

Pornography and Couples: What Does the Research Tell Us?

Nicholas P. Newstrom¹  · Steven M. Harris¹

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Abstract The authors present the results of a 15-year review of research on the effects of pornography on couple relationships, including intimacy. This review includes 26 empirically-based studies that were conducted between 2000 and 2016. This research topic has mostly been approached from an exploratory and descriptive perspective. Criticisms of the literature center on the lack of attention paid to the theoretical level of analysis and the unit of observation. The difficulty researchers have with defining “pornography” affects the measures used to assess pornography’s effects on couple relationships and limits the external validity of results. Findings indicate that there are both positive and negative effects of pornography use within committed relationships. These effects appear to be mediated largely by communication between both partners. Research with attention to a consistent theoretical level of analysis and unit of observation is needed to more fully understand the impact of pornography use on a couple’s relationship. Recommendations for future research are provided.

Keywords Couples · Intimacy · Pornography

Introduction

In 1997, there were approximately 900 pornography sites on the Internet. Today, the number of pornography sites is well over 2.5 million (Ogas and Gaddam 2012). This

indicates an increase of pornography availability and may even reflect a market demand. Most of the studies that explore the impact of pornography have focused on the impact it has on individuals; specifically on aspects of male aggression, its use among adolescents, and compulsive use among same-sex individuals. The authors report the results of a 15-year review of empirically-based literature that focuses on the impact of pornography on heterosexual couple relationships.

Background on Pornography and Relationships

Most of the research that has been conducted on the use of pornography has focused on its impact on individuals, specifically, on the relationship between viewing pornography and engaging in sexual violence (Foubert et al. 2011; Kingston et al. 2009). Early relationally-oriented research has examined pornography’s effects on individual attitudes about relationships (Zillman and Bryant 1988). With the increased use of the Internet and wireless devices, current trends suggest that pornography use among heterosexual couples may be increasing (Olmstead et al. 2013).

Manning (2006) published a landmark review of existing literature that examined the systemic impact of Internet pornography on families, summarizing the effects of pornography on marital and sexual satisfaction and on children. The current review builds on Manning’s findings in three ways: First, we chose to focus on couples rather than families. Couple and family therapists have reported feeling ill-equipped to treat pornography related problems with their clients and we hope the current review will begin to address this gap in clinical training (Ayres and Haddock 2009). Second, in addition to reviewing new studies published since Manning’s (2006) article, we broaden the inclusion criteria by including studies that have

✉ Nicholas P. Newstrom
newst038@umn.edu; smharris@umn.edu

¹ Family Social Science, University of Minnesota, 290 McNeal Hall 1985 Buford Avenue, St. Paul, MN 55108, USA

investigated other forms of pornography (e.g., VHS/DVD, pornographic magazines) rather than focusing on only Internet pornography. Finally, in addition to presenting the findings of the reviewed studies, the current review will critique the use of theory, measures, and analyses in order to recommend further directions for researchers to consider in future studies. Like Manning's review, inclusion criteria for the articles we reviewed were limited to empirically-based (data driven) studies that investigated how pornography affects the couple relationship. Studies that explored online sex behaviors such as cyber-sex and online dating were excluded as they were not exclusively looking at how pornography affects couples.

Article Selection Process

As part of the search process, we utilized Academic Search Premier, PsycInfo, and Google Scholar for this search. The goal of this search process was to identify empirically-based (and peer reviewed) journal articles that examined the effect of pornography use on the couple relationship. An initial search using the terms "couples" and "pornography" yielded over 19,900 results. By adding the search terms "intimate relationships" and "erotica," search results were paired down to 277 articles. We identified articles published in the past 15 years that were empirically-based that included quantitative, qualitative and mixed methods studies, yielding a final total of 26 articles for this review. We examined the articles' theoretical level of analysis, study design, measures, units of observation and statistical analyses. We present the results of these studies and a brief discussion of the limitations of this body of literature with specific regard to the use of pornography within intimate couple relationships. Finally, we make recommendations for future empirically-based studies on this topic.

Methods

Research Design

The majority of the 26 studies reviewed involved online surveys to ascertain the extent of couples' use of pornography and the impact that pornography use has on the sexual satisfaction, relationship quality and emotional affect among couples as measured by one or both partners in a committed relationship. Two studies used longitudinal designs (Muusses et al. 2015; Perry 2016b). Two studies utilized qualitative interviews to explore how women were affected by their partner's pornography use (Benjamin and Tlusten 2010; Zitzman and Butler 2009). Bergner and Bridges (2002) used qualitative methods to discover

common themes they found posted on message boards from three different websites that provide support for women whose partners used online pornography compulsively. There were three studies that used an experimental design conducted in a laboratory setting (Lambert et al. 2012; Senn and Desmarais 2004; Staley and Prause 2013). Staley and Prause was the only study that did not use random assignment with their conditions as participants both were assigned to view sexual and non-sexual video stimuli. Lambert et al. 2012 and Senn and Desmarais randomly assigned couples to sexual or non-sexual conditions.

The following sections summarize and critique the sampling methods, measures (e.g., relationship quality, pornography consumption, sexual satisfaction), and qualitative and quantitative analyses cited in the reviewed studies. The findings of these studies are summarized and suggestions are recommended for future pornography research.

Sampling

Convenience sampling was the most commonly used data collection procedure with eight studies using this method Lambert et al. (2012) Senn and Desmarais (2004), Staley and Prause (2013), Stewart and Szymanski (2012), Szymanski and Stewart-Richardson (2014), and Tylka and Kroon van Diest (2015) recruited students from universities for their sample; they acknowledged the potential threats to external validity such as a possible selection bias with their recruitment method and the difficulties with generalizing their results to populations outside of undergraduate age groups.

Albright (2008), Bergner and Bridges (2002), Bridges et al. (2003), Bridges and Morokoff (2011) and Sun et al. (2014) all relied on the Internet to recruit participants. These authors acknowledged the potential threats to external validity by relying on a purposive sampling strategy by using a participant recruitment website for their sample. However, Albright (2000), Bergner and Bridges (2002), and Bridges et al. (2003) did not address the limitations and potential confounding variables that are common among studies that investigate Internet pornography. Additionally, the presence of selection bias was not addressed by Bergner and Bridges despite the fact that they only sampled from websites that catered to women who were impacted negatively by their partner's pornography use.

Seven of the studies used secondary datasets for their sample (Maddox et al. 2011; Poulsen et al. 2012; Doran and Price 2014; Stack et al. 2004; Sun et al. 2014; Perry, 2016a, b; Willoughby, Carroll, Busby & Brown, 2016; Yucel and Gassanov 2010). A limitation to using secondary data could be that relying on a small number of items to

measure pornography and its impact may limit reliability. This limitation was discussed by only three of the studies that used secondary data (Maddox et al. 2011; Poulsen et al. 2012; Sun et al. 2014).

Zitzman and Butler (2009) and Poulsen et al. (2012) relied on marriage and family therapists (MFTs) located in the Midwest and Western United States to refer female participants to their study. Inclusion criteria for these female participants were that they were originally being treated by marriage and family therapists for their concerns about their husbands' pornography use. However, neither Poulsen et al. 2012 nor Zitzman and Butler provided a detailed procedure for how they selected referring therapists as part of their sampling methods.

Studies with large sample sizes appeared to include sections about confounding variables that may have affected the internal and external validity of findings. This discussion was often absent for studies with smaller sample sizes. The wide use of convenience sampling appears appropriate given the stage of the literature. Of course, a potential limitation to convenience sampling is that it may not ensure an accurate representation of the total population of couples who use pornography (Sullivan 2001). The use of the Internet to recruit participants and its limitations are not adequately discussed in the studies that used it.

Eleven of the studies reviewed in this manuscript gathered information on the pornography habits of both partners (Bridges and Morokoff 2011; Daneback et al. 2009; Doran and Price 2014; Lambert et al. 2012; Maddox et al. 2011; Muusses et al. 2015; Perry, 2016b; Poulsen et al. 2012; Stack et al. 2004; Willoughby et al. 2016; Yucel and Gassanov 2010). Of these studies, only Maddox et al. (2011) gathered information about the types of pornography that participants were using such as erotic websites, magazines or movies. The studies that did not gather information on the pornography habits of couples focused on pornography habits of men only, leaving questions about how pornography consumption by females may impact the couple relationship or how male partners address their female partner's problematic pornography use. As the literature stands now, one might assume women access pornography at lower rates than men.

Measures

Relationship Measures

The Dyadic Adjustment Scale (DAS - Spanier, 1976) was the measure most commonly used to assess couple satisfaction. Stewart and Szymanski (2012), Szymanski and Stewart-Richardson (2014), and Muusses, Kerkhof and Finkenauer (2015) used the full, 32-item measure of the

DAS. Bridges and Morokoff (2011) and Szymanski et al. (2016) used the seven-item version of the DAS. Bridges and Morokoff cited the relatively high internal consistency score ($\alpha = .79$) and the fact that the construct validity of the DAS correlates highly with other relationship measures as their inclusion criteria for its use. Staley and Prause (2013) used two items from the DAS that assessed for expressions of affection and overall couple satisfaction for their study. Maddox et al. (2011) used only four items of the DAS ($\alpha = .81$) that assessed couple happiness, relationship dissolution, confiding in one another and a general question on how the relationship is progressing.

Resch and Alderson (2013) and Szymanski et al. (2016) used the Couple Satisfaction Inventory (CSI) to measure relationship quality. Although it contains the same number of items as the DAS, the CSI has a higher Cronbach's Alpha level (.98) than the DAS. The higher internal consistency statistic was cited as the primary reason for choosing to use the CSI over the DAS. Tylka and Kroon van Diest (2015) used the Experiences in Close Relationships Scale (Brennan et al. 1998), a 36-item scale that uses a Likert-type rating to measure anxiety and closeness in relationships. The alphas were .92 for anxiety and .95 for avoidance.

Nine studies did not use an established measurement scale to assess couple satisfaction but created their own, Likert-type questions that rated the length and quality of a couple's relationship (Doran and Price 2014; Lambert et al. 2012; Perry 2016a; Perry 2016b; Poulsen et al. 2012; Senn and Desmarais 2004; Staley and Prause 2013; Willoughby et al. 2016; Yucel and Gassanov 2010). Stack, Wasserman and Kern (2004) used dummy coding to isolate overall relationship quality as a dependent variable. Lambert et al. (2012), Perry (2016a, b), Poulsen et al. (2012), and Staley and Prause reported Chronbach's Alpha levels for their measures equal to or above .72.

Measures of Pornography

The majority of studies used Likert-type scales to measure the frequency of pornography (Bridges and Morokoff 2011; Daneback et al. 2009; Lambert et al. 2012; Maddox et al. 2011; Muusses et al. 2015; Perry, 2016a; Perry, 2016b; Poulsen et al. 2012; Sun et al. 2014; Tylka and Kroon Van Diest 2015; Willoughby et al. 2016). Dichotomous "Yes" or "No" questions were also used by three studies to measure whether or not participants or their partners viewed pornography in the past 30 days (Doran and Price 2014; Stack et al. 2004; Yucel and Gassanov 2010). Additionally, Poulsen et al. 2012 also asked participants to classify their attitudes towards pornography while Sun et al. 2014 and Albright (2008) asked males about their sexual habits while viewing pornography (e.g., masturbation, participation in sex chat).

Muusses et al. (2015) were the only study to use a formalized instrument to measure Internet pornography (Exposure to Sexually Explicit Material on the Internet Scale). This one-item measure features a five-point Likert-type scale (1 = not at all to 5 = very much) to measure the frequency that participants are using the Internet for erotic purposes ($\alpha = .91$).

Szymanski et al. (2016) measured female attitudes about pornography using the 13-item Perceived Partner's Pornography Scale. Items included "Pornography degrades women" and "Pornography gives men false expectations about the opposite sex." A 7-point Likert-type scale was used with anchors at 1 (*strongly disagree*) to 7 (*strongly agree*). They did not compute an Alpha level but cited the .91 level that was computed by Stewart and Szymanski (2012).

Sexual Satisfaction Measures

To test for sexual satisfaction, four studies used previously validated scales. Bridges and Morokoff (2010) used the 25-item, Index of Sexual Satisfaction (ISS) ($\alpha = .93$). Stewart and Szymanski (2012) and Szymanski and Stewart-Richardson (2014) used the Multidimensional Sexuality Questionnaire ($\alpha = .90$) to assess for the level of sexual satisfaction in couples. Muusses et al. (2015) used a subscale of the Perceived Relationship Quality Components Inventory to measure sexual quality ($\alpha = .89$). Pariera (2015) used the Brief Sexual Attitudes Scale ($\alpha = .86$) to measure sexual behaviors.

Three studies reviewed used Likert-type scales to measure the type and frequencies of sexual activity between partners (Daneback et al. 2009; Perry 2016b; Yucel and Gassanov 2010). Other studies reviewed used Likert-type scales or "Yes" or "No" questions to measure the frequency of sexual behaviors between partners (Doran and Price 2014; Maddox et al. 2011; Stack et al. 2004; Sun et al. 2014). Albright (2008) asked participants to check boxes that best described their sexual behaviors online (e.g., read or posted messages on a sex newsgroup or bulletin board, participated in a live chat room discussion about sex).

Created Measures

Two studies in this review developed specialized measures to assess the impact of pornography on the couple relationship. Bridges et al. (2003) created the Pornography Distress Scale (PDS), a 50-item, Likert-type scale designed to measure female emotional distress as a result of their male partner's pornography use. Questions were asked to assess for negative themes such as *I feel my partner's*

pornography is really a kind of an affair. Participants were then asked to rate how much they agree with that statement using a seven-point, Likert-type scale. Reported reliability of the PDS was .98. Other than Bridges, Bergner and Hesson-McInnis, Resch and Alderson's (2013) study is the only study to date that has employed the 32-item PDS.

Stewart and Szymanski (2012) created their own measure, the Perceived Partner's Pornography Use Scale ($\alpha = .91$). This scale is comprised of subscales that measure the perceived frequency of a partner's pornography use and to assess the perceived problematic nature of that pornography use. Reported alpha scores were .92 and .90 respectively. To date, Szymanski et al. (2016) have been the only other study to use this method.

Szymanski and Stewart-Richardson (2014) created the Pornography Use Scale, a 16-item scale that measured the frequency and problematic use of pornography. Frequency items asked participants how often they viewed different types of pornographic media (e.g., Internet videos, DVD/VHS, magazines) while the problematic scale used a five point Likert-type scale with anchors at 1 (Strongly Disagree) and 5 (Strongly Agree). Sample items include, *I sometimes wish I would stop using sexually explicit materials/pornography* and *I believe I am addicted to sexually explicit materials/pornography*. Alphas were reported at .88 and .91 respectively.

Sexual Stimuli

Senn and Desmarais (2004) used a variety of sexually explicit slides in their study. Five female raters classified 310 sexually explicit images into the following categories: erotica (nude couples engaged in sex-play), nonviolent pornography (women posed alone without any violence) and violent pornography (women engaged in sexual poses with violent themes). These images were gathered from the magazines *Hustler*, *Playboy* and the books, *Rising Goddess* and *Women's Experience of Sex*. A final total of 75 images were chosen within an inter-rater reliability score of .93. Staley and Prause (2013) used sexually explicit videos of heterosexual couples engaging in oral and vaginal intercourse. A reliability statistic was not reported, although Staley and Prause stated that the videos used have been rated as "highly sexually arousing" by Janssen et al. (2003) study of gender differences and sexual responses (p. 618).

Pariera (2015) utilized DVD covers of both informational pornography (e.g., DVDs used by sex-therapists with sexual disorders) traditional forms of pornography to investigate the presence of the third-person effect—assuming that media has a stronger, negative effect on others than on themselves (Davison 1983)—when pornography emphasizes more sex-positive themes.

Validity of Measures

Staley and Prause (2010), Stewart and Szymanski (2012) and Szymanski and Stewart-Richardson (2014) addressed content validity by consulting with sexologists in the field when choosing stimuli and measures for their study while Pariera (2015) pilot tested the selection of their film conditions. However, other studies included in this review did not address content validity. Szymanski and Stewart-Richardson (2014) was the only study to address criterion validity by using confirmatory factor analysis to examine underlying constructs of the Pornography Use Scale.

Given the stage of this body of research, the PDS and the Perceived Partner's Pornography Use Scale should be used cautiously. Although only one other study utilized one of these measures after its initial creation (Resch and Alderson 2013), more studies are needed to confirm the validity and improve the accuracy of these measures. Moreover, these measures should be tested with other types of couples (e.g., same sex couples, ethnic minority couples) to increase external validity.

One issue that may affect the validity and reliability of the measures used to assess pornography use among couples is the definition of the unit of observation or the reporting units that are used by researchers (Bulcroft and White 1997). Issues exist with the research definition of pornography itself. The measures used to quantify the frequency of pornography use among couples lack semantic uniformity between definitions of what qualifies and what does not qualify as pornography.

Only nine studies included in this review used a clear definition of pornography. Additionally, none of the studies measured how participants defined pornography personally. All of the experimental studies were specific when identifying the stimuli they used for their experiments. The 17 studies that did not define pornography leave the reader to infer what is considered pornography. The scientific study of pornography on the couple unit cannot afford this ambiguity. This issue of what is considered socially acceptable erotica versus hardcore pornography became the fulcrum of the United States Supreme Court Case, *Jacobellis v. Ohio* (1964) and resulted in the infamous “I know it when I see it” criteria put forth by Supreme Court Justice Potter Stewart. Stewart's ruling does not provide a definition but summarizes the difficulty with identifying a definition of pornography that encompasses the subjective nature of sexually explicit material. Pornography researchers do not require a standard definition of pornography but they should strive to be conceptually precise when defining what is or is not considered pornography in their research designs.

Analyses

Qualitative Analyses

Benjamin and Tlusten (2010) used Giorgi's four-stage guideline of phenomenological analysis to code responses of female participants whose male partners used pornography. Zitzman and Butler (2009) also investigated the effect pornography has on women whose husbands use pornography. Through the use of an “analytic deliberative team,” a team of two raters coded transcripts individually while a third analyst coded transcripts alone (p. 219). Then, all three analysts came together to discuss the major themes that they identified. In order to be considered a theme, all three of the analysts had to agree on its presence. Bergner and Bridges (2002) coded message board posts from three different websites that provided support for women who were struggling to cope with their male partner's pornography use, but did not specify the approach or the method they used for their analysis.

A critique of the qualitative studies is that they were inconsistent when specifying their analysis technique. Zitzman and Butler (2009) were thorough in their description of their coding process. However, Bergner and Bridges (2002) do not address their coding technique at all, leaving questions about the trustworthiness of their analysis technique. Although Benjamin and Tlusten (2010) used Giorgi's phenomenological coding technique, they did not apply the technique appropriately as they identified hypotheses to form accurate themes, thereby violating the interpretive integrity of Giorgi's analytic method (Giorgi, 2012).

Quantitative Analyses

Eight studies used ANOVAs to compare group differences (Bridges et al. 2003; Bridges and Morokoff 2011; Pariera, 2015; Poulsen et al. 2012; Resch and Alderson 2013; Senn and Desmarais 2004; Staley and Prause 2013) and one study computed Chi-square tests (Szymanski and Stewart-Richardson 2014). Pearson's *r* correlations (Bridges and Morokoff 2011; Senn and Desmarais 2004; Perry, 2016a, b; Stewart and Szymanski 2012; Szymanski and Stewart-Richardson 2014), simple linear regressions were used (Albright 2004; Doran and Price 2014; Muusses et al. 2015; Perry, 2016a, b; Resch and Alderson 2013; Stack et al. 2004), and bivariate logistic regression were used (Stack et al. 2004; Sun et al. 2014) for additional tests. Tylka and Kroon van Diest (2015) used hierarchical regression while Stewart and Szymanski 2012, Szymanski and Stewart-Richardson 2014, Szymanski et al. (2016) and Muusses et al. (2015). used a more complex form of

regression as they employed bootstrapping and hierarchical linear modeling to explore the relationship between pornography use and couple satisfaction. Seven studies used structural equation modeling to estimate causal relationships (Bridges and Morokoff 2011; Poulsen et al. 2012; Sun et al. 2014; Willoughby et al. 2016; Szymanski and Stewart-Richardson 2014; Tylka and Kroon Van Diest 2015; Yucel and Gassanov 2010).

As noted by Kashy and Snyder (1995) and Kenny et al. (2002), analyzing the scores of couples individually may lead to a variety of measurement errors that can compromise validity. This measurement issue also affected the studies included in this review. Poulsen et al. (2012) and Yucel and Gassanov (2010) were the only studies to account for this by using Kurdek's (2003) recommendation of correlating error and the Actor-Independence Model (Kenny and Kashy 2000) respectively.

The variety of descriptive quantitative data and qualitative techniques used in these studies appears appropriate for the exploratory and descriptive state of the literature. One suggestion that may further our understanding of the phenomenon of pornography use among couples and its impact on them would be to utilize analyses such as hierarchical linear and structural equation modeling to explore causal relationships among a variety of predictor variables. These models can be used to predict pornography use among couples or describe the relationship between pornography use and the resulting effects of pornography use.

Findings

The Effect of Pornography on Relationships

Individuals who did not use pornography reported lower rates of negative communication than individuals who used pornography alone or with a partner (Maddox et al. 2011). Non-pornography viewing individuals also experienced a higher degree of relationship adjustment than partners who used pornography alone. Additionally, Maddox et al. found individual pornography users reported lower couple sexual satisfaction than couples who used pornography together and couples who did not use pornography at all. One interpretation of this finding is that the individual pornography user may be using pornography to increase their sexual satisfaction or as a diversion, as their current relationship is not meeting their sexual needs. However, this finding should be interpreted with caution, as the direction of this finding has not been identified.

A bi-directional effect between only husbands pornography use may exist with regards to pornography use and relationship adjustment as men with low adjustment use

more pornography than those who do not while an increase in pornography use is associated with decrease in adjustment (Muusses et al. 2015).

Yucel and Gassanov (2010) tested actor and partner effects and found that couples were more likely to identify their relationship as unhealthy when either partner was using pornography. Poulsen et al. (2012) were unable to replicate these findings as they found that there was no direct partner effect for male pornography use on the couple relationship. However, when this effect was analyzed using a structural equation modeling, the model revealed that male pornography use was indirectly related to male relationship satisfaction and female pornography use mediated higher male relationship satisfaction than male pornography use, suggesting more positive effects for female pornography use may exist.

Lambert et al. (2012) reported the results of five different studies carried out at a southeastern university that investigated the relationship between pornography viewing and romantic relationship commitment. They found that for couples where one or both partners used pornography, these relationships were characterized by lower levels of commitment, infidelity and partners were more likely to flirt with others outside their relationship.

A negative relationship between male pornography use and relationship quality has also been established by other studies (Perry 2016a, b; Stack et al. 2004; Stewart and Szymanski 2012). Stewart and Szymanski found that a woman's perception of their partner's problematic pornography use was also negatively associated with self-esteem, relationship quality and sexual satisfaction. Bergner and Bridges (2002) also found a negative relationship between pornography use, relationship satisfaction and low self-esteem in females. The length of time in the relationship appears to moderate the affects of pornography, as women who reported being in longer committed relationships were more affected by their partner's pornography use. Perry (2016b) examined how pornography impacts heterosexual relationships over time. He found that for male pornography users, partners in these relationships were more likely to report lower marital quality 6 years later. However, for female users of pornography, this relationship was not significant.

Gender Characteristics of Pornography Use

Overall, studies found that males used more pornography than women (Daneback et al. 2009; Lambert et al. 2012; Maddox et al. 2011; Perry 2016a; Poulsen et al. 2012; Stack et al. 2004; Willoughby et al. 2016). Predictors of pornography use in men in committed relationships included lower levels of religiosity, being less committed in their relationships, higher reports of depressive symptoms,

relational aggression, and having fewer children compared to non-pornography using males (Bridges et al. 2003; Perry, 2016a; Stack et al. 2004; Willoughby et al. 2016). Using participant self-reports, Perry (2016a) found that the negative impact pornography use was moderated by high levels of religiosity reported by couples.

Bridges and Morokoff (2011) found similar predictors for male and female pornography use in their study. However, a unique gender finding was that male pornography users reported higher levels of depression than female users. Additionally, female users of pornography in committed relationships were more likely to report low religiosity, earlier sexual experiences with their partner and more sexual partners and also reported higher sexual desire levels than women in committed relationships who did not use pornography (Maddox et al. 2011; Poulsen et al. 2012). Maddox et al. also found that pornography users reported more negative communication with their partner, lower quality of relationships in their family of origin and with others in general compared to those who did not use pornography.

Szymanski et al. (2016) investigated the perceptions that females have on their male partners' pornography use. They found that when females perceived their male partners were using pornography at higher rates, this was associated with lower levels of relationship satisfaction and psychological stress reported by women. Perceived high levels of male pornography use was also associated with a loss of emotional and relational trust as reported by women. Female attitudes towards their male partner's pornography was not found to moderate perceptions of pornography use in their partners.

Szymanski and Stewart-Richardson (2014) explored how pornography is impacted by level of attachment and gender role conflict—a phenomenon that occurs when gender roles have negative consequences on others and increase role rigidity among males. Results revealed that male pornography use was negatively associated with relationship and sexual quality. Role conflict and anxious and avoidant attachment was positively associated with higher rates of male pornography use.

Inconsistent findings have been found regarding female pornography use and sexual quality. (Muusses et al. 2015) found that female pornography use may be associated with higher levels of sexual satisfaction as reported by their male partners while Willoughby et al. (2016) were unable to replicate this finding. Female motivation to use pornography may be to improve their sex life by trying new sexual behaviors with their partner suggesting that pornography use by females may be relationally, and not individually motivated. This is contrary to male pornography use that may be motivated by individually needs only (Albright 2008; Bridges et al. 2003). Male pornography use

does not appear to affect male insecurities about sexual performance (Sun et al. 2014). However, males are more likely to incorporate the sexual acts they view in pornography during sex with their partners and are more likely to fantasize about these images as they are having sex. Additionally, the level of pornography use among males is negatively associated with sexual satisfaction (Sun et al. 2014).

Tylka and Kroon van Diest (2015) examined the impact of pornography on sexual objectification experienced by women. Results suggested that higher perceived level of previous male partners' pornography use was associated with women's interpersonal sexual objectification level. Additionally, perceived male pornography use was associated with the adoption of eating disorder symptoms (e.g., restricting food, binging/purging). Current male pornography use was not associated with the objectification variables, relationship distress or physical well-being. Explanations for this finding include the possibility that early relationships may shape the way they react to their partner's pornography use and possible underreporting by female participants about their partner's use of pornography.

Shared Pornography Use Among Couples

Literature suggests that couples who do not use pornography at all experience higher relationship satisfaction levels and report more dedication towards their partners compared to couples who used pornography together and individuals who used pornography alone (Maddox et al. 2011; Resch and Alderson 2013).

However, there may be some positive benefits for couples who do consume pornography together. A 2009 study found that couples who used pornography together experienced a relationship climate high in eroticism, as they felt more comfortable expressing and acting on their sexual desires with each other; these couples also reported more sexual dysfunctions such as arousal issues and negative self-talk among females suggesting that these couples may have used pornography in order to compensate for arousal difficulties or decreased self-esteem (Daneback et al. 2009).

Willoughby et al. (2016) explored the impact that differences in pornography use between partners can have on relationship outcomes. After computing difference levels of pornography between male and female partners, greater frequency in male pornography use was mediated by low female sexual desire and associated with a less reported level of male and female relationship satisfaction and stability. Additionally, greater differences between partner pornography consumption was associated with higher levels of male aggression, lower sexual desire among

females and poor communication by both partners, mediated by low relational satisfaction.

Discovery of Pornography by Women

The discovery of male pornography use by their female partners appears to be a significant finding in the literature. Women who discovered their partner's pornography use viewed it as a "traumatic event" and experienced emotions that were similar to those experienced by women whose partner cheated on them (p. 195). Second, discovering a partner's pornography use was negatively related to their self-esteem and third, women also reported changes in the ways they viewed their partner, using negative descriptors to describe them post-discovery, as a liar, inadequate, or suffering from a "sick" condition (Bergner and Bridges 2002, p. 199). Similarly, (Bridges et al. 2003) found that women who were in relationships with partners who used pornography reported that they also felt like they had "lost" their partner to pornography (p. 10). This language about pornography use as an "affair" appears to fit with literature that has associated affairs with pornography use (Doran and Price 2014; Stack et al. 2004).

In a qualitative study, women reported an emotionally intense and disruptive experience when they discovered their partner's pornography use. As a result of the discovery, trust and attachment security were compromised as women felt that they were not secure in their roles as wives, reporting that they felt that were not able to meet their "marital expectations" as a wife (Zitzman and Butler 2009, p. 220).

Honesty and Pornography

Honesty between partners appears to affect the use of pornography among couples. Zitzman and Butler (2009) found that as males disclosed the nature of their pornography use to their partners, this honesty helped to lessen the loss of trust within the relationship. Men whose partner knew of their pornography use reported that it was easier for them to talk about sex with their partner. Couples who viewed pornography together were found to communicate more frequently with each other about their sexual fantasies and desires, suggesting that honesty about pornography use may moderate its negative effects (Daneback et al. 2009).

One study found that women whose partners were honest about their pornography use reported less distress and reported higher relationship quality than women with partners who attempted to hide their pornography use. Honesty was found to be a factor that improved couple satisfaction but only to a certain extent as relationship satisfaction decreased "significantly" as males increased

the amount of honesty about their pornography use with their partners (p. 9, Resch and Alderson 2013). Researchers hypothesized that this effect may be related to the fact that previous literature has found that males report more comfort with pornography use than females (Carroll, Padilla-Walker, Nelson, Olson, McNamara Barry & Madsen, Carroll et al. 2008; Maddox et al. 2011; Morgan, 2011). This comfort level may explain why males in this study found it easier than females to talk about their pornography use with their partners.

Another study found that some women reported that their partner's pornography use occupied an acceptable "space" outside of the relationship (Benjamin and Tlusten 2010, p. 609). The woman's cooperation and negotiation surrounding their partner's pornography use, as well as the ability of the couple to maintain a healthy level of intimacy, appeared to moderate this negotiation.

Couple Pornography Use and Experimental Studies

In the last 16 years, there have been only four experimental studies that focused on couple relationships and pornography. Three experimental studies randomly presented sexual stimuli to participants, using non-pornography videos or images as controls (Pariera 2015; Senn and Desmarais 2004; Staley and Prause 2013). Pariera (2015) found that participants rated viewing instructional pornography as having a positive affect on others than themselves but viewed themselves more positively impacted than their close friends. Senn and Desmarais (2004) investigated how social support mediates the effects of pornography and found that female participants who discussed their experiences with someone else after watching pornography reported less disturbance. Controlling for type of pornography, as the type of pornography became more violent, this effect was less pronounced. When the relationship to the participant was controlled for, women reported more satisfaction from their conversations after viewing violent forms of pornography with their male partner rather than with a female friend. Staley and Prause's (2013) laboratory experiment explored whether excitation transfer theory and social comparison theory could explain the effects of pornography use among couples using sexually explicit and a non-sexual exciting films (e.g., video of an action sport) as variables. Results were mixed as both erotic and non-erotic exciting films increased excitement in participants.

Lambert et al. (2012) was the only study to examine the frequency of pornography use as they randomly assigned pornography users to abstain from watching pornography. Despite the fact that participants were separated in a lab, Staley's and Prause's study was the only study of which we are aware that attempted to study how pornography

affects couples that are viewing pornography simultaneously. They found that participants who were assigned to view pornography, reported less relationship commitment and flirted more with other people outside of their relationship.

Theory

Although the majority of the research reviewed did not identify a guiding theory for their methods, various theories regarding pornography use and couple satisfaction were mentioned, but only in passing (Benjamin and Tlusten 2010; Staley and Prause 2013; Stewart and Szymanski 2012; Zitzman and Butler 2009).

Eleven studies specifically cited a guiding theory. Poulsen et al. (2012) selected symbolic interactionism as a guiding theory to explore the meanings that couples attach to their pornography use. Symbolic interactionism states that humans interpret their world through symbols and shared meanings (Cooley, 1956). This theory may be beneficial for sexologists as they work to explore the meanings that pornography users ascribe to their pornography use. Tenets of symbolic interactionism are present in other studies included in this review as well. Readers may be able to infer that both sexual script theory, used by Daneback et al. (2009), and excitation theory, used by Staley and Prause (2011), involve the shared verbal and non-verbal interactions between pornography, study participants and their partners. Theories that were not associated with symbolic interactionism include Pariera's 2015 study that utilized the Third-person Effect Theory in order to explore how participants viewed erotic and instructional pornography. Stack et al. (2004) used Social Control and Opportunity Theories may give people the opportunity to use pornography when not involved in healthy relationships. Albright (2008) and Sun et al. (2014) used Cognitive Script Theory to investigate how pornography provides a heuristic model outlining "what should or should not be happening, how people should or should not behave in response to what is or is not happening and what the outcomes of a particular course of action should be" (Wright 2011, p. 348). Yucel and Gassanov (2010) tested the Interpersonal Exchange Model of Sexual Satisfaction using the Actor-Partner Independence Model to test their hypotheses (Kenny and Kashy 2000). Tylka and Kroon van Diest (2015) used objectification theory (Fredrickson and Roberts 1997) to explore how male partner pornography use contributes to female sexual objectification and well-being. Szymanski and Stewart-Richardson (2014) used attachment theory (Ainsworth et al. 1978) and gender conflict theory (O'Neil et al. 1986) to guide their

measurements to examine the impact pornography has on the attachment and gender role conflict of males.

It is clear that over half of the studies reviewed are atheoretical and lack a uniform level of analysis. This makes it difficult to know how to interpret the results of the findings of a given study and to build upon existing research. A consistent theoretical level of analysis allows researchers to avoid problems related to measurement and generalizations (Bulcroft and White 1997). The current literature on pornography and its effects on couple relationships does not use theory on a consistent basis. Future studies may benefit from using theory more consistently in order to test and create new theories.

Discussion

Two areas still need attention to further understand pornography use among couples. First, pornography's exact effect on the couple relationship is still unknown as questions remain about the frequency that couples actually use pornography together and second, what constitutes an 'excessive' level of pornography use? These dilemmas make statements about clinical findings difficult to suggest.

In a recent web blog, famed couples researcher, Dr. John Gottman identifies pornography use as detrimental to the couple relationship (Gottman 2016, April 6). He does not suggest a model of therapy that may address this problem but he is vehement that pornography use by couples is damaging to the relationship. A search of empirically-based treatments for couples impacted by pornography does not identify an empirically-based intervention. However, a case example identifying structural family therapy as a potential model of intervention for these couples has been proposed (Ford et al. 2012). The problematic pornography use by an individual has been treated as a sexual addiction (Rosenberg et al. 2014) but to date, no empirically supported interventions have been published in the literature.

To identify problems and interventions for pornography users researchers need a consistent use of a theoretical unit of analysis and a standard definition of pornography. The operational definition of pornography may be defined by the measures used to assess pornography use even though the exact definition of pornography is not described explicitly elsewhere in the study. Therefore, sexologists should consider types of pornography (e.g., violent or non-violent) and various forms of pornography that may include film, books, Internet or pornography accessed through pay-per-view services (e.g., Cinemax). A useful study that may help identify a more consistent definition of pornography is a qualitative design that asks couples to

define their definition of pornography in order to establish reliable measures of pornography use.

Additionally, to test the impact of pornography titration level on couples, the frequency (e.g., daily, weekly) and duration (e.g., 15 min, 30 min) of pornography use should also be gathered in order to classify the frequency of use. New media forms such as sexually explicit text messages or “sext” messages sent between both partners may be of interest as recent research indicates that sexting rates among adults and youth have increased (Klettke et al. 2014). Query It remains important that all forms, types and frequency levels of pornography remain consistent with the identified definition to address threats to reliability and validity.

Future Study Design and Analyses

A mixed-method design would be advantageous to answering the questions about how couples are using pornography together. Studies such as Senn and Desmarais (2013) were able to explore how processing pornography with a romantic partner impacts emotional experiences. However, they were unable to record the conversation that took place between them. A mixed-method design would allow researchers to explore this phenomenon and describe the communication that takes place between couples. This would allow researchers to test multiple theoretical frameworks or theories and compare different forms of data to explore the complexities of pornography consumption.

Although Muusses et al. (2015) and Perry (2016b) were the only studies to use a longitudinal design, more longitudinal designs are needed to investigate how pornography affects couples over the lifespan (e.g., compare dating couples, newlywed couples who use pornography). Stratified sampling techniques could assist with creating a sample that would allow comparisons between these groups. Other grouping variables such as frequency of pornography use (e.g., low medium and high levels) could also be used to compare between groups. Researchers who choose a longitudinal design may benefit from using life course theory (Bengston and Allen 1993) as their theoretical unit of analysis in conjunction with symbolic interactionism as their guiding theory. Used in conjunction with theories that have already been tested such as the *Accessibility, Affordability and Anonymity* or Attachment theories, researchers will be able to track how pornography habits and couple relationships change over time (Cooper et al. 2000).

Experimental studies may also be beneficial as using random assignment isolates the effects of pornography more clearly. However, ethical issues exist with this type of research. A potential ethical dilemma is assigning couples that do not use pornography at all to the pornography

viewing condition. The impact of this behavior may harm the couple’s relationship. Researchers must be mindful of standards of *benevolence* and *non-maleficence* when considering this scenario.

As with all nested couples data, statistical analyses such as hierarchical linear and structural equation modeling techniques are preferred when analyzing the results of these studies. Future studies should continue to build off the limitations addressed in this manuscript by continuing to explore different forms of pornography use while using different frameworks and theory to explain its impact on couples.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

References

*indicates articles that met the review criteria and were the subject of this review.

- Ainsworth, M. D. S., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale: Erlbaum.
- *Albright, J. M. (2008). Sex in America online: An exploration of sex, marital status, and sexual identity in Internet sex seeking and its impacts. *The Journal of Sex Research*, 45(2), 175–186. doi:10.1080/00224490801987481.
- Ayres, M. M., & Haddock, S. A. (2009). Therapists’ approaches in working with heterosexual couples struggling with male partners’ online sexual behavior. *Sexual Addiction and Compulsivity*, 16, 55–78. doi:10.1080/10720160802711952.
- Bengston, V. I., & Allen, K. R. (1993). The life course perspective applied to families over time. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 469–499). New York: Plenum.
- *Benjamin, O., & Tlusten, D. (2010). Intimacy and/or degradation: Heterosexual images of togetherness and women’s embracement of pornography. *Sexualities*, 13(5), 599–623. doi:10.1177/1363460710376492.
- *Bergner, R. M., & Bridges, A. J. (2002). The significance of heavy pornography involvement for romantic partners: Research and clinical implications. *Journal of Sex and Marital Therapy*, 28, 193–206. doi:10.1080/009262302760328235.
- *Bridges, A. J., Bergner, R. M., & Hesson-McInnis, M. (2003). Romantic partners’ use of pornography: Its significance for women. *Journal of Sex and Marital Therapy*, 29, 1–14. doi:10.1080/00926230390154790.
- *Bridges, A. J., & Morokoff, P. J. (2011). Sexual media use and relational satisfaction in heterosexual couples. *Personal Relationships*, 18, 562–585. doi:10.1111/j.1475-6811.2010.01328.x.

- Bulcroft, R.A., & White, J.M. (1997). Family research methods and level of analysis. *Family Science Review*, 10(2), 136–153. Retrieved from <http://www.familyscienceassociation.org/family-science-review.html>.
- Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., McNamara Barry, C., & Madsen, S. D. (2008). Generation XXX: Pornography acceptance and use among emerging adults. *Journal of Adolescent Research*, 23, 6–30. doi:10.1177/0743558407306348.
- Cooley, C.H. (1956). *Human nature and social order*. Glencoe, IL: Free press. (Original work published 1902).
- Cooper, A., Delmonico, L. D., & Burg, R. (2000). Cybersex users, abusers, and compulsives: New findings and implications. *Sexual Addiction and Compulsivity*, 7(1), 5–29. doi:10.1080/10720160008400205.
- *Daneback, K., Bente, T., & Månsson, S. (2009). Use of pornography in a random sample of Norwegian heterosexual couple. *Archives of Sexual Behavior*, 38, 746–753. doi:10.1007/s10508-008-9314-4.
- Davison, W. P. (1983). The third-person effect in communication. *The Public Opinion Quarterly*, 47(1), 1–15. doi:10.1086/268763.
- *Doran, K., & Price, J. (2014). Pornography and marriage. *Journal of Family and Economic Issues*, 35(4), 489–498. doi:10.1007/s10834-014-9391-6.
- Ford, J. J., Durtschi, J. A., & Franklin, D. L. (2012). Structural Therapy with a couple battling pornography addiction. *The American Journal of Family Therapy*, 40, 336–348. doi:10.1080/01926187.2012.685003.
- Foubert, J. D., Bros, M. W., & Bannon, R. S. (2011). Pornography viewing among fraternity men: Effects on bystander intervention, rape myth acceptance and behavioral intent to commit sexual assault. *Sexual Addiction and Compulsivity: The Journal of Treatment and Prevention*, 18, 212–231. doi:10.1080/10720162.2011.625552.
- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173–206. doi:10.1111/j.1471-6402.1997.tb00108.x.
- Giorogi, A. (2012). The descriptive phenomenological psychological method. *Journal of Phenomenological Psychology*, . doi:10.1163/156916212X632934.
- Gottman, J.M. (2016, April 6). Re: An open letter on porn [Web log message]. Retrieved from <https://www.gottman.com/blog/an-open-letter-on-porn/>.
- Jacobellis v. Ohio, 378 U.S. 184 (1964).
- Janssen, E., Carpenter, D., & Graham, C. (2003). Selecting films for sex research: Gender differences in erotic film preference. *Archives of Sexual Behavior*, 32, 243–251. doi:10.1023/A:1023413617648.
- Kashy, D. A., & Snyder, D. K. (1995). Measurement and data analytic issues in couple research. *Psychological Assessment*, 7(3), 338–348. doi:10.1037/1040-3590.7.3.338.
- Kenny, D. A., & Kashy, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (2nd ed., pp. 451–477). New York, NY: Cambridge University Press.
- Kenny, D. A., Mannetti, L., Pierro, A., Livi, S., & Kashy, D. A. (2002). The statistical analysis of data from small groups. *Personality and Social Psychology*, 83(1), 126–137. doi:10.1037/0022-3514.83.1.126.
- Kingston, D. A., Malamuth, N. M., Fedoroff, P., & Marshall, W. L. (2009). The importance of individual differences in pornography use: Theoretical perspectives and implications for treating sexual offenders. *Journal of Sex Research*, 46(2–3), 216–232. doi:10.1080/00224490902747701.
- Klettke, B., Hallford, D. J., & Mellor, D. J. (2014). Sexting prevalence and correlates: A systematic literature review. *Clinical Psychology Review*, 34(1), 44–53. doi:10.1016/j.cpr.2013.10.007.
- Kurdek, L. A. (2003). Methodological issues in growth-curve analyses with married couples. *Personal Relations*, 10, 235–266. doi:10.1111/1475-6811.00048.
- *Lambert, N. M., Negash, S., Stillman, T. F., Olmstead, S. B., & Fincham, F. D. (2012). A love that doesn't last: Pornography consumption and weakened commitment to one's romantic partner. *Journal of Social and Clinical Psychology*, 31(4), 410–438. doi:10.1521/jscp.2012.31.4.410.
- *Maddox, A. M., Rhoades, G. K., & Markman, H. J. (2011). Viewing sexually-explicit materials alone or together: Associations with relationship quality. *Archives of Sexual Behavior*, 38, 441–448.
- Manning, J. C. (2006). The impact of Internet pornography on marriage and the family: A review of the research. *Sexual Addiction and Compulsivity*, 13, 131–165. doi:10.1080/10720160600870711.
- Morgan, E. M. (2011). Associations between young adults' use of sexually explicit materials and their sexual preferences, behaviors, and satisfaction. *Journal of Sex Research*, 48, 520–530. doi:10.1080/00224499.2010.543960.
- *Muusses, L. D., Kerkhof, P., & Finkenauer, C. (2015). Internet pornography and relationship quality: A longitudinal study of within and between partner effects of adjustment, sexual satisfaction and sexually explicit internet material among newly-weds. *Computers in Human Behavior*, 45, 77–84. doi:10.1016/j.chb.2014.11.077.
- O'Neil, J. M., Helms, B. J., Gable, R. K., David, L., & Wrightsman, L. S. (1986). Gender-role Conflict Scale: College men's fear of femininity. *Sex Roles*, 14, 335–350. doi:10.1007/bf00287583.
- Ogas, O., & Gaddam, S. (2012). *A billion wicked thoughts: What the internet tells us about sexual relationships*. New York: Penguin Group.
- Olmstead, S. B., Negash, N., Pasley, K., & Fincham, F. D. (2013). Emerging adults' expectations for pornography use in the context of future committed romantic relationships: A qualitative study. *Archives of Sexual Behavior*, 42, 625–635. doi:10.1007/s10508-012-9986-7.
- *Pariera, K. L. (2015). Perceived effects of instructional pornography on the self, partner, and others. *Sexual and Relationship Therapy*, 30(3), 385–400. doi:10.1080/14681994.2014.967760.
- *Perry, S. (2016a). *From bad to worse? Pornography consumption, spousal religiosity, gender and marital quality*. Sociological Forum: Advance online publication. doi:10.1111/soef.12252.
- *Perry, S. (2016b). *Does viewing pornography reduce marital quality over time? Evidence from longitudinal data*: Archives of Sexual Behavior. Advance online publication. doi:10.1080/00224499.2016.1146203.
- *Poulsen, F. O., Busby, D. M., & Galovan, A. M. (2012). Pornography use: Who uses it and how it is associated with couple outcomes. *Journal of Sex Research*, 50(1), 72–83. doi:10.1080/00224499.2011.648027.
- *Resch, M. N., & Alderson, K. G. (2013). Female partners of men who use pornography: Are honesty and mutual use associated with relationship satisfaction? *Journal of Sex and Marital Therapy*, 00(00), 1–15. doi:10.1080/0092623X.2012.751077.
- Rosenberg, K. P., Carnes, P., & O'Connor, S. (2014). Evaluation and treatment of sex addiction. *Journal of Sex and Marital Therapy*, 40(2), 77–91. doi:10.1080/0092623X.2012.701268.
- *Senn, C. Y., & Desmarais, S. (2004). Impact of interaction with a partner or friend on the exposure effects of pornography and erotica. *Violence and Victims*, 19(6), 645–658.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family Therapy*, 38, 15–28. doi:10.2307/350547.
- *Stack, S., Wasserman, I., & Kern, R. (2004). Adult social bonds and use of Internet pornography. *Social Science Quarterly*, 85(1), 75–88. doi:10.1111/j.0038-4941.2004.08501006.x.

- *Staley, C., & Prause, N. (2013). Erotica viewing effects on intimate relationships and self/partner evaluations. *Archives of Sexual Behavior*, 38, 615–624. doi:10.1007/s10508-012-0034-4.
- Stanley, S. M., Amato, P. R., Johnson, C. A., & Markman, H. J. (2006). Premarital education, marital quality, and marital stability: Findings from a large, random, household survey. *Journal of Family Psychology*, 20, 117–126. doi:10.1037/0893-3200.20.1.117.
- *Stewart, D. N., & Szymanski, D. M. (2012). Young adult women's reports of their male romantic partner's pornography use as a correlate of their self-esteem, relationship quality, and sexual satisfaction. *Sex Roles*, 67, 257–271. doi:10.1007/s11199-012-0164-0.
- Sullivan, T. J. (2001). *Methods of social research*. Fort Worth: Harcourt.
- *Sun, C., Bridges, A., Johnason, J., & Ezzell, M. (2014). Pornography and the Male Sexual Script: An analysis of consumption and sexual relations. *Archives of Sexual Behavior*. doi:10.1007/s10508-014-0391-2.
- *Szymanski, D. M., Feltman, C. E., & Dunn, T. L. (2016). Male partners' perceived pornography use and women's relational and psychological health: The roles of trust, attitudes, and investment. *Sex Roles*, 73, 187–199. doi:10.1007/s11199-015-0518-5.
- *Szymanski, D. M., & Stewart-Richardson, D. N. (2014). Psychological, relational and sexual correlated of pornography use on young adult heterosexual men in romantic relationships. *The Journal of Men's Studies*, 22(1), 64–82. doi:10.3149/jms.2201.64.
- *Tylka, T. L., & Kroon Van Diest, A. M. (2015). You looking at her "hot" body may not be "cool" for me: Integrating male partners' pornography use into Objectification Theory for women. *Psychology of Women Quarterly*, 39(1), 67–84. doi:10.1177/0361684314521784.
- *Willoughby, B. J., Carroll, J. S., Busby, D. M., & Brown, C. C. (2016). Differences in pornography use among couples: Associations with satisfaction, stability, and relationship processes. *Archives of Sexual Behavior*, 45, 145–158. doi:10.1007/s10508-015-0562-9.
- *Yucel, D., & Gassanov, M. A. (2010). Exploring actor and partner correlates of sexual satisfaction among married couples. *Social Science Research*, 39, 725–738. doi:10.1016/j.ssresearch.2009.09.002.
- Zillman, D., & Bryant, J. (1988). Effects of prolonged consumption of pornography on family values. *Journal of Family Issues*, 9, 518–544. doi:10.1177/019251388009004006.
- *Zitzman, S. T., & Butler, M. H. (2009). Wives' experience of husbands' pornography use and concomitant deception as an attachment threat in the adult pair-bond relationship. *Sexual Addiction and Compulsivity: The Journal of Treatment and Prevention*, 16, 210–240. doi:10.1080/10720160903202679.