

# NIH Public Access

**Author Manuscript** 

Arch Sex Behav. Author manuscript; available in PMC 2012 April 1.

# Published in final edited form as:

Arch Sex Behav. 2011 April; 40(2): 441-448. doi:10.1007/s10508-009-9585-4.

# Viewing Sexually-Explicit Materials Alone or Together: Associations with Relationship Quality

Amanda M. Maddox, Galena K. Rhoades, and Howard J. Markman

Department of Psychology, University of Denver, Denver, CO 80208-3500, USA

# Abstract

This study investigated associations between viewing sexually-explicit material (SEM) and relationship functioning in a random sample of 1291 unmarried individuals in romantic relationships. More men (76.8%) than women (31.6%) reported that they viewed SEM on their own, but nearly half of both men and women reported sometimes viewing SEM with their partner (44.8%). Measures of communication, relationship adjustment, commitment, sexual satisfaction, and infidelity were examined. Individuals who never viewed SEM reported higher relationship quality on all indices than those who viewed SEM alone. Those who viewed SEM only with their partners reported more dedication and higher sexual satisfaction than those who viewed SEM alone. The only difference between those who never viewed SEM and those who viewed it only with their partners was that those who never viewed it had lower rates of infidelity. Implications for future research in this area as well as for sex therapy and couple therapy are discussed.

# Keywords

Pornography; Relationship quality; Couples; Sexually-explicit material; Infidelity

# Introduction

Various facets of pornography and its effect on our society have been studied for decades. In terms of how it relates to romantic relationships, there has been a focus on men who view it alone and how this behavior affects their romantic partners or their views of partners (e.g., Bridges, Bergner, & Hesson-McInnis, 2003; Kenrick, Gutierres, & Goldberg, 2003). With regard to women, most research has examined women's use of and attitudes about pornography (e.g., Lawrence & Herold, 1988; O'Reilly, Knox, & Zusman, 2007). Research from other countries has indicated that women tend to view sexually-explicit materials (SEMs) with their partners rather than by themselves, whereas men's viewing is more often private (Haavio-Mannila & Kontula, 2003; Træen, Nilsen, & Stigum, 2006). The present study investigated these dynamics in the United States and also examined how viewing SEM with one's romantic partner relates to relationship quality and functioning.

Pornography has been defined as "media used or intended to increase sexual arousal" (Carroll et al., 2008). However, many researchers divide pornography into subcategories, such as sexually-violent pornography, nonviolent pornography, and erotica. Erotica portrays more positive and affectionate sexual encounters with more balance of power than the first two categories (Stock, 1997). Given the novelty of the focus of the current study, we did not use such subcategories. Instead, we used the more general term, "sexually-explicit material"

<sup>©</sup> Springer Science+Business Media, LLC 2009 amaddox@psy.du.edu .

(SEM), which could have included any of these subcategories in the form of videos, internet web pages, literature, magazines, or other media.

# Viewing Sexually-Explicit Materials Alone

Viewing SEM on one's own (without a romantic partner) appears to be most common among 18 to 25 year olds who are sexually active, have low levels of sexual anxiety, and report higher numbers of sexual partners (Carroll et al., 2008). Additionally, Stack, Wasserman, and Kern (2004) found that being less religious was a strong predictor of viewing SEM on the internet. Regarding gender differences in SEM viewing, men generally view SEM more frequently than women (Traeen et al., 2006), though there is some variation in gender differences by age and cohort. Boies (2002) found the male to female ratio of SEM viewing to be 3:1 in younger populations and 6:1 in older populations. Men also tend to enjoy SEM more than women, regardless of whether the materials were designed for male or female audiences (Mosher & MacIan, 1994).

Research on the consequences of viewing SEM alone for attitudes about partners and for relationship functioning is somewhat mixed. Some research indicates deleterious effects for men's views of their partners and relationships. For example, Kenrick et al. (2003) found that men rated their partners as less attractive after viewing sexually-explicit photographs of other women. They theorized that this may be because exposure to SEM leads men to misperceive what a typical naked body looks like. Their earlier work supports this notion; men who found centerfolds attractive rated themselves as less in love with their partners (Kenrick et al., 2003). Interestingly, the same exposure did not affect women's ratings of love for their partners (Kenrick et al., 2003). In another study, after 6 weeks of 1 h per week exposure to non-violent pornography, both men and women reported less satisfaction with their partner's affection, physical appearance, and sexual curiosity and performance (Zillmann & Bryant, 1988). They also placed increased importance on sexual activity without emotional involvement. Other research indicates that prolonged exposure to pornography may be related to doubts about the value of marriage and higher endorsement of non-monogamous relationships (Zillmann, 1989). This body of research indicates that exposure to SEM can be associated with negative relationship consequences, perhaps especially for men.

On the other hand, other work has failed to find links between viewing SEM and negative attitudes about women or relationships. Linz, Donnerstein, and Penrod (1988) found that exposure to non-violent pornography did *not* increase men's judgments of women as sexual objects. Similarly, there is evidence that even watching explicitly degrading pornography does not change men's rating of women's intellectual competence, sexual interest, attractiveness, or permissiveness (Jansma, Linz, Mulac, & Imrich, 1997). Taken together, it appears that although some men may experience increases in negative opinions about women after exposure to SEM, not all men are affected in such negative ways. At the same time, we should note that we know of no studies that have demonstrated a *positive* effect of viewing SEM alone for relationship functioning in general or for men's views of their partners.

Although some research has examined women's general attitudes about pornography in tandem with men's attitudes about SEM (e.g., O'Reilly et al., 2007), much of the SEM research that focuses solely on women centers more on their opinions of their partners' SEM viewing rather than on their own viewing. For instance, Bergner and Bridges (2002) found that when women judged their partners' viewing as excessive, they tended to believe it had a negative effect on the relationship. They studied 100 posts to internet message boards from women who thought their partners' viewing of pornography was excessive. These women used words like "cheating," "affair," and "betrayal," and referred to their partners as "sex

general.

addicts," "sexualx degenerates," and "perverts." Female partners of diagnosed sex addicts tended to hold similar opinions to those in Bergner and Bridges' (2002) study (Schneider, 2000). However, these two samples were selected based on very frequent use of SEM by male partners, so their opinions are most likely more extreme than those of women in

Research that has assessed the opinions of more representative women regarding their partners' SEM viewing indicates that they tend not to hold such negative opinions as the women in the previous two studies (Bridges et al., 2003). In fact, women tended to agree with some positive statements about their partners' pornography use, such as "My partner's use of pornography leads to variety in our sexual relationship" and "My partner's use of pornography does not affect the intimacy in our relationship," and only one-third viewed their partner's use as a negative type of infidelity. Women who reported their partners' viewing as high in terms of frequency and duration reported the most distress (Bridges et al., 2003). These results imply that women may not view their partners' SEM viewing as unhealthy as long as they do not perceive that viewing as excessive. In fact, some women may even view their partners' pornography use as enhancing their sexual relationship.

One of the limitations of the literature on SEM and romantic relationships is that most studies assess individuals' attitudes toward the opposite gender or toward relationships after being exposed to SEM in an experimental context, which does not necessarily reflect real-life experiences. The current study addressed a gap in this field by exploring the ways in which viewing SEM alone or together in one's personal life (outside of an experiment and of one's own volition) was related to several indices of relationship quality and functioning. Assessing behavior as it occurs naturally as opposed to behavior induced in an experimental paradigm allows results to more closely mirror the general public's natural behavior and responses.

### Viewing Sexually-Explicit Materials with a Romantic Partner

Some previous studies have documented that men tend to view SEM alone whereas women tend to view SEM with their partners. For instance, when asked about their most recent viewing of a sexually-explicit film, women were more likely to say that they had seen it with their partner than alone whereas men were more likely to report having seen it alone (Traeen et al., 2006). In the same study, women were twice as likely as men to have said that someone else had bought the sexually-explicit magazines they had viewed. However, to our knowledge, there is very little prior research on how viewing SEM with a partner (outside of an experiment) is related to relationship functioning. Some studies have explored the reactions of men and women to being asked to view SEM in the presence of other people. While it does not directly address our central research questions, this research may be useful in understanding how viewing SEM with one's romantic partner is related to relationship quality. In one experimental research study, men tended to experience less sexual arousal and enjoyment of SEM when they watched pornographic videos with female strangers than they did when watching with male strangers (Lopez & George, 1995). This so-called "locker room effect" may occur because men think women disapprove of pornography, so they inhibit their enjoyment in the presence of women (Lopez & George, 1995). In another study, women reported more positive feelings and sexual arousal when viewing pornographic videos with their partners than when viewing such videos with female friends or a mixedgender group (Lawrence & Herold, 1988). The authors of this work suggested this finding may be related to the fact that 30% of their female participants said they used X-rated videos as a prelude to sexual intercourse with their partners. In combination, these findings may indicate that unlike men, who seem to prefer viewing SEM alone or with other men (Lopez & George, 1995), women may be more comfortable viewing SEM with their partners than viewing it alone or with friends.

The clinical literature is also relevant to the discussion of viewing SEM with a romantic partner. Many clinicians believe in the utility of prescribing or supporting the viewing of SEM for couples who are having difficulties with intimacy (Manning, 2006; Striar & Bartlik, 1999). Additionally, one study indicated that therapists were 2.6 times more likely to claim that the viewing of SEM by their clients was more helpful than harmful (Robinson, Manthei, Scheltema, Rich, & Koznar, 1999). Thus, some professionals have endorsed the idea that consensual viewing of SEM can be healthy and helpful in a committed relationship, though little research exists to support or refute this notion.

#### The Present Study

The present study sought to expand the literature on how viewing SEM, either alone or together with one's romantic partner, was related to other relationship characteristics. Based on the research that is available about how viewing SEM alone affects opinions of romantic partners, particularly for men, we expected that individuals who did not view SEM at all would report higher relationship quality on a number of indices, including general relationship adjustment, communication quality, and sexual satisfaction, as well as lower rates of infidelity than those who viewed SEM by themselves. On the other hand, we expected that viewing SEM together, but not alone, would relate to relationship quality in a positive direction. We expected this positive association because viewing SEM together could be considered a shared activity or interest between partners, and there is evidence that having more shared interests and activities is associated with higher relationship satisfaction (Kurdek & Schmitt, 1986). It could also be that relationships in which partners engaged in using SEM together are characterized by higher relationship quality because of the level of trust and intimacy needed to be able to discuss and decide together to view SEM jointly. These hypotheses were examined in the current study using a large, random sample of 18-35 year-old men and women in unmarried relationships. Additionally, given that so little research has examined characteristics of those who view SEM alone versus together with their partners, we present some basic descriptive data on our sample before testing our research questions about relationship quality and functioning.

# Method

#### **Participants**

Participants (N=1291) were individuals taking part in a larger project focused on unmarried relationships in the United States. The sample for the current study included 475 men (36.79%) and 816 women. Participants ranged in age from 18 to 34 years (M=25.51 SD=4.0), had a median of 14 years of education, and made \$15,000 to \$19,999 annually, on average. All participants were unmarried, but in romantic relationships, with 31.99% cohabiting with their partner. In terms of ethnicity, this sample was 8.4% Hispanic or Latino and 91.6% not Hispanic or Latino. In terms of race, the sample was 75.9% White, 14.3% Black or African American, 3.3% Asian, 1.1% American Indian/Alaska Native, and .3% Native Hawaiian or Other Pacific Islander; 3.8% reported being of more than one race and 1.3% did not report a race.

# Procedure

To recruit participants for the larger project, a calling center used a targeted-listed telephone sampling strategy to call households within the contiguous United States. After a brief introduction to the study, individuals were screened for participation. To qualify, participants needed to be between 18 and 34 and be in an unmarried relationship with a member of the opposite sex that had lasted 2 months or longer. The criterion for length of the relationship was established so that we obtained data on relatively stable dating relationships, which was a necessity for the aims of the larger project. Those who qualified,

agreed to participate, and provided complete mailing addresses (N=2,213) were mailed forms within 2 weeks of their phone screening. Of those who were mailed forms, 1,447 individuals returned them (65.4% response rate); however, 153 of these survey participants indicated on their forms that they did not meet requirements for participation, either because of age or relationship status, leaving a sample of 1294. Of these, three individuals did not

answer items regarding SEM, thus the final sample of 1254. Of these, three individuals did not answer items regarding SEM, thus the final sample for the current study was 1291. For the larger project, these individuals are followed longitudinally, but the current study only employed data from the initial wave of data collection.

#### Measures

**Demographic Information**—Data on basic background characteristics (e.g., age, income), as well as information on relationship status and length, were collected in a demographics questionnaire. Religiosity was also measured in this section of the forms with the item: "All things considered, how religious would you say that you are?" This item was rated on a 1 (*Not at all*) to 7 (*Very religious*) scale. It has been used in previous research in which it has demonstrated convergent validity (Rhoades, Stanley, & Markman, 2009).

**Viewing Sexually-Explicit Materials**—We used two items to assess whether or not participants viewed SEM alone and whether they viewed SEM with their partner: "Do you look at erotic websites, magazines, or movies by yourself?" and "Do you and your partner look at erotic websites, magazines, or movies together?"The answer choices were"No," "Yes, sometimes,"and"Yes, often."For the analyses presented here, those who answered "No"were coded as 0, and those who answered "Yes, sometimes" or "Yes, often"were coded as 1. We chose to combine these two "Yes"groups because we were most interested in comparing those who had never engaged in viewing SEM to those who had engaged in viewing, rather than attempting to examine frequency of viewing. Additionally, this scale is likely a poor measure of frequency because there are no definitions of "sometimes" versus "often," and it would be difficult to establish that the scaling is interval in nature.

**Negative Communication**—To measure negative communication, we used the Communication Danger Signs Scale (Stanley & Markman, 1997). On this 7-item scale, participants rate items about communication in their relationships such as "little arguments escalate into ugly fights with accusations, criticisms, name-calling, or bringing up past hurts" on a 1 (*never or almost never*) to 3 (*frequently*) scale. This scale has demonstrated adequate reliability and validity in previous work (Kline et al., 2004). In the current study, Cronbach's alpha ( $\alpha$ )=.81.

**Relationship Adjustment**—We used the 4-item version of the Dyadic Adjustment Scale (Sabourin, Valois, & Lussier, 2005; Spanier, 1976) to measure relationship adjustment. This measure included items about happiness, thoughts about dissolution, confiding in one another, and a general item about how well the relationship is going. In this sample, ( $\alpha$ )=.81.

**Dedication**—Dedication, also called interpersonal commitment, was measured using the 14-item Dedication Scale from the Revised Commitment Inventory (Stanley & Markman, 1992). Example items are "I want this relationship to stay strong no matter what rough times we encounter" and "I like to think of my partner and me more in terms of 'us' and 'we' than 'me' and 'him/her."Each item was rated on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Many studies have demonstrated this measure's reliability and validity (e.g., Kline et al., 2004; Stanley & Markman, 1992). In this sample, ( $\alpha$ )=.88.

**Sexual Satisfaction**—For sexual satisfaction, participants rated "We have a satisfying sensual or sexual relationship" on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. This item has demonstrated validity in previous research (Rhoades et al., 2009; Stanley, Amato, Johnson, & Markman, 2006).

**Infidelity**—For infidelity, participants were asked, "Have you had sexual relations with someone other than your partner since you began seriously dating?" This item was developed for this study based on previous research. For the analyses presented here, those who answered "No" were coded as 0 and those who answered "Yes, with one person" or "Yes, with more than one person" were coded as 1. We combined these two "Yes" response options because we had made no predictions about the number of infidelity partners.

# **Data Analytic Strategy**

We used chi-square and analysis of variance (ANOVA) to test whether there were significant differences between those who never viewed SEM ("no-SEM"; 35.9%), viewed SEM by themselves only ("alone-only"; 19.3%), viewed SEM together with their partner, but not alone ("together-only"; 15.9%), and viewed SEM both together and alone ("together/alone"; 29.0%). When omnibus tests were significant, we then used *t*-tests to examine specific significant differences among the groups. Given the large sample size, we adopted a conservative alpha of p=.01 for the omnibus tests (ANOVA and chi-square) and used a Bonferroni correction for the *t*-tests. There were no significant SEM group X gender interactions on any variables, so these results are not reported. All means and SDs are reported in Table 1. Effect sizes (Cohen's *d*) for significant differences are presented in the text.

# Results

# **Descriptive Findings**

**Gender**—Significantly more men (76.8%) than women (31.6%) reported viewing SEM alone,  $\chi^2(1, N=1291)=245.92$ , *p*<.001, but there was not a significant difference between men and women in terms of whether they reported viewing SEM with their partner, *p*>.30. In this sample, 44.8% reported viewing SEM with their partner.

**Age**—There were no significant main effects of SEM group for age, p>.01.

**Religiosity**—A 4 (SEM group)×2 (gender) ANOVA indicated a main effect for level of religiosity, F(1, 1277)=12.47, p<.001. Contrasts (*t*-tests) showed that individuals in the no-SEM group had higher levels of religiosity than those in the alone-only group (d=.38) and the together/alone group (d=.41).

**Relationship Length**—A 4 (SEM group)×2 (gender) ANOVA showed a main effect for gender, F(1, 1283)=10.28, p<.01, with women reporting having been in their relationships for a longer period of time than men. The ANOVA did not reveal a significant main effect for SEM group, p>.01.

**Cohabitation Status**—A two-by-two chi-square indicated that individuals who were cohabiting were more likely to report that they viewed SEM together (52.5%) than individuals who were dating (41.2%),  $\chi^2(1, N=1291)=14.53$ , *p*<.001. There was no significant difference between cohabiting and dating individuals in regards to viewing SEM alone.

#### **Relationship Quality and Functioning**

**Negative Communication**—To assess the differences among the four SEM groups on communication, a 4 (SEM group)×2 (gender) ANOVA was conducted (see Table 1). There was a significant main effect for SEM group, F(1, 1280)=9.25, p<.001. Individuals in the no-SEM group reported significantly lower negative communication than those in the alone-only group (d=.26) and those in the together/alone group (d=.26).

**Relationship Adjustment**—A 4 (SEM group)×2 (gender) ANOVA indicated a significant main effect for SEM group, F(1, 1147)=3.95, p<.01. Individuals in the no-SEM group had significantly higher relationship adjustment than individuals in the alone-only group (d=.22).

**Dedication**—A 4 (SEM group)×2 (gender) ANOVA indicated a significant main effect for SEM group, F(1, 1280)=6.55, p<.001. Individuals in the no-SEM group reported significantly higher levels of dedication compared to those in the alone-only group (d=.30) and the together/alone group (d=.22). Individuals in the together-only group also reported significantly higher levels of dedication than those in the alone-only group (d=.31) and the together/alone group (d=.23).

**Sexual Satisfaction**—A 4 (SEM group)×2 (gender) ANOVA indicated a significant main effect for SEM group, F(1, 1275)=8.39, p<.001. Individuals in the alone-only group reported significantly lower sexual satisfaction than those in the no-SEM (d=.21), the together-only (d=.43), and the together/alone groups (d=.33).

**Infidelity**—We used a four-by-two chi-square to assess the relationships between SEM group and self-reported infidelity (yes or no). The chi-square was significant,  $\chi^2(3, N=1286)=40.41$ , p<.001. Across the groups, 9.7% (n=45) of those in the no-SEM group reported having sexual relations with someone other than their partner since they seriously began dating, while 19.4% (n=48) of those in the alone-only group, 18.2% (n=37) of those in the together-only group, and 26.5% (n=99) of those in the together/alone group reported infidelity. Follow-up tests indicated that individuals in the no-SEM group reported significantly less infidelity in their relationships than the other three groups.

# Discussion

Much of the past research on viewing SEM and relationships has been conducted in laboratories using experiments and random assignment (e.g., Glascock, 2005;Jansma et al., 1997; Kenrick et al., 2003). In contrast, the current study asked individuals about their own experiences with SEM and assessed how viewing SEM with one's romantic partner or on one's own was associated with key dimensions of relationship quality. Before discussing how viewing SEM in different contexts was related to relationship functioning, we discuss the findings from our more descriptive analyses.

Our descriptive results supported the generally accepted finding that more men than women view SEM by themselves (e.g., Boies, 2002; Carroll et al., 2008). However, we did not find any significant gender differences with regard to viewing SEM with partners. Nearly half of both men and women reported that they have viewed SEM with their romantic partner. The length of relationship was unrelated to whether individuals had viewed SEM with their partner or alone, but those who were cohabiting were more likely to have viewed SEM with their partner than those who were dating, but not living together. Although this behavior is rarely addressed in research on couples and relationship functioning, these descriptive

findings suggest that viewing SEM together is a common activity among young unmarried couples.

Patterns of viewing SEM were also related to religiosity. Prior work showed that viewing internet SEM was related to weak religious ties (Stack et al., 2004), and our results support that finding in that individuals who did not view SEM at all were more religious than those who viewed SEM only by themselves or by themselves and with their partner.

Regarding viewing SEM and relationship functioning, our hypothesis that individuals who did not view SEM at all would report higher relationship functioning than those who viewed SEM alone was mostly supported. As expected, individuals who did not view SEM at all reported lower negative communication and higher dedication than individuals who viewed SEM alone or both alone and with their partner. Additionally, individuals who did not view SEM at all reported higher sexual satisfaction and relationship adjustment compared to those who viewed SEM only alone. Lastly, those who did not view SEM at all had an infidelity rate that was at least half that of the other three groups. The effect sizes for these differences were generally small.

Our hypothesis that individuals who viewed SEM with their partner would have higher relationship functioning than those who viewed SEM alone was partially supported. Those who only viewed SEM together reported more dedication than those who viewed SEM alone or both alone and together, and viewing SEM only together was associated with higher sexual satisfaction than viewing SEM only alone. As was the case for the comparison between those who viewed SEM alone versus not at all, the effect sizes for these differences were typically small. At the same time, there was only one instance in which viewing SEM together with one's partner was associated with lower relationship functioning than not viewing SEM in any context. Those who viewed SEM at all. In all other cases, there were not significant differences between these two groups. These results clearly do not suggest a benefit of viewing SEM together, but also do not suggest that it is associated with lower relationship quality or detrimental in some way.

Manning (2006) theorized that viewing SEM together may be a means to become closer whereas viewing it alone may put up a wall between partners. Our findings cannot directly speak to whether couples who viewed SEM were closer or whether closeness was a motivation for viewing SEM, but the finding that individuals who viewed SEM alone only had the lowest sexual satisfaction may support Manning's notion that viewing SEM alone takes away from the couple's sexual relationship. However, it could also be that individuals who are unhappy in their relationships seek out SEM on their own as an outlet for sexual energy. The difficulty with interpreting these analyses is that they were correlational. We cannot know from these data whether viewing SEM alone or together was a cause or an effect of relationship dynamics.

No significant gender differences emerged in our analyses, which suggests that viewing SEM in different contexts was related to men's and women's relationships in similar ways. Much of the previous research has focused on men's use of pornography and their relationships with and views of women (e.g., Bridges et al., 2003; Philaretou, Mahfouz, & Allen, 2005). This research extends that literature because it demonstrated that women who viewed SEM by themselves also tended to have lower quality relationships. Future research might examine these mechanisms in more depth in a sample of couples in which data from both partners are collected. For example, it may be important to know whether women who view SEM alone tend to also have partners who view SEM alone and if differences in rates

or interest in viewing SEM alone or together within couples is associated with different relationship characteristics.

There are some clinical implications of the research we have presented. As mentioned earlier, some clinicians have endorsed prescribing viewing SEM together as a means to improve sexual satisfaction and/or intimacy (Striar & Bartlik, 1999). Excluding individuals who did not view SEM at all, our results indicated that higher dedication was the only positive relationship characteristic associated with viewing SEM together but this finding was correlational. The best test of whether such prescriptions are warranted would be to use a randomized controlled trial in which some couples in therapy are assigned to view SEM and others are not. In addition, more research is needed to determine which characteristics might need to exist within a relationship for such interventions to be effective.

This research also indicated that viewing SEM alone may be a risk factor for negative relationship characteristics. Although we cannot know from our results whether viewing SEM alone leads to poorer relationship quality or vice versa, these data may be useful to clinicians who talk with their clients about viewing SEM alone and how it relates to their romantic relationships.

#### **Limitations and Future Research**

The current study had several strengths, but they should be considered in the context of the study's limitations. As noted earlier, we were unable to assess frequency of viewing SEM alone versus together. Future research could expand what was measured in this study by measuring not only the context of viewing SEM (alone versus together), but also the frequency of different viewing behavior, the type of media viewed (e.g., internet, video, or print material), as well as the type of SEM (e.g., what is known as soft or hardcore pornography).

Additionally, although most of the measures included in this study were reliable and valid, our single item measure of sexual satisfaction may have limited its sensitivity. Collecting more information about sexual satisfaction, sexual functioning, and intimacy would provide a more nuanced and thorough perspective about how these facets of relationship quality relate to experiences with SEM. Additionally, because our results were not based on longitudinal research, they can only be interpreted as correlational relationships not as causal relationships.

With regard to future research, this field may benefit from examining both partners in a couple. It would be interesting to know, for example, if it matters for relationships whether partners are matched in terms of their preferences for and behavior related to viewing SEM alone and together. Data collected from both partners could also help this field know how one partner's private viewing of SEM affects the other partner's sense of the relationship. Furthermore, future research should consider how individual sexual history such as premarital sexual experience and number of previous sexual partners relates to viewing SEM and to relationship quality. Examining sexual history in conjunction with SEM-viewing behavior could help explain the nuances of why viewing SEM alone was negatively associated with relationship quality. This kind of research could help the field to disentangle whether viewing SEM is a proxy for more important individual characteristics, such as sexual drive.

In conclusion, this study demonstrated that many unmarried young adults choose to view SEM in their private lives, either by themselves and/or with their partners. This behavior is clearly a part of many dating relationships, yet it is not often measured or discussed. Our findings suggest that several different domains of relationship quality are related to viewing

SEM either alone or together in meaningful ways and that future research should continue to explore how viewing SEM affects relationship development and quality.

# Acknowledgments

This research was supported by a grant from the National Institute of Child Health and Human Development (R01 HD0 47564) awarded to Scott Stanley and the second and third authors.

# References

- Bergner RM, Bridges AJ. The significance of heavy pornography involvement for romantic partners: Research and clinical implications. Journal of Sex and Marital Therapy 2002;28:193–206. [PubMed: 11995598]
- Boies SC. University students' uses of and reactions to online sexual information and entertainment: Links to online and offline sexual behaviour. Canadian Journal of Human Sexuality 2002;11:77–89.
- Bridges AJ, Bergner RM, Hesson-McInnis M. Romantic partners' use of pornography: Its significance for women. Journal of Sex and Marital Therapy 2003;29:1–14. [PubMed: 12519658]
- Carroll JS, Padilla-Walker LM, Nelson LJ, Olson CD, Barry CM, Madsen SD. Generation XXX: Pornography acceptance and use among emerging adults. Journal of Adolescent Research 2008;23:6–30.
- Glascock J. Degrading content and character sex: Accounting for men and women's differential reactions to pornography. Communication Reports 2005;18:43–53.
- Haavio-Mannila, E.; Kontula, O. Sexual trends in the Baltic Sea area. Population Research Institute; Helinski: 2003.
- Jansma LL, Linz DG, Mulac A, Imrich DJ. Men's interactions with women after viewing sexually explicit films: Does degradation make a difference? Communication Monographs 1997;64:1–24.
- Kenrick, DT.; Gutierres, SE.; Goldberg, LL. Influence of popular erotica and judgments of strangers and mates. In: Plous, S., editor. Understanding prejudice and discrimination. McGraw-Hill; New York: 2003. p. 243-248.
- Kline GH, Stanley SM, Markman HJ, Olmos-Gallo PA, Peters M, Whitton SW, et al. Timing is everything: Preengagement cohabitation and increased risk for poor marital outcomes. Journal of Family Psychology 2004;18:311–318. [PubMed: 15222838]
- Kurdek LA, Schmitt JP. Early development of relationship quality in heterosexual married, heterosexual cohabiting, gay, and lesbian couples. Developmental Psychology 1986;22:305–309.
- Lawrence KA, Herold ES. Women's attitudes toward and experience with sexually explicit materials. Journal of Sex Research 1988;24:161–169.
- Linz DG, Donnerstein E, Penrod S. Effects of long-term exposure to violent and sexually degrading depictions of women. Journal of Personality and Social Psychology 1988;55:758–768. [PubMed: 3210143]
- Lopez PA, George WH. Men's enjoyment of explicit erotica: Effects of person-specific attitudes and gender-specific norms. Journal of Sex Research 1995;32:275–288.
- Manning JC. The impact of internet pornography on marriage and the family: A review of the research. Sexual Addiction & Compulsivity 2006;13:131–165.
- Mosher DL, MacIan P. College men and women respond to X-rated videos intended for male or female audiences: Gender and sexual scripts. Journal of Sex Research 1994;31:99–113.
- O'Reilly S, Knox D, Zusman ME. College student attitudes toward pornography use. College Student Journal 2007;41:402–406.
- Philaretou AG, Mahfouz AY, Allen KR. Use of internet pornography and men's well-being. International Journal of Men's Health 2005;4:149–169.
- Rhoades GK, Stanley SM, Markman HJ. The pre-engagement cohabitation effect: A replication and extension of previous findings. Journal of Family Psychology 2009;23:107–111. [PubMed: 19203165]

- Robinson BE, Manthei R, Scheltema K, Rich R, Koznar J. Therapeutic uses of sexually explicit materials in the United States and the Czech and Slovak Republics: A qualitative study. Journal of Sex and Marital Therapy 1999;25:103–119. [PubMed: 10327379]
- Sabourin SP, Valois P, Lussier Y. Development and validation of a brief version of the Dyadic Adjustment Scale with a nonparametric item analysis model. Psychological Assessment 2005;17:15–17. [PubMed: 15769225]
- Schneider JP. A qualitative study of cybersex participants: Gender differences, recovery issues, and implications for therapists. Sexual Addiction & Compulsivity 2000;7:249–278.
- Spanier GB. Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage and Family 1976;38:15–28.
- Stack S, Wasserman I, Kern R. Adult social bonds and use of internet pornography. Social Science Quarterly 2004;85:75–88.
- Stanley SM, Amato PR, Johnson CA, Markman HJ. Premarital education, marital quality, and marital stability: Findings from a large, random, household survey. Journal of Family Psychology 2006;20:117–126. [PubMed: 16569096]
- Stanley SM, Markman HJ. Assessing commitment in personal relationships. Journal of Marriage and Family 1992;54:595–608.
- Stanley, SM.; Markman, HJ. Marriage in the 90s: A nationwide random phone survey. PREP; Denver, CO: 1997.
- Stock, WE. Sex as commodity: Men and the sex industry. In: Levant, RF.; Brooks, GR., editors. Men and sex: New psychological perspectives. John Wiley; Hoboken, NJ: 1997. p. 100-132.
- Striar S, Bartlik B. Stimulation of the libido: The use of erotica in sex therapy. Psychiatric Annals 1999;29:60–62.
- Træen B, Nilsen TS, Stigum H. Use of pornography in traditional media and on the Internet in Norway. Journal of Sex Research 2006;43:245–254. [PubMed: 17599247]
- Zillmann, D. The effects of prolonged consumption of pornography. In: Zillmann, D.; Bryant, J., editors. Pornography: Research advances and policy considerations. Lawrence Erlbaum; Hillsdale, NJ: 1989. p. 127-157.
- Zillmann D, Bryant J. Pornography's impact on sexual satisfaction. Journal of Applied Social Psychology 1988;18:438–453.

# Table 1

Means, SDs, and significant differences as a function of sexually-explicit viewing groups

Measure possible range	No-SEM	I	<b>Together-only</b>	:-only	<u>Alone-only</u>	nly	Together/alone	r/alone
	n = 463		n = 205		n = 249		n = 374	
	М	SD	М	SD	Μ	SD	М	SD
Age	25.33	4.75	25.62	4.74	25.63	4.91	25.68	4.79
Religiosity	4.35 <sup>a</sup>	1.72	3.99 <sup>ab</sup>	1.62	3.69 <sup>b</sup>	1.77	3.66 <sup>b</sup>	1.68
Relationship length	30.87	28.60	42.89	41.47	31.03	32.67	36.11	34.12
Negative communication	$1.58^{a}$	.48	$1.68^{\mathrm{ab}}$	.52	1.71 <sup>b</sup>	.51	1.71 <sup>b</sup>	.51
Relationship adjustment	$16.28^{\mathrm{a}}$	3.69	16.18 <sup>ab</sup>	3.58	15.47 <sup>b</sup>	3.54	15.69 <sup>ab</sup>	3.64
Dedication	5.47 <sup>a</sup>	96.	5.48 <sup>a</sup>	66.	5.16 <sup>b</sup>	1.07	5.25 <sup>b</sup>	1.04
Sexual satisfaction	$5.86^{a}$	1.61	$6.18^{a}$	1.32	$5.51^{b}$	1.80	$6.04^{a}$	1.44

*Note:* Across rows, different superscripts indicate significant differences between groups using a Bonferroni correction; means that have the same superscript were not significantly different from one another. For Religiosity, Dedication, and Sexual Satisfaction, absolute range was 1–7; for Negative Communication, absolute range was 1–3; for Relationship Adjustment, absolute range was 0–21