

## *Pornography's Effects on Interpersonal Relationships*

*Ana J. Bridges, Ph.D.*

I obtained my Masters degree in Clinical Psychology in 2001. My training included interning for one year at an adult psychiatric hospital. In this setting, I had my first introduction to the interpersonal impact of pornography use.

My first client was a woman who had a partner she described as “addicted” to pornography. For some time, she had been struggling to change his behavior—through cajoling, pleading, threats and ultimatums, tears and tantrums. Although at times effective in the short run, none succeeded in the long run and she continually found a re-stocked stash of pornographic materials, despite his promises to stop. Her distress and inability to have this distress heard by her partner reached such high levels that she had attempted suicide: thus her admission into the hospital and our meeting. I was wholly unprepared for this. I had studied depression, anxiety, trauma, psychosis, but had no understanding of how to approach this particular concern. Was this a cognitive distortion? Did she just need to “lighten up,” to stop interpreting his behavior in unhealthy and unhelpful ways and just accept it? Did she have a right to demand that his sexuality be limited to what she found acceptable? Was there such a thing as pornography addiction? Was there something else going on, but she was unable to talk about it directly and thus was using this as a way to avoid the real problem? Could people actually become that upset over something that was so normal? Didn't all men look at pictures of naked women and masturbate?

As a neophyte clinician and conscientious graduate student, I immediately consulted the professional and scientific literature, seeking answers to my questions. What I found was an array of articles examining how short-term exposure to pornography in a laboratory setting related to numerous outcomes in male viewers. I found not one single empirical study of pornography use from the romantic partner's perspective. Thus, my research area was born.

In this past decade, research in the area of interpersonal effects of pornography use has risen considerably. Today, I will be providing a summary and overview of my own and others' research that describes these studies and their implications for relationship functioning and policy. Although I will be focusing primarily on romantic relationships, these results oftentimes extend to parental, work, and peer relations. I begin by describing a series of theoretical models that suggest the mechanisms by which pornography exerts its effects on interpersonal

relationships. Following this, I will provide an overview of findings from research studies that highlight how I and others are attempting to disentangle systematically the full spectrum of effects that pornography may exert in interpersonal relationships.

### Models of Pornography Effects

#### *Imitation Model*

Myriad theories exist for how media in general, and pornography in particular, affect consumers and others. The simplest of these is the *imitation model* (Silbert & Pines, 1984). The imitation model theorizes that pornography creates a model for behavior and consumers then imitate what they have seen. There is some indirect and qualitative support for such a theory. For example, Silbert and Pines conducted qualitative interviews with 200 prostitutes to gather information on their sexual experiences, and found that 24% mentioned pornography as being intimately tied to a sexual assault they experienced. Most often, the abuser reportedly made reference to something he had seen in the pornography as inspiration for his actions, or to insist the woman enjoyed the assault. However, the imitation model is grossly inadequate: while it may contribute to particular sensational instances of aggression or violence, most people who view pornography do not commit similar abuses. This model ignores myriad complexities of the relationship between media and individual behavior and suggests that consumers of pornography are uncritical automatons. Critics of anti-pornography efforts have repeatedly utilized the imitation model as the focus of their attacks, stating that consumers are aware of the difference between what is supposedly fantasy, as portrayed in pornography, and reality (Loftus, 2002).

*Implications for policy:* If the imitation model was the only or even the primary mechanism by which pornography exerted its effects on users, then limiting access or even banning harmful pornography would be clearly indicated. However, the evidence as a whole does not support such a simplistic mechanism.

#### *Social Learning Model*

A slightly more complex theory to explain how pornography exerts effects on viewers is the *social learning model*. This model, based on Albert Bandura's (1967) research, posits that people learn new behaviors and attitudes through observational learning. It extends the imitation model, however, in that only behaviors that are rewarded are more likely to be imitated. Thus, if a pornographic depiction shows a man overpowering a woman sexually, and although initially she refuses such advances eventually she invites them and derives pleasure from them (a script

for what is called the “rape myth,” cf. Bauserman, 1996), the viewer learns that overpowering women sexually leads to rewards (in this case, both self and partner sexual gratification), and is then more likely to imitate the behavior. Feminists argue that the violent and degrading treatment of women combined with the powerful reinforcer of sexual arousal is what makes pornography such a potentially harmful cocktail (Russell, 1993). In fact, research studies have continually demonstrated that it is the combination of sexual arousal and violence in movies and pictures that result in more misogynist attitudes and behaviors than depictions of violence against women or sexually explicit media alone (Malamuth, 1984). However, as with the imitation model, this model is limited in its ability to explain the discrepancy between widespread and common use of pornographic materials and relatively low rates of overt sexual violence. Many have pointed to how circulation rates of pornographic materials are negatively correlated with indicators of gender inequality and sexual violence (Kimmel & Linders, 1996), suggesting that pornography’s effects cannot be readily and solely attributed to such direct effects models.

### *Sexual Script Model*

A more general version of both the social learning and imitation models is *sexual script theory*. Scripts are memory structures that provide information or rules for behaving. They evolve over time and with repeated exposure to a set of stimuli or with repetition of particular behaviors (Lakshmi-Ratan & Iyer, 1988). For example, people develop scripts for how to behave in a public library, a football game, or when stopped by a police officer for speeding.

Pornography provides information about gender roles and sexuality via sexual scripts (Mosher & MacIan, 1994). Given that pornography, particularly Internet pornography, is becoming the primary sex educator for adolescents (Rideout, 2001), it is important to examine closely what scripts for sexuality are being communicated. In general, the scripts found in pornography emphasize culturally accepted beauty standards, sexual availability and insatiable sexual appetites of men and women, the excitement of sexual novelty, and sex outside of a primary romantic relationship (Brosius et al., 1993). Mosher and MacIan (1994) argued that pornography rarely includes elements of affection, relationships, expressions of love, and often involves men ejaculating outside of a woman’s body while she expresses orgasmic pleasure. Frequently, pornography lacks foreplay and afterplay.

These scripts for sexual intimacy with a real life partner nearly always fall short, as maintaining intimate relationships is hard work. There are times when a partner is too tired or

feels too ill to desire sex. There are occasions when the comforts of a routine sexual encounter with a spouse or long-time lover are precisely what one desires. There are occasions when we feel unattractive. There are even occasions, although one hates to admit it, when we might prefer to have hurried sex, before the kids' Saturday morning cartoon finishes and the requests for an outing or a snack begin. Furthermore, real life requires the capacity to switch mental gears with our partners such that the argument we had last night over hanging up wet towels or how to spend the holidays, and having seen one another other blow noses or pass gas, do not squash the ability to consider each other sexual beings. Unlike a movie, these awkward moments are not edited out of life. They are the very fabric that creates intimacy. It is not surprising, then, to find out that learning about gender roles through unrealistic portrayals of sexuality, including pornography and soap operas or romantic novels, has been found to lead to reduced sexual and relational satisfaction (Shapiro & Kroeger, 1991).

Although sex among constantly-aroused and beautiful strangers may skew expectations for sex with an intimate other, a more disturbing trend is emerging whose effects are not yet well explored. A recent content analysis of 50 best-selling adult videos (Wosnitzer & Bridges, 2007) revealed a grim "reality" characterized by inequality and violence. Nearly half of the 304 scenes analyzed contained verbal aggression, while over 88% showed physical aggression. Seventy percent of aggressive acts were perpetrated by men. Women were overwhelmingly portrayed as the victims of aggression: 87% of acts were committed against women. By far the most common responses victims expressed when aggressed were either pleasure or neutrality. Fewer than 5% of the aggressive acts provoked a negative response from the victim, including flinching and requests to stop the action. This pornographic "reality" was further highlighted by the relative infrequency of more positive behaviors, such as verbal compliments, embracing, kissing, or laughter.

The importance of the sexual scripts usually seen in pornography of the sort analyzed by Brosius and colleagues (1993) and Wosnitzer and Bridges (2007) may explain why women are more likely to respond negatively to it compared to men. In short, media that portrays women as subordinates, sexually ready and intimate with virtual strangers, and objects of aggression, coupled with a lack of emphasis on intimate relationships and more positive behaviors, likely results in negative reactions to women consumers. If this is the case, then pornography that better adheres to women's romantic and sexual scripts ought to be better received by women

than traditional made-by-men pornography. If the fact that this sort of romantic depiction is a far cry from women's romantic scripts, then femme pornography (made by women for women) should produce greater sexual arousal and more positive affect in women, since it focuses less on the genitals and male pleasure, and more on slower, sensual sexual pleasures and relationships. The authors did a study where men and women were assigned to either view "conventional" or "femme" sexually explicit videos. They assessed general attitudes towards pornography, sexual arousal, and (48 hours later), masturbation and coital activity. They found that men liked all types of videos and all of it increased either post-viewing sexual activity (both solitary and otherwise). Women, on the other hand, were more disgusted by the "conventional" male pornography and, conversely, reported more sexual arousal and less negative affect following exposure to the femme videos. Additionally, they engaged in higher levels of sexual intercourse following exposure to femme videos (although there was no increase in levels of masturbation). The authors say these results support their theory that conventional pornography is a turn-off to women because it does not fit their sexual scripts.

*Implications for policy:* If the social learning model and sexual script models are important explanatory mechanisms for how pornography exerted its effects on users, efforts should be aimed at limiting production and consumption of pornographic materials that reward aggression and violence against others. Instead, sexually explicit materials that promote egalitarian depictions of erotic encounters would be preferred.

#### *Other Cognitive Models*

Two other cognitive models of pornography's effects on users that merit discussion are *permission-giving beliefs* and *perceptions of social norms*. Cognitive models focus on internal thoughts and beliefs or interpretations of stimuli that then drive behavior. These models, popular in psychology, explain why the same event can have two very different meanings for different people, why one woman may be indifferent or even encouraging of her partner's pornography use while another is completely devastated (Bridges et al., 2003).

The first of these models draws from the alcohol and substance abuse literature (Newman & Ratto, 1999) and refers to any thoughts the user may have that serve to rationalize behavior, such as "everyone is doing it." For pornography users in particular, numerous permission-giving thoughts have been expressed to justify behavior (Layden, 2004; Loftus, 2002). For example, men may tell themselves that the women in pornography clearly enjoy what they are doing and

are not harmed by it (bloopers and deleted scenes as part of many pornographic DVDs serve to reinforce this particular belief), or that using pornography is much better than seeking out women for affairs.

Interestingly, my own research suggests that female partners of male pornography users utilize similar permission-giving beliefs. For example, many women report thinking that their partner's behavior is preferable to his having a real-life affair, that all men view pornography, and that it is a relief at times that her partner does not turn solely to her to fulfill his frequent sexual demands (Bridges et al., 2003).

The second of these models has also been adopted by alcohol abuse researchers. In particular, this model describes how what is considered normal (that is, what the average person does) is skewed for heavy users of pornography in such a way that they are unable to recognize just how uncommon their own behavior may be. According to this model, heavy use results in a normalization of this use and consequent over-estimation of how frequently certain sexual activities are actually practiced. Some researchers have demonstrated support for this model: adolescent boys with higher consumption rates of pornography are more likely to engage in anal sex and group sex and to report "hook ups" (having sexual relations with a friend who is not a romantic partner; Häggström-Nordin et al., 2005).

*Implications for policy:* The downside to cognitive models that explain the effects of pornography is that their adoption places the problem, and therefore its solution, firmly inside the individual. Although changing social norms may involve community-wide campaigns with corrective educational information, the proposed mechanism of change remains at the level of the individual's thoughts. (CITES here)

One important implication of the cognitive and behavioral models I've described is that each relies on the rational choice of the consumer: the viewer chooses to behave in a way that has been previously modeled and reinforced by adult films, or provides permission-giving thoughts that serve to neutralize other thoughts that may turn him away from pornography (such as "I could get fired for this," or "My partner would be upset by this.>"). The user may be following a scripted cognitive map of how to behave in sexual situations, or rationally considering how normative his behavior may be. Treatment efforts may occur in a one-on-one therapy setting by examining evidence for distorted thoughts, or may include consultation with a religious leader where personal values and morals are highlighted and emphasized, or with

community-wide public service announcements to re-educate people about healthy sexuality and normative practices. In other words, interventions rely on appeals to a more rational mind: one that asks the pornography user to weigh carefully his values and possible long-term consequences for behavior, and then makes a choice.

However, in a clever study Dan Ariely, a behavioral economist at MIT, demonstrated that these “cold,” rational choices are different from those we may make while in a “hot” or aroused state (Ariely & Loewenstein, 2006). He asked college men to answer a series of questions about sexual interests and behaviors while in a “cold” state of mind (simply reading the items) or in a “hot” state of mind (while masturbating to pornographic pictures). Questions included items related to risky sexual behavior, such as condom use; sexual arousal, such as finding elderly women, young girls, or shoes sexually arousing; sexual behavior, such as interest in slapping someone during sex, bondage, or in engaging in anal sex or bestiality; and sexual violence, such as willingness to coerce someone in order to have sex. During the aroused state, all but two questions were significantly more likely to be endorsed, such that while masturbating, men were more likely to report a series of behaviors, people, and objects as sexually arousing and reported increased willingness to both engage in the behaviors and to use coercive methods to obtain sex. (The two items that were not significantly different between conditions were willingness to have sex with other men and interest in having sex with the lights on.)

This study points to an important consideration when planning interventions for pornography users: what is wholeheartedly and earnestly promised in a cold state will not readily translate into real behavior change while in an aroused state. It may be preferable to have people practice behaviors in the same physiological state that they will be experiencing when expected to perform.

### *Cultural Climate Model*

A more comprehensive model for understanding the effects of pornography on interpersonal relationships considers larger contextual and societal factors rather than assuming micro-level mechanisms of medium-individual person interactions. The *cultural climate theory* states that pornography contributes to an environment in which violence towards women becomes acceptable (Krafka, Linz, Donnerstein, & Penrod, 1997). These effects are seen not only in men’s perceptions of women, but in women’s own perceptions of themselves. Theoretically, exposure to pornographic media results in reduced self-esteem and body image

satisfaction, increased sense of vulnerability to violence, and an increased sense of defenselessness in women. Similarly, this climate rewards displays of hyper masculinity and trivializes or excuses violence against women. Partial support for this has been found in the psychological literature (Krafka et al., 1997); however, pornography is not the only media that portrays images of women as victims, vulnerable, sexually available, and degraded. In fact, perhaps one of the most troubling trends in this media culture is how pornographic norms for gender relationships and sexuality infuse other forms of media, such as music videos, reality television shows, even children's toys. Thus, it becomes difficult to determine how pornography's specific or unique effects can be differentiated from a general climate of gender inequality: a pornified culture (Paul, 2006).

Interestingly, one study of circulation rates of pornographic magazines and incidents of sexual assault found that an initial positive relationship was made nonsignificant with the inclusion of a measure of approval of violence in general (Baron & Straus, 1984). These researchers suggest that whatever relationship may appear to exist between consumption of pornography and violence against women is better thought of as a relationship that is supported by general social acceptability of violence as a whole, with sexual violence being but one of many types. Such findings support the cultural climate theory.

The American Psychological Association has already spoken of the negative effects of a more sexualized culture on girls (APA, 2007). Studies have repeatedly demonstrated that exposure to sexualized imagery and pornography relate to earlier initiation of sexual activity, increased sexual risk-taking behavior, and increasingly tolerant attitudes towards sexual promiscuity (Wingood et al., 2001). Similarly, studies have shown associations between frequent viewing pornographic videos and anal sex, group sex, and hook ups (Häggström-Nordin et al., 2005).

*Third Person Effects.* An important consideration when speaking with the public about effects of pornography is the empirical finding that people are significantly more likely to perceive others as being susceptible to media influences while simultaneously believing that they, themselves, are immune to such influence. Studies have demonstrated that while a majority of people believe that others' behavior is influenced by pornography, only a small minority report their own behavior as being similarly influenced (Häggström-Nordin et al.,

2005). Thus, public education must include both information about how pornography exerts its effects and information about this perceptual bias.

*Implications for Policy.* The cultural climate hypothesis is akin to the radical feminist sociopolitical position: it advocates for widespread cultural change in how sexuality is constructed. A simple ban on certain materials or the passing of legislation would be insufficient, since pornography norms are infused throughout the culture. Instead, new models of healthy sex and gender relationships are required, models that do not view sex appeal as narrowly defined by physical looks, where a person's worth is determined by more than just sexual behavior, where sexuality is expressed between consenting beings, each with the freedom to choose this activity over another. In these new models of healthy sex, people are not reduced to sexual objects, valued only insofar as they can sexually service another.

#### The Interpersonal Effects of Exposure to Pornography

##### *Pornography Increases Negative Attitudes towards Women*

Feminists have argued that media depicting women as objects, existing for male sexual pleasure, and as subordinates, negatively impact its consumers; this translates directly into their attitudes and behaviors towards live encounters with women. Social psychologists posit a strong relationship between attitudes and behaviors. Thus, examining changes in attitudes resulting from exposure to pornography has implications for changes in behavior towards women in general. Studies have examined the impact of pornography on attitudes of gender roles. For example, Garcia (1986) had 115 male college students complete surveys regarding their exposure to different sexually explicit materials, the frequency of their use, and attitudes towards traditional female and male gender roles. He found that use of erotic material (nonviolent, nondegrading, sexually explicit materials) did not have any impact on their attitudes towards women. However, use of pornographic materials (sexually explicit materials that included elements of coercion or violence) were positively correlated with beliefs that women should occupy more gender-defined, traditional roles, they should be less independent than men, drink and swear less, exhibit less interest in sexual behaviors, and maintain more traditional roles in marriages. Although effect sizes were small, the results have direct implications for romantic relationships. Specifically, men who consume pornography may expect their partners to occupy traditional female roles and be less assertive. This restriction in role definition could lead to increased dissatisfaction among their female partners.

### *Pornography Decreases Empathy for Victims of Sexual Violence*

A common methodology for studying the effects of pornography has involved exposing participants to pornographic materials, then examining their attitudes towards an alleged rape victim. Theoretically, material that perpetuates the myth that women secretly desire to be forced into sexual relations, and once forced enjoy such encounters, would lead to decreased empathy for rape victims and milder punishments for alleged perpetrators. Linz, Donnerstein, and Penrod (1988) conducted such a study on 156 college men. After repeated exposure to one of three film types (graphically violent sexual films, degrading but nonviolent pornographic films, or degrading but nonviolent and nonsexual films), attitudes towards a rape victim shown in a videotaped mock trial were assessed. The researchers found that participants in the violent, sexual film group showed significantly less sympathy for the rape victim during the mock trial than those in the other groups. Interestingly, participants in the nonsexual but degrading film group generally did not differ significantly from control subjects in ratings of empathy for the rape victim. The authors conclude that the combination of degradation and sexually explicit material seems particularly detrimental.

A similar study was conducted by Krafska et al. (1997). College women (N = 164) were assigned to view sexually explicit but nonviolent films, sexually explicit and violent films, mildly explicit but graphically violent films, or no film/control group. For four consecutive days, women in the first three groups viewed films in the group categories. On the fifth day, they were told there was a problem with the delivery of the last film, and were invited to participate in an ostensibly different experiment on jury selection for a rape trial through the university's law school. Data were taken on rape myth acceptance and sensitivity to the portrayed victim. The authors found that women in the graphically violent condition showed reduced empathy for the rape victim and a decreased sense of personal vulnerability to crimes. However, no changes in endorsement of the rape myth were evident.

In a review of studies examining attitudes towards rape, Linz (1989) found that of the seven studies reviewed with a brief (<1 hour) exposure to pornography, six found significant negative effects of violent pornography exposure (reduced sympathy for victims, increased sense of the woman's responsibility for the rape, and decreased punishments for the perpetrator). Of the seven longer exposure studies (>1 hour), five showed negative effects such as more lenient sentences for the rapist, less empathy for the victim, less support for women's equality, and

greater endorsement of their own likelihood of raping were they assured they would not be caught. The two studies showing no effects showed only nonviolent erotica compared to a control group. Having less sympathy for women, perceiving injuries sustained during a sexual assault as less serious, assigning greater responsibility for rape to female victims, and proposing lighter sentences for perpetrators of sexual violence can affect romantic relationships, both directly and indirectly. In the most extreme sense, legitimizing violence in male-female interactions may put more women at risk (this will be discussed in greater detail later). Indirectly, a relationship in which such demeaning attitudes are held is likely to result in diminished relationship satisfaction.

### *Pornography Leads to Blunted Affect*

Anxiety-provoking stimuli lose their ability to evoke strong affective reactions with repeated exposure. This effect is well known and documented in the psychological literature, and exposure therapies are extremely successful at resolving phobic and anxiety reactions (Marks & Dar, 2000). Researchers have argued that similar processes can occur for violent and degrading pornographic material (Russell, 1993). Unfortunately, it may not be beneficial to the individual, the romantic relationship, or to society to have such affective blunting in response to degradation and violence against women. The studies reviewed here have demonstrated just such effects.

A study of 156 college men demonstrated that repeated exposure to violent, sexually suggestive material lead to declines in negative emotions associated with viewing such disturbing material (Linz et al., 1988). Participants were repeatedly exposed to one of three film types: (1) overtly violent, mildly sexually explicit films (“slasher” films), (2) sexually explicit, nonviolent but degrading films, or (3) nonsexual, but degrading films. Participants habituated to the violent slasher films over repeated exposure, so that by the last day, there were significant declines in reported anxiety and depression (while no declines in the degrading but nonviolent film groups were observed). Participants also perceived the materials to be less violent, negative, and degrading on the last day compared to the first for all film types.

The blunting of strong affect shown in previous research is not limited to men. Krafka et al. (1997) found similar effects in women. Participants were 164 college women, assigned to three groups: (1) viewing sexually explicit but nonviolent films, (2) viewing sexually explicit, violent films, or (3) viewing mildly explicit but graphically violent (“slasher”) films. For four

consecutive days, women in each group viewed full-length commercial films. As in the Linz et al. (1988) study, Krafka and colleagues (1997) found that emotional blunting occurred in women, so that by the fourth day, women in both violent film conditions had significant declines in measures of hostility, anxiety, and depression. No such affective blunting was observed in the erotic film condition. Unlike the male subjects in the Linz et al. study (1988), the women in this study did not change their perceptions of how violent or degrading the film content was from the first to the last day. This desensitization to the degradation and violence of women has negative implications for interpersonal violence in romantic relationships.

### *Pornography Increases Dominating Behaviors*

Focusing on adult attitudes in studies may be problematic, since attitudes are developed over a lifetime. Studies that provide short exposures to pornographic materials in a laboratory may not be sensitive enough to detect changes in attitudes that result from such exposure. Mulac, Jansma, and Linz (2002) designed a study that attempted to measure behavior towards women, rather than attitudes, to determine if exposure to pornography resulted in more dominating, degrading, and sexualizing behaviors in men. Participants were 71 male and 71 female college students. The male participants were randomly assigned to one of three films: erotica, nonsexual news coverage of war, or pornography. Framed as a study on the perceptions of media communications, they viewed 11 minutes of the films and were asked to offer their opinions. Following the film exposure, male participants were invited to attend a short, ostensibly separate experiment in which each was paired with a female participant in a problem-solving task. The pairs of participants were asked to select, from a pile of cards, which items would be most important to surviving a plane crash, and to prioritize the items. Participants were filmed while completing the task. Five trained raters coded the videotapes to determine behaviors for each participant, including eye gaze, interruptions, touch, unwanted sexual remarks, and disregard of a partner's suggestions. The experimenters found that men who viewed the sexually explicit films (both erotica and pornography) showed more dominant behaviors, touched their female partners for longer periods of time, and ignored their partner's contributions more often than males who viewed the news clips. Furthermore, men in the pornography condition interrupted their partners more and showed more anxious behaviors than those in the other two groups.

The authors were interested in seeing whether the *women's* behaviors varied as a function of their partner's film condition (Mulac et al., 2002). Female participants were blind to the first portion of the experiment. Results showed that women's behaviors correlated highly with their male partner's behaviors. Women whose partners had viewed sexually explicit materials showed similar levels of anxiety, physical proximity, partner touch, and gazing as their partners. This behavioral matching, argue the researchers, is particularly notable. It suggests that women are affected by a partner's use of sexually explicit material, *even when they are unaware of such use*. *Pornography Increases Sexually Imposing Behaviors*

Studies of aggression in the laboratory must use proxy tasks, as one obviously cannot ethically put participants in danger. Different experimenters have attempted different tasks, such as delivering electric shock to a female confederate, using a noxious noise stimulus, and so forth, as measures of aggressive behavior following exposure to pornography (cf. Donnerstein & Barrett, 1978). The authors in one study were interested in seeing a more subtle form of sexual aggression: exposing a participant with known negative attitudes towards sexually explicit material to erotica or pornography (essentially ignoring her preferences; Nagayama Hall, Hirschman, and Oliver, 1994). The female was a confederate who was supposedly engaged in a memory task, and the participant was instructed to attempt to distract her by showing her a series of slides. The participant could choose from neutral slides (people engaging in sports), autopsy slides, erotic (nude photographs), sexually explicit (partners engaging in sexual acts together), or sexually deviant slides (including bondage). The participants were made aware of the confederate's dislike of sexually explicit material, and also knew that all categories of slides were equally distracting to the participant. Fifty-one college males and 54 college females participated. Of the males, 72% ignored the woman's stated dislike of sexually explicit materials and showed her slides from one of the three explicit categories, while 44% of the females did so. The experimenters replicated the study but this time, participants were told the female confederate was neutral to sexually explicit materials. Participants were 25 college students (12 female and 13 male). In this study, female use of the sexually explicit slides was similar to the previous study (41%); however, males significantly decreased their selection of sexual material—only 54% showed such slides as a distraction to the female confederate. The authors suggest this type of disrespect towards a woman's stated preferences has implications both in the workplace for sexual harassment, and in the home for romantic relationships.

## Pornography's Effects within the Context of Romantic Relationships

There are numerous ways in which sexually explicit materials can be incorporated into romantic relationships. For example, couples may choose to view such materials together, as an enhancement to their sex lives. Many couples that have done so have felt positively about such shared use (Bridges, Bergner, & Hesson-McInnis, 2003). Sexually explicit materials may be acceptable alternatives to sexual intercourse when a partner is absent (e.g. out of town) or simply too tired for sexual relations. In such instances, the use is usually perceived as benign by both partners (Clark & Wiederman, 2000; Moll & Bridges, in preparation). Furthermore, sexually explicit materials have been used successfully by numerous marital and sex therapists to enhance lovemaking in romantic relationships (Robinson et al., 1999).

However, more often than not the use of pornographic materials is done outside of the dyad, in private, and oftentimes without the knowledge of the romantic partner (Cooper et al., 1999). The combination of secrecy, extradyadic sexual activity, and perceptions of the alternative "reality" portrayed in pornography have led significant numbers of women to find such use by their partners as disturbing (Bridges et al., 2003). Empirical findings on the effects of pornography on romantic relationships are now described.

### *Pornography Use Can Be Addictive*

A clear negative consequence of pornography use is that it may escalate to the level of addiction. Several researchers have described pornography addiction and several risk factors for compulsive use (CITE). For example, researchers have found that depression and stress were risk factors for compulsive pornography use: use that occurred despite negative consequences to the person's occupational or relationship functioning (Cooper et al., 1999; Kafka, 2000). Negative effects may be obvious, such as the loss of a job due to surfing adult websites on the company computer, but may be more insidious, such as role disruption that occurs when a husband spends significant portions of his evenings online masturbating to explicit images rather than being with his family (CITE). In fact, increasingly pornography use is becoming implicated in marital ruptures (Paul, 2004).

### *Women Are Reluctant to Enter into Relationships with Frequent Pornography Users*

Studies have found that the discovery of a partner's use of pornography can be a traumatic event (Bergner & Bridges, 2002). Some women reported feeling shocked, hurt, and confused when they learned of the nature and extent of their partner's sexual activities. This led

us to ask whether or not foreknowledge about a potential romantic mate's use of pornography would impact intentions to enter into a serious, long-term relationship. We conducted a study in which 85 college men and 81 college women were asked to view numerous mock online dating website-like profiles of individuals and to rate their interest in pursuing a long-term romantic relationship with each person in the profile. We provided information about the person such as their personality style (introverted or extraverted), their physical attractiveness (above or below average), their generosity (high or low), past sexual partners (multiple or few), and use of pornography (infrequent or very frequent). The results of this study revealed that knowledge about a potential mate's pornography use was a significant predictor of intentions to pursue a relationship for women, but not for men. For women, frequent pornography use in a potential mate resulted in significantly lower intentions to pursue him for a relationship. In contrast, men's knowledge of a potential female partner's pornography use was completely unrelated to his pursuit intentions.

#### *Pornography Leads to Decreased Satisfaction with a Romantic Partner*

The association between use of pornography and dissatisfaction in romantic relationships has been shown with cross-sectional and longitudinal data. Although not able to show the temporal sequence, Stack et al. (2004) found that in a sample of 531 internet users, happily married people were 61% less likely to report visiting a pornographic website in the prior 30 days. Similarly, Bridges and colleagues (2007) conducted a survey of 217 heterosexual couples and found that men's use of pornography negatively related to both his and her levels of sexual satisfaction.

In a two-part study (Kenrick & Gutierrez, 1989), researchers were interested in seeing what effects short-term exposure to a Playboy or Penthouse centerfold would have on participants' later evaluations of a "normal" woman's attractiveness or on their wives. They hypothesized that models whose physiques conformed to or exaggerated culturally idealized sexual attractiveness, such as those often depicted in these popular men's magazines, might skew a person's perceptions of what an average person looks like when naked. In the first part of their study, they found that for both men and women, exposure to the female centerfold models significantly lowered judgments about the attractiveness of the "average" attractive persons. This occurred regardless of the participant's subjective feelings about the images (whether or not they found them to be pleasant). In the second study, centerfolds from Playgirl were used along

with the Playboy and Penthouse centerfolds. After viewing the opposite sex models, participants were asked to rate how sexually attractive they felt their mate was (the control condition involved viewing abstract art slides). They found that for men in the experimental condition, ratings of their female partner's attractiveness and scores on Rubin's Love Scale were significantly lowered compared to the males in the control condition. Women's ratings were not influenced by the type of material to which they were previously exposed. The authors discuss how their study supports the notion that males find physical attractiveness to be more central to their sexual responding than women in this culture, and that consumption of popular pornographic magazines may adversely affect males' commitments to monogamous relationships. This empirical finding validates women's experiences that they are being unfavorably compared to the impossible ideal portrayed in pornography and erotica (Bergner & Bridges, 2002). Here we see that even in a short, experimental situation that involves a one-time exposure to popular pornographic depictions, there are negative consequences for males' evaluations of their romantic partner's attractiveness and how in love with them they feel.

Zillmann and Bryant (1988) wanted to examine how repeated exposure to common, nonviolent pornography affected participants' ratings of sexual satisfaction with their romantic partners. Over a six-week period, participants (N = 160, included student and nonstudent participants) viewed either pornographic videotapes or sexually innocuous comedic acts taken from prime time television. Findings showed significant declines in sexual satisfaction for both men and women following repeated exposure to pornography. Sexual satisfaction decreased in these areas, specifically: partner's displays of affection, their physical appearance, sexual curiosity, and their actual sexual performance. Also of great interest was that responses to more general items of satisfaction (e.g. general life happiness, satisfaction in non-romantic relationships, and so forth) remained unchanged following exposure to either pornography or the innocuous videotape. Therefore, the reduction in satisfaction was specific to the sexual partner of the participant, not a decline in satisfaction overall. This provides very strong experimental evidence for the way pornography can negatively impact sexual satisfaction within a current, heterosexual relationship.

Although men's use of pornography has a demonstrated negative relationship to satisfaction with a romantic partner, it appears that women's use is more complex. In Bridges et al.'s (2007) study of heterosexual couples, women's use of pornography was positively

associated with their male partner's relationship and sexual satisfaction. The researchers suggest that this difference may be explained by the primary reason for use of pornography: for men, it was a masturbatory aid. For women, the principal reason for pornography use was as part of lovemaking with their partner.

To explore further the relationship between shared versus solitary use of pornography, Bridges and colleagues (2008) examined survey data for 254 men and 226 women who reported being in a current romantic relationship. Approximately half of these men and women reported viewing explicit materials with their partners. Those with shared use of pornographic materials reported higher relationship and sexual satisfaction. These results were particularly strong for men. The researchers believe that this may be due to the different sorts of explicit materials that tend to be marketed towards individual male users versus couples. Pornographic videos marketed to couples tend to have increased emphasis on story lines, foreplay and afterplay, softer lighting, a reduced focus on genitalia and fewer close-up shots of coital activity (CITE). Therefore, increased satisfaction may have been due to the effects of shared erotica rather than pornography. Currently, the authors are exploring this further in a study of 40 romantic couples. *Pornography Users May Not See Their Use as Problematic...*

A survey of 9,177 internet users (Cooper et al., 1999) found that 70% of respondents kept secret from their romantic partner how much time they spent online in their sexual pursuits. While most (68%) felt their online sexual pursuits did not interfere with any area of their lives, follow-up analyses of the data set by Cooper, Morahan-Martin, Mathy and Maheu (2002) found that 93% of males and 84% of females admitted that others in their life had complained about their online sexual activities. In a study of 1,117 web users, Whitty (2003) found that participants without internet sexual experiences were significantly more likely to rate the use of pornography as an act of infidelity compared to users.

*... However, Partners of Pornography Users Are Affected*

The use of pornography not only has effects on the attitudes and behaviors of the consumer, but implications for his or her partner's well being. In the most extreme example, a study examining the relationship between pornography use and the odds of a battered woman reporting sexual assault showed that a partner's pornography use nearly *doubled* the odds that a woman reported being sexually assaulted (Shope, 2004). The researcher interviewed 271 women entering a program for battered women in a large metropolitan city. During the intake interview,

information was collected about their partner's abuse, pornography use, and alcohol abuse. Forty-six percent of the women reported being sexually abused, and 30% reported their partners used pornography. The researcher hypothesized that the abuse of alcohol would increase the relationship between pornography and sexual abuse, since alcohol serves as a disinhibitor. However, including alcohol use in the logistic regression equation did not significantly increase prediction of sexual assault above and beyond that of pornography use alone. Furthermore, 58% of the women interviewed identified their partner's pornography use as having played a part in their sexual assault.

Ninety-four partners of identified "sexual addicts" (91 females, 3 males) were interviewed by Jennifer Schneider (2000) to determine the effects they perceived their partner's cybersex use had on their romantic relationships. Effects included feelings of hurt, betrayal, lowered self-esteem, mistrust, decreased intimacy, anger, feelings of being unattractive and objectified, feeling their partners had less interest in sexual contact, pressure from the partner to enact things from the online fantasy, and a feeling that they could not measure up to the women online.

Senn (1993) conducted a study with 59 females to determine the multiple perspectives women may have vis-à-vis pornography. Interestingly, women who had had frequent, repeated exposure to pornography and found it difficult to avoid in their daily lives were the most negative about such materials (29% of the sample). These women disliked pornography immensely because of the negative images of women and unrealistic standards of physical attractiveness. They tended to see women as being victimized or violated in such materials. Over half of the women in this category were involved with male consumers of pornography, and most felt negatively about this. These women identified with the females portrayed in such materials. They had argued with their partners about their use, had felt rejected by it, reported that it had a negative impact on their relationship, and believed part of how they were being treated by their partners was a result of the pornography use.

Also noteworthy, Senn (1993) found that women who generally held neutral to mildly positive views on pornography (7% of the sample) were nonetheless conflicted when considering its impact on their personal romantic relationships. They did not feel pornography showed violence and victimization of women, nor did they believe it was related to violence against women. However, they did feel that it created unrealistic standards of physical attractiveness and sexual prowess, and this had hurt their self-esteem or made it emotionally painful when a

partner had used it. They viewed themselves as very distinct from the women in the pornography.

Some researchers have asked participants to imagine a scenario where their partner used sexually explicit materials to engage in solitary sexual stimulation, and to rate how upset they would become over such use. Clark and Wiederman (2000) studied 444 students who had been or were in a serious, committed heterosexual romantic relationship. The researchers measured affective and cognitive responses to hypothetical solitary sexual stimulation vignettes. Results indicate that women had fewer positive reactions and more negative reactions to the vignettes. Men were more likely to view a partner's use of sexually explicit materials as an attempt by the partner to enhance the sexual experiences of the dyad. Both men and women disagreed slightly that the behaviors were due to problems in the romantic relationship; particularly in the case of unassisted masturbation (i.e. no use of pornographic materials accompanied the masturbation). Overall, the researchers found that participants did not react negatively to this sort of extradyadic sexual activity, perhaps because the scenarios were hypothetical, and all described the sexual activity as taking place when the partner was out of town. It is conceivable that reactions would have been considerably more negative if the vignettes had indicated that the partner was available at the time of the behavior, since it would more clearly show the partner *choosing* the sexually explicit material and/or masturbation over sexual relations with their partner.

To explore this possibility, we conducted a similar study with 112 undergraduate women (Moll & Bridges, in preparation). Each participant read a series of descriptions of romantic couples. The independent variables were length of time in the relationship (3 months v. 3 years), frequency of male partner pornography use (1-2 v. 10-12 hours per week), and the context in which the use occurred (when the partner was in town v. out of town). Results revealed that across all scenarios, women were rated as being less satisfied with their bodies and their relationships when the partner in the scenario was described as a heavy user of pornography. As predicted, pornography use that occurred when the partner was in town and presumably available for sexual relations resulted in significantly lower ratings of body esteem and relationship satisfaction.

When examining how partners feel about the use of pornography in a real-world context rather than a hypothetical scenario, results are clearer. Bergner and Bridges (2002) conducted a qualitative study to examine the meanings women ascribed to their male partners' pornography

use. Due to the exploratory nature of the research, they sought out women who identified their partners as pornography “addicts,” were quite upset over this use, and were seeking help from an online, anonymous, public forum. Results indicate that for this population, a partner’s use of pornography was associated with numerous devastating interpretations about her role in his use, his moral character, and the state of their romantic relationship. Themes included seeing oneself as the reason for a partner’s excessive pornography use (“I am not attractive enough,” “I should be more available”), seeing the partner as uncaring or selfish (“If he loved me, he wouldn’t hurt me this way,” “I’ve told him it bothers me and he still uses pornography; he must not care about me”), and viewing the relationship as a farce (“We pretend like everything is fine, but really our relationship is sick and unhealthy”).

In order to determine how prevalent these distressing attitudes about a partner’s use of sexually explicit media were for a larger, more representative sample, Bridges et al. (2003) conducted a web-based survey of 100 women whose partners used pornography. Nearly one-third of women surveyed reported moderate to high levels of distress about their partner’s use of such material. Women reported feeling like their partners were not interested in making love to them, but rather were picturing the women they had seen in the sexually explicit material during sexual intercourse. They also felt their partners were less trustworthy, usually because he’d keep the use a secret from her (even when she did not object to it). Nearly three quarters of women surveyed reported feeling like the sexually explicit material negatively affected their self-esteem. Some felt they had failed their partners sexually; if they had been better sexual partners, their partners never would have had to turn to such material for sexual satisfaction. These data show that for a significant minority of partners in heterosexual romantic relationships, the use of pornography negatively impacts their perceptions of themselves, their partners, and their relationship.

It is noteworthy that survey research consistently shows a majority of women are either neutral or positive towards a partner’s use of pornography. While the distressed and broken marriage merits our clinical attention, this intriguing and consistent finding merits our scientific attention. Why do some women report interpersonal difficulties stemming from a partner’s use of pornography while others do not? What characterizes couples who are able to accommodate such use successfully, perhaps even in a manner that enhances the self-reported quality of their relationship, while others become so distraught that they consider divorce or even suicide? This

remains a mystery but its solution may provide us with insight regarding the mechanisms by which pornography exerts its negative effects. Currently, I am exploring this question in a longitudinal, multimethod inquiry of 40 heterosexual couples. Although these data are not yet available, I am certain that they will generate numerous fruitful pathways for future research that will continue to enhance our understanding of this important area of study.

#### Summary and Implications