



# Pornography consumption and partnered sex: a review of pornography use and satisfaction in romantic relationships

Margaret Bennett-Brown<sup>1,2</sup> · Paul J. Wright<sup>3</sup>

Accepted: 25 April 2022 / Published online: 11 May 2022  
© The Author(s), under exclusive licence to Springer Nature Switzerland AG 2022

## Abstract

**Purpose of review** The effect of pornography on romantic relationships has been long discussed in popular culture and by researchers. The aim of the current review is to discuss the most recent findings probing the potential effect of pornography consumption on relationship and sexual satisfaction for individuals who are in romantic relationships.

**Recent findings** Currently, there has only been one meta-analysis, which shows that pornography consumption and sexual and relationship satisfaction are negatively related for men but not for women (Hum Commun Res. 43(3):315-43, 6). Potential mediators of this link include a preference for pornographic over partnered sexual excitement, the devaluation of intimate sexual communication, decreased partnered sex due to masturbatory displacement, and upward comparisons between one's own sex life and sex in pornography. Potential moderators include frequency of consumption and whether pornography use is alone for masturbation or partnered as a coupled sexual enhancement.

**Summary** Future studies examining previously discussed potential moderators and mediators are needed to replicate findings and provide extension to theory directed toward pornography's effects on romantic relationships. Additional meta-analyses on process and contingency are also needed to further synthesize the research on pornography's effect on partnered sexual activity. Clinical implications are discussed as related to problematic pornography use.

**Keywords** Pornography consumption · Sexual satisfaction · Relationship satisfaction · Pornography use in romantic relationships

## Introduction

Pornography has become more and more accessible throughout the past decade. For instance, 94% of men and 87% of women in the USA have viewed pornography at least once with an average age of first exposure being 13.8 and 17.8 years, respectively [1]. As pornography use has become more common, researchers have become increasingly interested in its possible effects on consumers. A relatively large

body of literature now exists examining pornography consumption and its relationship to several mental, physical, sexual, and relational health outcomes. To enhance clarity and coherence, this particular review aims to cover the most recent body of research examining pornography consumption and its potential effects on relationship and sexual satisfaction as it pertains to individuals in romantic relationships. Theory, pertinent empirical findings, potential mediating and moderating variables, and additional outcome variables of interest are discussed.

## Theoretical background

In pornography effects theorizing as it relates to sexual and relationship satisfaction, two main perspectives have remained consistent. First, sexual script theory posits how a sexual encounter should unfold, detailing what should be sexually arousing, who individuals should engage in sexual activities with, and what the outcomes of sexual activity should be [2]. Although sexual scripts are influenced

This article is part of the Topical Collection on *Sex Addiction*

✉ Paul J. Wright  
paulwrig@indiana.edu

<sup>1</sup> The Kinsey Institute, Indiana University, Bloomington, IN, USA

<sup>2</sup> Department of Communication Studies, Texas Tech University, Lubbock, TX, USA

<sup>3</sup> Department of Communication Science, Indiana University, Bloomington, IN, USA

by many variables, a key influence is pornography [3]. By applying this theoretical framework to pornography effects, individuals are generally expected to report decreased satisfaction due to the mismatch between idealized pornographic scripts and how one's actual sexual encounters unfold [4].

Looking at another theoretical framework, social comparison theory examines how individuals compare themselves to others, which then determines how satisfied they feel with themselves and their situation [5]. When individuals are using upward comparisons, or evaluating themselves to superior peers, this is likely to result in decreased satisfaction. Within the context of pornography, individuals are very likely to experience decreased satisfaction if they are comparing themselves to pornographic situations [6••].

More recently, Leonhardt et al. [7••] developed an organizational framework to analyze effects related to both short- and long-term sexual quality, sexual media content, application of sexual scripts, and partner similarities. The theory suggests that individuals may be experiencing more benefits from pornography consumption in shorter relationships due to increased sexual arousal or more sexual openness versus longer relationships where they may experience more negative effects such as less intimacy and communication. When examining the content of pornography, the framework categorizes material as paraphilic, which includes themes such as coercion or dominance; explicit, which includes themes such as eroticism and objectification but also depicts specific sexual acts; and suggestive, which highlights the same themes as explicit but does not include specific sexual acts. With certain types of content and themes highlighted, explicit and paraphilic material may be more likely to have an influence on sexual behaviors than suggestive content would.

In addition, the application of sexual scripts may be important to examine in terms of the amplification or dampening of effects. The framework discusses the key variables of exclusivity, formativeness, resonance, and reinforcement as considerations for moderating variables, which were also highlighted in Wright's [8] 3AM model. Lastly, the couple must be considered in terms of the congruence of their consumption, application of sexual scripts, and their morality beliefs, which were also highlighted in Campbell and Kohut's [9] ACE model.

## Meta-analysis

There is currently only one meta-analysis in the field of pornography effects that examines the basic question of association between pornography consumption and relationship and sexual satisfaction [6••]. This meta-analysis considered experimental, cross-sectional, and longitudinal studies when looking at the effects of pornography. The association between pornography consumption and interpersonal

satisfaction was significantly negative for men but was not significant for women. Sexual and relationship satisfaction were grouped together as an "interpersonal satisfaction" variable, as the results were indistinguishable. It is possible that there are certain subgroups or circumstances in which these relationships may be different. But on the whole, this meta-analysis suggests that women's sexual and relationship satisfaction levels are not directly affected by pornography consumption and that men may have adverse effects to their sexual and relationship satisfaction with increased pornography consumption. This systematic review concluded with an emphasis on the importance of potential mediators and moderators.

## Mediation

Only a few studies have tested potential mediators linking pornography consumption to sexual or relationship satisfaction. Wright et al. [10] tested a conceptual model, which was supported by the data for both men and women. The model proposed that more frequent pornography consumption would be correlated with a heightened perception of pornography as a source of sexual information, which would in turn be correlated with preferring pornographic excitement over partnered excitement and less sexual communication. Less sexual communication and a preference for pornographic excitement would then be correlated with lower levels of sexual satisfaction. Additionally, Bennett et al. [11] tested a mediated model that was supported for both men and women, indicating that pornography consumption was correlated with pornography guilt, which in turn was correlated with decreased partner sexual desire, which then correlated with less relationship satisfaction.

More recently, Wright et al. [12] examined youths' consumption of pornography as it relates to sexually dominant behaviors and sexual satisfaction. The data supported the proposed model which predicted that increased levels of pornography use correlated with more sexually dominant behaviors, which then in turn correlated with less sexual satisfaction. Another recent study aimed at examining the effect of pornography consumption indirectly on both sexual and relationship satisfaction [13]. The data supported the model for both men and women, which proposed that pornography consumption would be correlated with pornographic arousal, which in turn would be correlated with a preference for pornography over partner, and then correlated to lower levels of sexual satisfaction followed by lower levels of relationship satisfaction.

Examining a moderated mediation model, Guidry et al. [14] examined pornography consumption as related to relationship satisfaction through anxiety and depression, when individuals had higher levels of moral disapproval of pornography. As predicted, higher levels of pornography use

with more moral disapproval correlated with more depression, which negatively impacted relationship satisfaction. The relationship with anxiety was more nuanced, with anxiety being generally negatively correlated with relationship satisfaction; however, when romantic attachment was controlled for, it had a positive correlation with relationship satisfaction. As this study shows, moderating variables are also essential to consider when examining the relationship between pornography use and interpersonal satisfaction. The next section explores the question of moderation in more detail.

## Moderation

There are several potential moderating factors that have been examined within the context of pornography use and interpersonal satisfaction. The main moderator of interest has been biological sex, or examining how these relationships look in men versus women. As suggested by several studies, men and women appear to be affected differently by pornography use with the Wright et al. [6••] meta-analysis finding that women's sexual and relationship satisfaction is largely uncorrelated with their pornography consumption at the main-effect level while men's sexual and relationship satisfaction decreases with increased consumption. Within a recent longitudinal study, men and women's pornography use and reported partner sexual satisfaction differed based on biological sex as well. Sommet and Berent [15] found that men who consumed more pornography had lower levels of partner-reported sexual satisfaction whereas women who consumed more pornography had higher levels of partner-reported sexual satisfaction. Additionally, Willoughby et al. [16, 17] in a dyadic analysis of heterosexual partners found that men's pornography use negatively correlated with both men's and women's sexual satisfaction through the variable of sexual desire.

Another key moderator appears to be the amount (i.e., frequency) of exposure to pornographic material. In a two-sample study of German and English adults, Wright et al. [18] found that examining amount of exposure was essential when looking at the correlation between pornography consumption and sexual satisfaction, as this relationship was non-linear. The findings indicated that once pornography consumption reaches a certain level, once a month in this particular study, sexual satisfaction starts to decrease and decrease more rapidly with higher levels of consumption. In another non-US (Korean) sample, Wright et al. [19] found the usual linear relationship between more frequent pornography consumption and lower sexual satisfaction. However, the curvilinear relationship showed an enhanced fit with individuals who consumed pornography on fewer occasions reporting higher levels of sexual satisfaction but those who consumed pornography more regularly reporting

lower levels of sexual satisfaction. The more negative relationship was stronger for women whereas the more positive relationship was stronger for men, which had not been demonstrated in other studies but coincides with men's desire for more sexual novelty and women's sexual socialization values. Within a US sample, Willoughby et al. [16, 17]'s findings did suggest a linear relationship between higher pornography consumption and decreased sexual satisfaction and between partnered pornography consumption and higher levels of both relationship satisfaction and sexual satisfaction. However, when joint pornography use reached a certain level, in this case a weekly occurrence, there was a decrease in sexual satisfaction levels. In addition, once pornography use reached a certain level — specifically consumption occurring three to five times a day — it linked with relationship satisfaction but had no association with relationship satisfaction before the specified threshold. Wright et al. [20] also analyzed a US sample, which yielded similar findings demonstrating the negative relationship between pornography consumption and sexual satisfaction, with the acceleration of declines in sexual satisfaction increasing as pornography use increased.

As previously indicated, the differences between individualized consumption and coupled consumption emerge when discussing pornography's effect on interpersonal satisfaction. Although an older study, Maddox et al. [21] demonstrated findings where partners who viewed pornography together reported higher levels of sexual satisfaction than those who used pornography alone. More recently, Rodrigues et al. [22] compared monogamous partners to those who were consensually non-monogamous (CNM) in their pornography consumption habits. CNM couples were more likely to consume pornography with their primary partner but both types of couples demonstrated that consumption with their partners correlated with more sexual satisfaction. Consistent with previous findings, solo consumption indicated lower levels of sexual satisfaction for both types of couples. On a related note, Kohut et al. [23] found that differences or similarities in sexual values between partners are important to analyze, with joint pornography consumption being associated with openness and sexual communication. Their findings suggest that joint pornography consumption may enable couples to share their sexual likes and dislikes with one another.

## Other outcomes

Although relationship satisfaction and sexual satisfaction have been the primary variables of interest when it comes to relational outcomes, findings have concluded that there could be additional variables to consider when examining the impact of pornography consumption on partnered sexual activity, with two of the additional variables being

body satisfaction and sexual shame. Wright and Tokunaga [24]’s meta-analysis highlighted the variable of body satisfaction as being negatively related to partner’s pornography consumption, indicating that for heterosexual women who perceived their partner as a pornography user, lower levels of body satisfaction are evidenced. Floyd et al. [25] examined personal pornography use and found higher levels of sexual shame were correlated with lower levels of sexual satisfaction and relationship satisfaction. Similarly, Maas et al. [26] found that for men who were more accepting of pornography, pornography consumption was associated with higher levels of relationship satisfaction, whereas for men who were less accepting of pornography, pornography consumption was associated with lower levels of relationship satisfaction. For women who were more accepting of pornography, there was not a significant difference in the relationship between consumption and satisfaction; however, for women who were less accepting of pornography, pornography consumption was associated with lower levels of relationship satisfaction. Although these two variables have both been identified as potential moderators to consider, additional research is needed to further clarify the regularity of these relationships.

### Clinical implications

Recently, the World Health Organization (WHO) included compulsive sexual behavioral disorder (CSBD), which can involve problematic pornography use (PPU), as an impulse control disorder in the ICD-11 [27]. Before this inclusion, there had not been a formal diagnosis for PPU within the clinical setting. However, therapists report that some clients present with consequences or problems that arise from PPU, which are often similar to those experiencing other types of addiction.

There are several psychometric evaluations that have been developed and used in an attempt to evaluate PPU, but a recent review suggested that there were two instruments that should be recommended to practitioners [28]. The first instrument is the problematic pornography use scale (PPUS; [29]), which addresses most components of addiction excluding intrapsychic conflict and craving. The second instrument is the problematic pornography consumption scale (PPCS; [30]), which was the only instrument in the review that addressed all the components of addiction but was limited on the conflict component. In line with the current review, the authors recommended examining additional variables to ensure that there is not an underlying issue, and that problematic pornography use is truly the main problem.

As suggested, future research should examine if there are certain circumstances or personality characteristics that may make individuals more at risk for developing PPU. One way for therapists to incorporate a type of risk assessment would include additional measures in their intake assessments.

Since previous research has demonstrated that PPU is associated with anxiety, depression, substance use [31], less empathy [32], and even factors of the Big Five Personality Model [33], therapists could include some of these scales to screen for potential risk factors.

### Conclusion

Overall, the research examining pornography’s potential effect on partnered sexual activity focuses on sexual and relationship satisfaction. The predominate trend is for lower sexual and relationship satisfaction to be associated with more frequent pornography consumption [6, 34]. Although several studies aimed to examine potential mediators and moderators, additional replicative research on these variables is needed. Furthermore, theory on pornography and satisfaction specifically [7••], theory on sexual media use and sexual socialization more generally [8], and theory broadly focused on processes and contingencies involved in media effects [35], suggests that additional moderators and mediators are in need of exploration. Through continued theory-driven tests and additional process and contingency oriented meta-analysis, subsequent research will add even greater clarity to the extant body of scholarship on pornography and satisfaction among people in romantic relationships.

### Compliance with ethical standards

**Competing interests** The authors declare no competing interests.

**Human and animal rights and informed consent** This article does not contain any studies with human or animal subjects performed by any of the authors.

### References

Papers of particular interest, published recently, have been highlighted as: •• Of major importance

1. Herbenick D, Fu TC, Wright P, Paul B, Gradus R, Bauer J, Jones R. Diverse sexual behaviors and pornography use: findings from a nationally representative probability survey of Americans aged 18 to 60 years. *J Sex Med.* 2020;17(4):623–33.
2. Simon W, Gagnon JH. Sexual scripts: permanence and change. *Arch Sex Behav.* 1986;15(2):97–120.
3. Wright PJ, Donnerstein E. Sex online: pornography, sexual solicitation, and sexting. *Adolesc Med State Art Rev.* 2014;25(3):574–89.
4. Willoughby BJ, Carroll JS, Busby DM, Brown CC. Differences in pornography use among couples: associations with satisfaction, stability, and relationship processes. *Arch Sex Behav.* 2016;45(1):145–58.



5. Festinger L. A theory of social comparison processes. *Hum Relat.* 1954;7(2):117–40.
- 6.●● Wright PJ, Tokunaga RS, Kraus A, Klann E. Pornography consumption and satisfaction: a meta-analysis. *Hum Commun Res.* 2017;43(3):315–43 **Currently, the only meta-analysis on pornography consumption as it relates to interpersonal satisfaction. The overall association was negative for men but not significant for women.**
- 7.●● Leonhardt ND, Spencer TJ, Butler MH, Theobald AC. An organizational framework for sexual media's influence on short-term versus long-term sexual quality. *Arch Sex Behav.* 2019;48(8):2233–49 **This article is the most recent and comprehensive theoretical framework on the influence of pornography consumption on romantic relationships.**
8. Wright PJ. Mass media effects on youth sexual behavior assessing the claim for causality. *Ann Int Commun Assoc.* 2011;35(1):343–85.
9. Campbell L, Kohut T. The use and effects of pornography in romantic relationships. *Curr Opin Psychol.* 2017;13:6–10.
10. Wright PJ, Sun C, Steffen NJ, Tokunaga RS. Associative pathways between pornography consumption and reduced sexual satisfaction. *Sex Relatsh Ther.* 2019a;34(4):422–39.
11. Bennett M, LoPresti BJ, McGloin R, Denes A. The desire for porn and partner? Investigating the role of scripts in affectionate communication, sexual desire, and pornography consumption and guilt in young adults' romantic relationships. *West J Commun.* 2019;83(5):647–67.
12. Wright PJ, Herbenick D, Paul B, Tokunaga RS. Exploratory findings on US adolescents' pornography use, dominant behavior, and sexual satisfaction. *Int J Sex Health.* 2021a;33(2):222–8.
13. Wright PJ, Paul B, Herbenick D, Tokunaga RS. Pornography and sexual dissatisfaction: the role of pornographic arousal, upward pornographic comparisons, and preference for pornographic masturbation. *Hum Commun Res.* 2021b;47(2):192–214.
14. Guidry R, Floyd CG, Volk F, Moen CE. The exacerbating impact of moral disapproval on the relationship between pornography use and depression, anxiety, and relationship satisfaction. *J Sex Marital Ther.* 2020;46(2):103–21.
15. Sommet N, Berent J. Porn use and men's and women's sexual performance: evidence from a large longitudinal sample. *Psychol Med.* 2022;9:1–0.
16. Willoughby BJ, Leonhardt ND, Augustus RA. Associations between pornography use and sexual dynamics among heterosexual couples. *J Sex Med.* 2021a;18(1):179–92.
17. Willoughby BJ, Leonhardt ND, Augustus RA. Curvilinear associations between pornography use and relationship satisfaction, sexual satisfaction, and relationship stability in the United States. *Comput Hum Behav.* 2021b;125:106966.
18. Wright PJ, Steffen NJ, Sun C. Is the relationship between pornography consumption frequency and lower sexual satisfaction curvilinear? Results from England and Germany. *J Sex Res.* 2019b;56(1):9–15.
19. Wright PJ, Miezan E, Sun C. Pornography consumption and sexual satisfaction in a Korean sample. *J Media Psychol Theories Methods Appl.* 2019c;31(3):164–9.
20. Wright PJ, Bridges AJ, Sun C, Ezzell MB, Johnson JA. Personal pornography viewing and sexual satisfaction: a quadratic analysis. *J Sex Marital Ther.* 2018;44(3):308–15.
21. Maddox AM, Rhoades GK, Markman HJ. Viewing sexually-explicit materials alone or together: associations with relationship quality. *Arch Sex Behav.* 2011;40(2):441–8.
22. Rodrigues DL, Lopes D, Dawson K, de Visser R, Štulhofer A. With or without you: associations between frequency of internet pornography use and sexual relationship outcomes for (non) consensual (non) monogamous individuals. *Arch Sex Behav.* 2021;50(4):1491–504.
23. Kohut T, Balzarini RN, Fisher WA, Campbell L. Pornography's associations with open sexual communication and relationship closeness vary as a function of dyadic patterns of pornography use within heterosexual relationships. *J Soc Pers Relat.* 2018;35(4):655–76.
24. Wright PJ, Tokunaga RS. Women's perceptions of their male partners' pornography consumption and relational, sexual, self, and body satisfaction: toward a theoretical model. *Ann Int Commun Assoc.* 2018;42(1):55–73.
25. Floyd CG, Landa S, Saunders MA, Volk F. The moderating influence of moral disapproval of pornography on couples' sexual and relationship satisfaction. *J Sex Marital Ther.* 2020;46(7):660–82.
26. Maas MK, Vasilenko SA, Willoughby BJ. A dyadic approach to pornography use and relationship satisfaction among heterosexual couples: the role of pornography acceptance and anxious attachment. *J Sex Res.* 2018;55(6):772–82.
27. Kraus SW, Krueger RB, Briken P, First MB, Stein DJ, Kaplan MS, Voon V, Abdo CH, Grant JE, Atalla E, Reed GM. Compulsive sexual behaviour disorder in the ICD-11. *World Psychiatry.* 2018;17(1):109.
28. Fernandez DP, Griffiths MD. Psychometric instruments for problematic pornography use: a systematic review. *Eval Health Prof.* 2021;44(2):111–41.
29. Kor A, Zilcha-Mano S, Fogel YA, Mikulincer M, Reid RC, Potenza MN. Psychometric development of the problematic pornography use scale. *Addict Behav.* 2014;39(5):861–8.
30. Bóthe B, Tóth-Király I, Zsila Á, Griffiths MD, Demetrovics Z, Orosz G. The development of the problematic pornography consumption scale (PPCS). *J Sex Res.* 2018;55(3):395–406.
31. Valkenburg PM, Peter J. The differential susceptibility to media effects model. *J Commun.* 2013;63(2):221–43.
32. Kor A, Djalovski A, Potenza MN, Zagoory-Sharon O, Feldman R. Alterations in oxytocin and vasopressin in men with problematic pornography use: the role of empathy. *J Behav Addict.* 2022;11(1):116–27. Retrieved May 11, 2022, from <https://akjournals.com/view/journals/2006/11/1/article-p116.xml>.
33. Brand M, Blycker GR, Potenza MN. When Pornography Becomes a Problem: Clinical Insights. *Psychiatric Times.* 2019;36(12).
34. Borgogna NC, Aita SL. Problematic pornography viewing from a Big-5 personality perspective. *Sex Addict Compuls.* 2019;26(3-4):293–314.
35. Perry SL. Pornography and relationship quality: establishing the dominant pattern by examining pornography use and 31 measures of relationship quality in 30 national surveys. *Arch Sex Behav.* 2020;49(4):1199–213.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.