found that men and women differed in the types of studies in which they would volunteer to participate. Men were more likely to volunteer for heterosexual sexual activity content studies than women, and in reverse, women were more likely to volunteer for studies that contained male nudity. Additionally, volunteers reported greater self-monitoring and general sensation seeking compared to nonvolunteers (Gaither & Sellbom, 2003), suggesting that even well-constructed experiments may be flawed and use samples that are not representative of the population.

Current Study
The current study addressed the large gap in research concerning pornography’s effect on relationships. Because the research suggests mixed effects of pornography, the hypothesis was that pornography exposure would affect relationships but did not indicate the direction of the effect. Specifically, viewing pornography compared to neutral images of people and neutral scenery would affect the participants’ responses to surveys addressing both relationship and sexual satisfaction. A second hypothesis was that there would be differences between men and women’s responses. Men were expected to have more pornography exposure than women, which might affect their responses to different measures. Therefore, we separated sexes for the analysis of all data.

Method
Participants
The participants in this study were students (N=98) from the University of North Dakota; the experimenters excluded two participants from analysis for not being in a committed relationship. Participants ranged in age from 18 to 31 (M = 19.99, SD = 2.49). Both male (n = 55) and female (n = 41) participants were required to be in a committed relationship. Participants indicated their level of commitment as exclusive/committed (i.e., boyfriend or girlfriend; 70%), promised (i.e., “pinned” or wearing a promise ring; 9%), living together (10%), engaged (7%), or married (3%). The length of relationship was specified as 0 to 2 months (8%), 2 to 6 months (19%), 6 months to 1 year (26%), 1 to 3 years (38%), and more than 3 years (9%). With respect to sexual activity with current partner, 76% (n = 73) of participants reported having intercourse. All participants reported being in a heterosexual relationship.

The majority of participants reported their ethnicnicity as Caucasian/White (92%). Others reported Black (1%), Hispanic (3%), Native American (3%), or Mixed (1%) ethnicity. Participants’ year in school varied: 42% indicated freshman, 23% sophomore, 26% junior, 7% senior, and 2% graduate student status.

Materials
Slideshows. We used the International Affective Picture System (IAPS; Lang, Bradley, & Cuthbert, 1999) to create three slideshows. Lang et al. developed the IAPS for experimental investigations in order to provide a set of normative emotional stimuli. Each slideshow used pictures exclusively from IAPS and contained 30 pictures on 30 separate slides. The neutral images of people slideshow contained images of people smiling or showing affection to others. The pornographic images slideshow consisted of erotic images of men and women, either alone or together. The images of solitary individuals contained nudity and sensual poses; for example, one image was of a naked woman facing the beach, her legs separated and her head turned toward the camera. Her position exposed her buttocks and part of her left breast. When two individuals were together in an image, it was always one man and one woman. All of the images showed the couple engaging in sexual contact, such as having oral sex, intercourse, or caressing each other while naked. The images were equally split between male and female domination; for every picture where a man was in a dominant position (such as on top), there was a photograph of a woman in the same position. Likewise, for every photograph of a woman performing oral sex, there was a picture of a man performing oral sex. None of the pictures contained violence or degradation; all of the actions in the photographs appeared to be consensual. Finally, the neutral scenery group was comprised of neutral images, such as inanimate objects or scenery. Each slideshow had 10 random slides with a 4-digit code placed in an obvious position on the picture to ensure that participants looked at each picture.

Image content questionnaire. The image content questionnaire consisted of 10 blank spaces where the participant recorded the 4-digit codes found in the slideshow.

Demographic. Participants indicated their sex, age, ethnicity, year in school, sex of partner, and the length of their relationship. Participants assessed their commitment to the relationship as exclusive/committed, promised, living together,
engaged, or married. Finally, the participants indicated their sexual activity with their current partner as none, kissing, seen each other naked, manual manipulation of partner’s genitals, oral sex, and/or intercourse.

**Beck Depression Inventory–II (BDI–II; Beck, Steer, & Brown, 1996).** The BDI–II is a 21-item questionnaire used to assess symptoms of depression. Each item is accompanied by four statements scored 0–3: Higher scores indicated an increase in symptom severity. Participants chose one of the four statements that best explained the way they had been feeling during the past two weeks. Many studies have found that the BDI-II has sufficient validity and reliability for both psychiatric and nonpsychiatric populations (Dozois & Covin, 2004; Joiner, Walker, Pettit, Perez, & Cukrowicz, 2005).

**Couples Satisfaction Index (CSI-32).** The CSI-32 is a 32-item questionnaire used to assess the level of satisfaction one has with his/her relationship (Funk & Rogge, 2007). The first question indicated the general degree of happiness in the relationship. Participants rated happiness from 0 (extremely unhappy) to 5 (perfect). Other items indicated the level of satisfaction for particular aspects of a relationship, such as time spent together, romantic connection to partner, and how interesting the relationship is. The scale changed according to the question, for instance, rating “I feel a strong connection with my partner” on a scale from 0 (not at all true) to 5 (completely true). All other questions beside the first were on a scale from 0 to 5. Summing the items’ scores determined the total score, with higher scores indicating an elevated level of satisfaction with the relationship.

The CSI-32 was developed from a variety of items collected from different measures. The aggregated CSI-32 scores discriminate between a distressed and nondistressed relationship and correlate highly with other relationship satisfaction measures (Funk & Rogge, 2007). It has moderately high reliability; however, the recent development of this measure allowed for only preliminary data (Graham, Diebels, & Barnow, 2011).

**Sexual Satisfaction Questionnaire (SSQ).** The experimenters developed this 16-item survey to determine the level of sexual satisfaction within a relationship. We created the SSQ because the CSI-32 lacked an analysis of the sexual dimension within a relationship. Items included statements such as “I wish that my partner would be more experimental/adventurous during sexual activity.” Responses ranged from 1 (totally agree/very satisfied) to 5 (totally disagree/very unsatisfied). Some items included a not applicable option. Total scores were a sum of the items based on a point scale; higher scores indicated enhanced levels of sexual satisfaction (see Appendix A).

**Overall Sexual Satisfaction.** The participant’s answer to the first item of the SSQ determined this subscale’s value.

**Sexual Fantasy Subscale.** The experimenters assessed sexual fantasies by condensing items 7, 8, and 9. High scores indicated many fantasies about partner and few fantasies about others. Chronbach’s alpha indicated high reliability (α = .62).

**Desire Different Subscale.** The experimenters used items 6, 11, and 12 to assess the degree to which participants wished their partner acted differently during sexual activity. Low scores suggested that they wished their partner exhibited different behavior during sexual activity. Chronbach’s alpha indicated high reliability (α = .81).

**General Sexual Satisfaction Subscale.** Items 2, 3, 4, 5, 10, 13, 14, 15, and 16 indicated a variety of partner-related issues associated with sexual satisfaction. High scores indicated high sexual satisfaction within his/her relationship. Chronbach’s alpha suggested dependable reliability (α = .71).

**Pornography Viewing Questionnaire (PVQ).** The PVQ contained five items that questioned participants about their current and past exposure to pornography. The items inquired about the participants’ age when they first viewed pornography and how many times they viewed pornography for more than 30 min total and in the last year. The final two items were checklists for types of pornography viewed and the intentions behind viewing pornography. The questions used in this survey were taken from a larger measure (Sabina, Wolak, & Finkelhor, 2008).

**Procedures**

We recruited participants through the University of North Dakota’s Department of Psychology’s research participation system online. If an individual chose to participate, he/she met one of research assistants in a room with a computer and no windows. Before the participant arrived, the research assistant checked the spreadsheet that randomly assigned participants to a group. The research assistant prepared the slideshow so that the first slide was the only thing visible on the screen when the participant arrived.

Once the participant arrived, the research
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assistant presented the consent form and highlighted important information. After the participant signed the consent form, the research assistant then explained the experiment and that the participant would be left alone in the room. During the time alone, the participant would first look at the pictures on the computer. The research assistant stressed importance of only going forward through the pictures and looking at each picture. The experimenter then explained how to complete the Image Content Questionnaire. The research assistant instructed participants to complete the rest of the questionnaire packet after viewing the images. After ensuring that the participant had a firm grasp of the experiment, the experimenter left the room, filed the consent form, and waited in a specified location.

After the participant finished and exited the area, the research assistant checked the slideshow for any tampering such as stopping in the middle of the slideshow or exiting the slideshow and viewing other things on the computer. None of the research assistants reported that they suspected a participant had tampered with the slideshow. The entire process took approximately 30 min.

Results

Gender Differences on the Pornography Viewing Questionnaire

The most common type of pornography viewed by men and women was “sexual activity among two or more people” (men, 73%; women, 47%). Three women reported never having viewed pornography. The percentages for the indicated reasons why participants viewed pornography appear in Table 1. Men most frequently indicated viewing pornography because they “wanted the sexual excitement” (78%), whereas women indicated “never viewing pornography on purpose” (32%). However, the next most frequently indicated reason for viewing pornography by women was “wanted the sexual excitement” (29%).

We conducted a one-way ANOVA to evaluate the impact of sex on the responses to three of the items from the PVQ: age that the participants first viewed pornography, total number of times respondents had viewed pornography for more than 30 min, and the number of times individuals had viewed pornography in the last month. Results indicated that there was a significant effect for the participant’s gender on the age he/she first viewed porn, \( F(1, 90) = 40.10, p < .001 \). Male participants indicated viewing pornography at an earlier age \( (M = 12.64, SD = 2.32) \) compared to female participants \( (M = 15.63, SD = 2.12) \). Likewise, the participant’s gender had a significant effect on the total number of times a participant indicated viewing pornography, \( F(1, 94) = 30.39, p < .001 \). Male participants indicated viewing more pornography in total \( (M = 1.85, SD = 1.16) \) compared to female participants \( (M = 0.61, SD = 1.00) \). Finally, a significant gender effect was seen on the number of times a participant indicated viewing pornography in the last month, \( F(1, 94) = 12.96, p < .01 \). Male participants indicated viewing more pornography in the last month \( (M = 1.25, SD = 1.16) \) compared to female participants \( (M = 0.46, SD = 0.92) \). Significant results indicated that male participants tended to view pornography at a younger age, more often overall, and more often within the last month compared to female participants.

Couples Satisfaction Inventory Results

We conducted a 2 × 3 (Gender × Group assignment) ANOVA on participants’ CSI scores in order to evaluate the impact of group assignment and gender on responses. Results were nonsignificant for group effect, gender effect, and interaction (all \( Fs < 1 \)), suggesting there were no differences in the participants’ responses, no matter the type of images they viewed.

A one-sample \( t \) test was conducted on the CSI scores to evaluate whether the current study’s means were significantly different from Funk and Rogge’s (2007) findings \( (M = 121, SD = 32) \). The sample mean of 134.47 \( (M = 134.47, SD = 19.87) \) was significantly different, \( t(95) = 6.64, p < .001, d = 0.68 \). On average, the participants in this sample rated their relationships as more satisfying than the average participant from Funk and Rogge’s (2007) research.

### Table 1

<table>
<thead>
<tr>
<th>Participants’ Reasons for Viewing Pornography</th>
<th>Male ( (n = 55) )</th>
<th>Female ( (n = 41) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason for Viewing Pornography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanted the sexual excitement</td>
<td>78</td>
<td>29</td>
</tr>
<tr>
<td>Curious about different things people do sexually</td>
<td>53</td>
<td>22</td>
</tr>
<tr>
<td>Wanted information about sex</td>
<td>31</td>
<td>5</td>
</tr>
<tr>
<td>With friends who wanted to do it</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Never looked for pornography on purpose</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>
Sexual Satisfaction Questionnaire Results
We assessed the SSQ and found good reliability, \( \alpha = .78 \). A univariate ANOVA was conducted to determine if group assignment or sex affected the participants’ scores on the SSQ. Results were not significant for differences due to group assignment, \( F(2, 90) = 1.37, ns; \) gender, \( F(1, 90) = 1.73, ns; \) or the interaction, \( F < 1, \) indicating participants were not affected by image content or sex.

In order to compare participants’ responses on the SSQ to the mean of the scale, 3, we conducted a one-sample \( t \)-test. Results were significant, \( t(95) = 6.85, p < .001, d = .70, \) indicating that participants generally expressed a high level of sexual satisfaction.

We conducted four \( 2 \times 3 \) (Participant gender \( \times \) Group assignment) ANOVAs on the SSQ subscales in order to determine if participants’ responses differed according to group assignment or sex. Results for the overall sexual satisfaction item indicated a marginally significant gender effect, \( F(1, 90) = 3.03, p < .09, \eta^2 = .03, \) qualified by a significant interaction, \( F(2, 90) = 3.26, p < .05, \eta^2 = .07. \) Effects analysis of groups at each level of gender yielded marginal significance for women only, \( F(2, 90) = 2.67, p < .08, \eta^2 = .06. \) Women’s responses within the neutral images of people group \( (M = 4.67, SD = 0.65) \) were higher than those in the pornographic images group \( (M = 3.38, SD = 1.71). \) There were no significant differences between the neutral images of scenery and either neutral images of people or pornographic images groups.

The final \( 2 \times 3 \) ANOVA conducted on the general sexual satisfaction subscale did not yield significance for a main effect of group, \( F(2, 90) = 2.02, ns; \) gender, \( F < 1; \) or interaction, \( F < 1, \) indicating image content and sex did not affect participants’ general sexual satisfaction.

Discussion
Differences Between Sexes
Confirming our hypothesis, male participants indicated a younger age of first exposure to pornography, higher total number of times pornography was viewed, and more frequently viewing pornography within the last year compared to female participants. Although men viewed more pornography more frequently than women, both male and female participants reported similar reasons for viewing pornography. “Wanted the sexual excitement” was frequently indicated as a reason for viewing pornography. However, a higher percentage of women reported “never looking for pornography on purpose” than did men. The difference between “wanted the sexual excitement” and “never looking at pornography on purpose” was only 3%, suggesting that there is great discrepancy within reasons for viewing pornography among female participants. The discrepancy suggests that there is not a “typical” relation between women and pornography. Researchers should investigate the differences among women who view pornography for the sexual excitement and women who do not seek out pornography.

The trends found in this study were similar to those found by Sabina et al. (2008). Women also indicated lower rates of viewing pornography compared to men in the original study. Similar to the current study (32%), the most frequent reason indicated by women for why they viewed pornography in the Sabina et al. study was “never looked for pornography on purpose” (42%). In the current study, “wanted the sexual excitement” was the second most frequent reason women indicated for viewing pornography (29%). Sabina et al. found only 17% of female participants indicated viewing pornography for sexual excitement. The discrepancy may be explained by the fact that in the Sabina et al. study participants who did not view pornography before the age of 18 were excluded from analysis.

Couple and Sexual Satisfaction
The nonsignificance found suggested that image
content did not affect participants’ couple or sexual satisfaction. However, the one-sample t-test that compared the current study’s CSI scores to Funk and Rogge’s (2007) study may suggest self-monitoring among the current study’s participants. The participants reported significantly higher CSI scores than Funk and Rogge’s study. The difference may be because the current study’s participants viewed images before taking the CSI or because of differing participant populations. Viewing images of people who appeared to be in loving, happy relationships or as sexually satisfied may have affected how the participants in the neutral images of people group responded to questions about their relationship. Also, the current study had fewer married individuals (4%) compared to Funk and Rogge’s study (24%). The difference in commitment level may explain the difference between the current study’s participants and Funk and Rogge’s.

Like CSI responses, SSQ responses were not significantly affected by either sex or group assignment. Unlike the CSI scores, gender effects were seen in SSQ subscales. Women reported higher sexual satisfaction on overall satisfaction, fantasy, and desire different subscales compared to men. Therefore, men may generally perceive themselves as less sexually satisfied than women. Female participants’ responses to the overall satisfaction item indicated a group effect. Women rated their sexual activity less satisfying when in the pornography group compared to the neutral images of people group. Male participants’ responses on the desire different subscale indicated the same finding, suggesting that perhaps men and women express sexual satisfaction (or lack of) through different questions. Women expressed more general dissatisfaction, whereas men expressed dissatisfaction by admitting to desiring more or different behavior from their partner. Future researchers should look further into assessing women and men’s sexual satisfaction differently.

Overall, pornographic images seemed to produce the same effect that pictures of scenery produced. The nonsignificant difference may suggest that pornography does not affect an individual’s relationship any more than scenery; however, the lack of difference could also suggest that there was a confounding variable in the current study, such as unpleasant images of scenery or unappealing images of pornography. Also, the pornographic images were not violent or degrading, which may be why the harmful effects of pornography that previous research has found were not seen in this study.

Limitations
One of the limitations to this study was the pornographic images seemed outdated, perhaps because Lang et al. created the IAPS in 1999. A few of the participants commented on the grainy pictures and outdated hairstyles. It may be beneficial for this study to be replicated with recent photographs. Another limitation may be the type of people who volunteered to participate. Overall, the current study’s CSI scores were significantly higher than the scores reported in Funk and Rogge’s research (2007). Recruitment was specific for individuals in a committed relationship. The “commitment” criterion may have excluded individuals who believed their relationship was not satisfying or not committed, which may have affected the types of participants that volunteered. Biased volunteering may limit the degree to which this study can be generalized. In addition, the current study lacked evidence for long-term effects of pornography.

Conclusion
We found little evidence that pornography has a positive or negative effect on relationship or sexual satisfaction. Also, the results indicated gender differences in pornography viewing habits and responses to surveys. The gender differences found in the participants’ responses may affect research because participants indicated different dissatisfaction in different areas of their sexual activity with their current partner. Future research should further review gender differences in sexual satisfaction. Our results suggest sex should continue to be a variable when researching pornography. Researchers should consider assessing sexual satisfaction differently between men and women.

References


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Mary Butler graduated from the University of North Dakota (UND) in 2011 as a scholar of the Honors Program with a BS in psychology and a minor in biology. She is now a first-year PhD student in the clinical psychology program at UND. As an undergraduate, she received two research scholarships: the Advanced Undergraduate Research Award that funded research of frontal lobe functioning in unmanned aviation pilots and the Research Experience for UND Undergraduates Scholarship that funded research of the role of neurogenesis in depression and memory. For her senior honors thesis, Ms. Butler worked with Drs. F. Richard Ferraro and Jeffery Holm researching the effects of pornography on relationships. During her thesis research, Ms. Butler participated in the unique experience of developing her own measure for her experiment in the field of human sexuality.
## APPENDIX A

### Sexual Satisfaction Questionnaire

Circle the answer that best fits. Sexual activity can be defined as anything from kissing to sexual intercourse.

1. How satisfied are you with the amount of sexual activity you have with your partner?
   - (1) Very Satisfied
   - (2) Somewhat Satisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Unsatisfied
   - (5) Very Unsatisfied

2. How satisfied are you with the quality of the sexual activity you have with your partner?
   - (1) Very Satisfied
   - (2) Somewhat Satisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Unsatisfied
   - (5) Very Unsatisfied

3. How satisfied are you with the physical appearance of your partner?
   - (1) Very Satisfied
   - (2) Somewhat Satisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Unsatisfied
   - (5) Very Unsatisfied

4. I have engaged in sexual activity with other partners that has been more sexually satisfying than sexual activity with my current partner.
   - (1) Totally Agree
   - (2) Somewhat Agree
   - (3) Neither Agree or Disagree
   - (4) Somewhat Disagree
   - (5) Totally Disagree
   - (N/A) Does not apply

5. I wish that my partner would change some things about his/her physical appearance.
   - (1) Very Unsatisfied
   - (2) Somewhat Unsatisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Satisfied
   - (5) Very Satisfied
   - (N/A) Does not apply

6. I wish that my partner would be more experimental/adventurous during sexual activity.
   - (1) Very Unsatisfied
   - (2) Somewhat Unsatisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Satisfied
   - (5) Very Satisfied
   - (N/A) Does not apply

7. I often fantasize about sexual activity with my partner.
   - (1) Very Unsatisfied
   - (2) Somewhat Unsatisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Satisfied
   - (5) Very Satisfied
   - (N/A) Does not apply

8. I often have fantasies about sexual activity with people other than my partner.
   - (1) Very Unsatisfied
   - (2) Somewhat Unsatisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Satisfied
   - (5) Very Satisfied
   - (N/A) Does not apply

9. I have had fantasies about people other than my partner while engaging in sexual activity with my partner.
   - (1) Very Unsatisfied
   - (2) Somewhat Unsatisfied
   - (3) Neither Satisfied or Unsatisfied
   - (4) Somewhat Satisfied
   - (5) Very Satisfied
   - (N/A) Does not apply

10. I sometimes fulfill my own sexual desires (i.e., masturbate) because my partner is unwilling or unable to.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply

11. I wish that my partner were more assertive during sexual activity.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply

12. I wish that my partner initiated sexual activity more often.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply

13. Sexual activity with my current partner is more satisfying than sexual activity with any other partner I have had.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply

14. My partner and I watch pornography together.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply

15. Sexual satisfaction is a very important part of my relationship with my current partner.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply

16. It is important to be sexually satisfied in your relationships.
    - (1) Very Unsatisfied
    - (2) Somewhat Unsatisfied
    - (3) Neither Satisfied or Unsatisfied
    - (4) Somewhat Satisfied
    - (5) Very Satisfied
    - (N/A) Does not apply