Communication About Pornography and Relationship Quality in Different-Gender Couples

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Communication About Pornography and Relationship Quality
in Different-Gender Couples

Rachel Ann Augustus

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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ABSTRACT
Communication About Pornography and Relationship Quality in Different-Gender Couples

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Doctor of Philosophy

Scholars have begun to suggest factors that explain and influence the association between pornography use and relationship outcomes but further work is still needed. Communication about pornography is one variable that may be influential but it has yet to be considered in this way. Using a dyadic sample of 713 different-gender couples, I used Actor-Partner Structural Equation Modeling to analyze associations between pornography use (male pornography use, joint pornography use and female pornography use) and relational quality (from the perspective of each partner, respectively), associations between communication about pornography and relationship quality. Communication about pornography was also considered as a moderator between pornography use and relationship outcomes. Results showed a negative association between male pornography use and relationship quality for both men and women and a positive association between joint pornography use and relationship quality for women. Communication about pornography was positively associated with relationship quality for both men and women but did not moderate the associations between pornography use and relationship quality. Results highlight the value of communicating about pornography and possible implications are discussed.

Keywords: pornography, relationship quality, communication
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Communication About Pornography and Relationship Quality in Different-Gender Couples

Reports of pornography use suggest it is a common behavior for many individuals, with best estimates indicating that in a given month 56% of men and 26% of women use pornography (Miller et al., 2020; Regnerus et al., 2016). Overall, men utilize pornography more often than women but women’s usage has increased over past decades (Price et al., 2016). Further, many couples choose to consume pornography jointly as part of their sexual activities (Carroll et al., 2017). This viewing frequency means it is likely that in most couples at least one partner uses pornography. Given that probability, it seems reasonable to assume that decisions and negotiations around pornography are applicable to couples today and that there is need for clear literature on relational outcomes of pornography use and the circumstances relevant to those outcomes. Basic associations between pornography and couple outcomes have been established, with higher use often linked to poorer relational outcomes (e.g., satisfaction; see meta-analysis, Wright et al., 2017), however, there is complexity within those findings. For example, joint use (e.g., Kohut et al., 2018) and women’s use (e.g., Litsou et al., 2021) have positive associations with some relational outcomes. Such a mixture of results suggests the need for further work to show for whom such findings are true. Without additional variables, research focused on outcomes associated with pornography use is limited in how it may be interpreted and applied. Broadly, understanding pornography use outcomes has been improved by the inclusion of additional concepts such as moral incongruence (i.e., feeling as if one’s behaviors and one’s values about those behaviors are misaligned, Grubbs et al., 2019) or specific pornography content themes (e.g., objectification, power and violence, Klassen & Peter, 2015). Communication between partners is a possible factor that could provide insight into relational
outcomes of pornography use (Willoughby et al., 2020). What a couple talks about can change their experience around that topic and impact their relationship as a whole (Boisvert et al., 2011; Miller et al., 2003; Theiss & Solomon, 2006). In the sexuality literature, communication about sex has a positive association with relational outcomes (Jones et al., 2018; Mallory et al., 2019) and has been shown to moderate links between sex frequency and marital satisfaction (Park et al., 2022). Communication about pornography could theoretically show similar patterns of both influence and moderation however, it has not been studied in this way. Hence, this study will examine communication about pornography, directly in association with relational quality and then as a moderator between pornography use and relational quality in a dyadic sample of different-gender couples in the United States.

**Pornography Use and Couple Outcomes**

Researchers have typically measured the impact of pornography use on relational quality using three main outcomes: relational satisfaction, stability and sexual satisfaction (Newstrom & Harris, 2016; Perry, 2020; Willoughby et al., 2020). Relational satisfaction has a primarily negative association with pornography use over a number of studies (see meta-analysis Wright et al., 2017), however there are variations within such findings (Bridges & Morokoff, 2011; Kohut et al., 2017; Perry, 2020; Veit et al., 2017). For example, differences between partners in their levels of pornography use have been associated with lower relational satisfaction (Kohut et al., 2021; Willoughby et al., 2016) suggesting use patterns within a couple may be noteworthy. Gender is also an important variable. Men’s, but not women’s use, has been negatively associated with relational satisfaction (Willoughby & Leonhardt, 2020). Specifically, Poulsen and colleagues (2013) found that men’s pornography use had a negative indirect effect on both men’s and women’s relationship satisfaction, where women’s use had a positive indirect effect
on men’s relationship satisfaction. Interestingly, in their study, no direct associations were found between pornography use and relationship satisfaction. Instead, the effects were present through sexual quality (defined as general sexual satisfaction combined with sexual problems; Poulsen et al., 2013).

Another outcome relevant to pornography use is the stability of the relationship, typically measured with questions about commitment, fidelity, and if there have been thoughts about or behaviors related to the relationship being in trouble or ending (Newstrom & Harris, 2016; Willoughby et al., 2021b). Overall, pornography use has been linked to a higher likelihood of infidelity (Gwinn et al., 2013; Maddox et al., 2011), increased probability of breakup or divorce (Perry & Davis, 2017; Perry & Schleifer, 2018), and poorer relationship dedication/commitment (Maddox et al., 2011; Minarcik et al., 2016). Pornography use has a negative association with general relationship stability, especially at higher levels of pornography use (Willoughby et al., 2021b). Patterns of pornography use by individual members of the couple are important to consider here. Partners having different levels of pornography consumption (discrepancies) reported lower levels of relational stability (Willoughby et al., 2016) and there are significant differences in measures of relationship dedication and infidelity between groups who view no pornography, view only alone or view together with the worst outcomes existing for those view only alone (Maddox et al., 2011).

Sexual satisfaction has similarly consistent negative associations with pornography use (Rasmussen, 2016; Wright et al., 2017) but there are again a number of complexities. Gender plays a role with men’s use being associated with his own lower sexual satisfaction (Sun et al., 2016; Willoughby et al., 2021a). Women’s use has been associated with lower sexual satisfaction for herself, but at the same time also associated with higher couple sexual satisfaction (Brown et
al., 2017; Litsou et al., 2021). Viewing patterns (i.e., with or without one’s partner and frequency of use) also have an important effect on the nature of the association. Couple, as opposed to individual, use has been associated with higher sexual satisfaction for both partners (Huntington et al., 2021; Kohut et al., 2021; Willoughby & Leonhardt, 2020). Frequency of use is also relevant given that a curvilinear association has been identified between pornography and sexual satisfaction, with the strongest effects occurring at highest levels of use (Willoughby et al., 2021b; Wright et al., 2019).

Taken together, across these three outcomes (relational satisfaction, stability, and sexual satisfaction), it is clear the use of pornography is related to relationship quality. However, there are consistently variations in the nature of those associations. Scholars have suggested the reason for these nuanced findings lies in a variety of potential mediating and moderating variables (Campbell & Kohut, 2017; Leonhardt et al., 2019; Willoughby et al., 2020). Two such variables that are commonly studied are the gender of the viewer and whether the use occurs individually or jointly. Female individual use has been positively associated with relational outcomes while male individual use consistently has a negative impact (Poulsen et al., 2013; Sun et al., 2016; Willoughby et al., 2021a). This difference between genders has been suggested as occurring through paradigm and value differences (e.g., views on the purpose of sexual intimacy or acceptance of pornography, Willoughby et al., 2016), variance in the content viewed (e.g., male-versus female-centric features such as genital focus versus mutual pleasure, French & Hamilton, 2018), sexual scripting (norms about sexuality that individuals internalize through socialization, Simon & Gagnon, 1986; Zitzman & Butler, 2009) and as the result of discordant use (i.e., one partner who uses pornography and one partner who does not, Kohut et al., 2018, 2021). Similarly complicated, joint use typically has been associated with positive relational outcomes where
individual use typically has a more negative association (Hertlein et al., 2020; Huntington et al., 2021; Kohut et al., 2018; Willoughby & Leonhardt, 2020). Essentially, differing impacts of pornography for men and women seem to come as a result of both the content of pornography and the process of use. For example, a man who uses pornography independently of his partner (e.g. Kohut et al., 2018, 2021) and has internalized scripts about objectifying women (Tylka & Kroon Van Diest, 2015) would be expected to have negative outcomes. In contrast, a woman who uses primarily with her partner for the purpose of enhancing their intimacy (e.g. Kohut et al., 2018, 2021; Willoughby et al., 2016) would be expected to have positive outcomes. Overall, considering both gender and individual or shared use offers important insights into the study of relational outcomes and pornography use but have not been able to completely answer questions about the circumstances under which (i.e., for whom and when) these associations occur.

**The Role of Couple Process Variables**

Beyond relational usage patterns or gender, there are a number of additional factors that could help explain the presence of nuanced findings in pornography outcomes. The importance of these additional factors was explored in depth by Willoughby and colleagues (2020) in an organizational framework where they described a web of contextual variables that influence pornography’s impact on couple outcomes. Their framework proposed five dimensions relevant to the role pornography use may play in relational outcomes: pornography content (e.g., the impact of violent content; Klassen & Peter, 2015), personal views and attitudes (e.g., pornography use as infidelity; Zitzman & Butler, 2009), individual background factors (e.g., age of first use/sexual script development; Wright, 2011), relational contexts (e.g., relationship length and status; Ahmetoglu et al., 2010; Herbenick et al., 2010), and couple process (e.g., sexual communication; Timm & Keiley, 2011). They suggested these dimensions each play a
unique role in the way in which pornography use may influence couple outcomes and also
highlighted how all are connected in a variety of ways. In its simplest form, their framework
makes the argument that the unique circumstances of each couple matter and that further study of
pornography and relationship outcomes needs to include variables from these dimensions in
order to properly evaluate any associations.

Couple process, or a couple’s interaction patterns and behaviors, is one factor that may be
influential of pornography use and its associated outcomes but has received little attention in the
scholarship to date. Emerging literature in this area suggests there are a number of behaviors
(e.g., decision to use pornography together, the concealment of pornography use; Carroll et al.,
2017; Willoughby & Leonhardt, 2020) that are relevant in couple outcomes. However, as noted
by Willoughby and colleagues (2020), process variables are “understudied and underutilized in
the current scholarship” (p. 717). Although the other dimensions highlighted in their framework
(Willoughby et al., 2020) certainly offer unique and important insights into pornography’s
impact on relationships, they may not necessarily be applicable in all cases since within each
category there are a number of possible experiences (e.g., the background factor of moral
incongruence cannot explain all negative outcomes from pornography use since not all cases will
involve a disconnect between behaviors and values, Grubbs et al., 2019). Couple process, in
contrast, is a universally applicable construct to consider. All couples have processes they
engage in that impact their relationship development and outcomes. Especially when able to
capture information from both partners, variables in this category are useful when trying to
capture the nuances of an association to relationship outcomes.

Couple process variables have long been recognized and identified for their role in
successful relationships (Gottman & Levenson, 1992; Larson & Holman, 1994), meaning such
constructs should be able to offer valuable insights into what is occurring as couples navigate pornography use. Communication is a key aspect of couple process and certainly one of the most important in successful relationships (Kelly et al., 2003; Welker et al., 2014). Less frequent positive communication has been shown to be a risk factor for dissolution and divorce (Markman et al., 2010; Kanter et al., 2022) and conversely, support and positive communication from a partner has been identified as contributing to being more satisfied and stable in one’s relationship (Lawrence et al., 2008; Ruffieux et al., 2014). Additionally, the topics discussed by a couple can also impact their relationship satisfaction in both positive and negative directions (e.g., Hill et al., 2017). Overall, the amount, the quality and the content of communication are all recognized for their associations with relational health and well-being (Baucom & Baucom, 2022; Koerner & Fitzpatrick, 2022).

**Content Specific Couple Communication**

Given its essentially universal nature, research into couple communication should offer meaningful contributions to the associations between pornography use and couple outcomes. As previously described, communication comprises both the process and the topic of a given interaction. While understanding *quality* of communication is valuable, the *content* of a couple’s communication is even more important as a first step. Quality of communication is only relevant to topics the couple actually communicates about. While there are many theoretical approaches that include the importance of communication (i.e., family communication patterns theory, Koerner et al., 2017; social cognitive theory, Bandura, 1989; family systems theory, Yoshimura & Galvin, 2017), a lens of Symbolic Interactionism supports the prioritization of communication content (Blumer, 1969). According to this perspective, human behavior can be explained by the meanings that something has for the person and that meanings are formed, modified and
interpreted in social interactions (Blumer, 1969). Because meaning is at the core of this
approach, language is seen as central to the shaping of behavior. Through the content of
particular conversations meanings are created. These meanings then modify the associations
between a couple’s actions and outcomes. Therefore, the amounts of specific content
communication will have a significant impact on couple experiences.

This value of content specific communication is clearly identified in the broad sexuality
literature. For example, having direct, verbal negotiations about condoms has been positively
associated with their usage (Peasant et al., 2015). Consent is another area where communication
directly impacts how individuals behave in a given interaction (Muehlenhard et al., 2016). The
role of sexual communication goes further than just association with behaviors, however. In
reviews of existing research there are clear positive associations between discussions about
sexual topics and outcomes such as satisfaction (Byers, 2011; Freihart et al., 2020) and function
(Mallory et al., 2019). Specifically, communication about sexuality has been positively related to
sexual and marital satisfaction (Cupach & Comstock, 1990; Frederick et al., 2017; Thomas et al.,
2015; Timm & Keiley, 2011). Taken in reverse, devaluing sexual communication has been
associated with less sexual satisfaction (Wright et al., 2019). In a path analysis evaluating sexual
and relational satisfaction, Jones and colleagues (2018) found significant positive patterns of
association between sexual communication content and relational outcomes. As a moderator, at
different levels of sexual communication, research has found significant variation on the effect of
sexual frequency on marital satisfaction through one’s perceived sense of mattering (Park et al.,
2022). In sum, discussing sexual topics has a clear association with both relational behaviors and
their outcomes.
In the previous examples, the construct of communication refers to discussions about the topic broadly (e.g., Byers, 2011; Freihart et al., 2020) or more specifically to specific limits or boundaries around a particular area (e.g., Muehlenhard et al., 2016; Peasant et al., 2015). Unfortunately, there are only a few examples in literature where communication about pornography has been considered. Leonhardt et al. (2018) examined relational anxiety, which included anxiety about discussing pornography with a partner, and found pornography use had an indirect effect on higher relational anxiety. Further examples of communication about pornography have mostly focused on the honesty or openness between partners about pornography use. Those who report more honesty regarding their consumption have higher satisfaction and less distress than those in relationships where there is deceit about pornography use (Resch & Alderson, 2014). In reverse, unknown use has been associated with less sexual satisfaction (Willoughby & Leonhardt, 2020). However, there has also been evidence suggesting a negative association between honesty and satisfaction (Resch & Alderson, 2014; Willoughby & Leonhardt, 2020). These findings are illustrative that communication about pornography use may be relevant in association with relational outcomes but do not yet point specifically to how that may occur or what those may be.

It seems reasonable to extrapolate the literature on broader sexual communication and apply it to pornography communication. In theory, discussions (or the lack thereof) about pornography would have a similar influence as discussions about broader sexuality on behaviors and relationship outcomes. As previously stated, studies have shown that talking about sexuality to be positively associated with relational and sexual satisfaction (Cupach & Comstock, 1990; Frederick et al., 2017; Thomas et al., 2015; Timm & Keiley, 2011; Wright et al., 2019) and conversations about pornography (i.e., openly discussing the topic or setting limits or rules for
the use of pornography in the relationship) should follow this same pattern. Further, drawing from the Symbolic Interactionism lens (Blumer, 1969), communication about pornography could also act as a moderator between pornography use and the associated outcomes. Couples have the opportunity to create and negotiate meaning (Blumer, 1969) around its use through open discussion and limit setting, it should have a positive impact on relational outcomes. The level or degree of such communication could also alter the associations between pornography use and relational quality. At higher levels of communication about pornography, couples should be able to establish meanings and boundaries for pornography use and relational quality should therefore be less dependent on the frequency of pornography use. Conversely, at lower levels of communication about pornography, couples will not necessarily have determined the nature or limits of pornography use and relational quality should be therefore be more dependent on the quantity of pornography use. Overall, couples who communicate more about pornography use in their relationship should have different outcomes than those who avoid or neglect the topic.

**Current Study**

Empirical evidence has clearly connected pornography use with differences in relationship outcomes. In some cases, the usage is associated to the detriment of the relationship (i.e., Wright et al., 2017) where in others, usage appears to offer benefits (Kohut et al., 2017). Some variables have begun to explain these differences in findings (i.e., type of use, gender of the user, Huntington et al., 2021; Poulsen et al., 2013; Willoughby & Leonhardt, 2020; Willoughby et al., 2021a) but a further examination of other factors is still needed in order to best understand circumstances that interact with the association between pornography use and relational outcomes (Willoughby et al., 2020). Literature suggests that couple process variables such as communication are highly influential to couple well-being (Baucom & Baucom, 2022).
and specifically, the content of those conversations is especially important (Blumer, 1969). Topical conversations such as communication about sexuality have been shown to have a positive influence on the health of relationships (i.e., Mallory et al., 2019; Park et al., 2022) and it seems likely that talking openly about and discussing limits around pornography could have similar outcomes, but communication about pornography has not yet been considered in this way. The purpose of this study therefore is a) to examine the direct associations between pornography use (male pornography use, joint pornography use and female pornography use) and relational quality (from the perspective of each partner, respectively), b) to explore the direct association between communication about pornography and relationship quality and c) to investigate if communication about pornography may moderate the associations between pornography use and relationship outcomes.

Figure 1 illustrates the full model as proposed. To account for previous findings highlighting the important role of both gender and the distinctive nature of individual compared to shared pornography use (i.e., Huntington et al., 2021; Poulsen et al., 2013; Willoughby & Leonhardt, 2020; Willoughby et al., 2021a), this study will use three pornography use variables: both male and female individual use as well as joint use by the couple. These will be considered in direct association with relationship quality. To further consider the role of gender and in order to capture any actor-partner influences, outcomes will be measured in two variables: male and female relationship quality. Then, in order to accomplish the novel purpose of this study, communication about pornography will be considered. As a single variable comprising both partner’s experiences, communication about pornography will be modeled first in direct association to both relationship quality variables and then finally as a moderator between all direct associations of pornography use variables and relationship quality variables.
As noted, the first purpose of the study was to replicate past work by examining the direct relationships between pornography use (men’s use, women’s use, and joint use) and relationship quality (both from the man’s perspective and the woman’s perspective, respectively). Based on previous work, I would expect individual male pornography will be negatively associated with both male and female relationship quality (e.g., Sun et al., 2016; Willoughby et al., 2021a; Wright et al., 2017), individual female use will be negatively associated with female relationship quality and positively associated with male relationship quality (e.g., Brown et al., 2017; Litsou et al., 2021; Poulsen et al., 2013), and joint pornography use will be positively associated with both male and female relationship quality (e.g., Huntington et al., 2021; Kohut et al., 2021; Willoughby & Leonhardt, 2020).

*H1*: Higher levels of individual male pornography use will have a negative association with both actor (male) and partner (female) relationship quality.

*H2*: Higher levels of individual female pornography use have a negative association with actor (female) relationship quality and have a positive association with partner (male) relationship quality.

*H3*: Higher levels of joint pornography use will be positively associated with both male and female relationship quality.

The second purpose of this study was to explore the direct association between communication about pornography and relationship quality. This construct has not been specifically examined in literature yet and for this study includes talking openly about pornography and discussing limits or rules about pornography. It seems reasonable to hypothesize that the association between communication about pornography use and relational quality would similar patterns as those seen in the established link between sexual
communication and relationship quality, with communication positively associated with relationship quality (Frederick et al., 2017; Thomas et al., 2015; Timm & Keiley, 2011; Wright et al., 2019). Specifically, it was believed that communicating about pornography use would be related positively to relationship quality because communicating about specific topics may allow for the chance to create and negotiate meanings (Blumer, 1969). Therefore, more communication about pornography should have positive associations with relational quality

**H4: Communication about pornography will be positively associated with both male and female relationship quality.**

Finally, the third purpose of the study was to examine the possible moderating role of communication about pornography in the associations between pornography use and relational outcomes. Patterns suggested by a lens of Symbolic Interactionism (Blumer, 1969) and the sexual communication literature (i.e., Mallory et al., 2019; Park et al., 2022), illustrate that different levels of communication around particular topics can have not only a positive direct association with relationship quality but also impact, or moderate, other associations as well. As previously described, because communication provides opportunities for couples to create shared meaning, at higher levels of communication relationship quality should become less dependent on pornography use frequency. In reverse, at lower levels of communication, couples will not have created shared meanings or boundaries for pornography use which would make relationship quality more dependent on the amount of pornography used.

**H5: Communication about pornography will moderate the association between pornography use and relationship quality. For all types of use (individual and joint), the more communication about pornography there is, the less influence pornography use will have on relational quality (both male and female).**
Methods

Procedure

All data collection procedures for this study were approved by the Institutional Review Board at Brigham Young University. Participants for this study were identified and administered an online survey by Qualtrics. The sample was recruited from across the United States based on quotas designed to mirror census data for age, race, education and geographic region. To qualify for the study, participants were required to be over 18 and currently in a relationship. Participants were asked to indicate that their partner would also be available to participate in the study. Participants provided their partner’s email address and following completion of the survey, the partner was sent an email with a link and instructions on completing their survey. All participants for this study completed an informed consent form prior to being asked any questions in the survey. As part of the informed consent, participants were given an overview of the study, explained their rights as a research participant and assured of the confidentiality of their data including that their partner would not have any access to their responses. Following completion of the survey, participants were compensated directly by Qualtrics, at the standard rates they utilize for online panels. In order to substantiate data quality, five attention checks were inserted throughout the survey. Examples of these attention check items were “If you are reading this question, please select ‘Somewhat important’” and “If you are reading this question, please move the slider to ‘65’”. Couples where both partners did not pass all five attention checks throughout the survey were removed from the final sample. Following removal due to attention checks there were 843 total couples. In order to allow for consideration of gender in the analysis, 130 couples with same- gender partners were also removed from the data.
Participants

The final sample for this study consisted of 713 couples in a different-gender relationship. Demographic information is shown in Table 1. Racially, the sample was 84% White, 7% Black, 4% Mixed/Other, 3% Asian and 1% each of Hispanic and Native American. The mean age for the sample was 43 years old (SD = 11.89) and had been in their relationships an average of 13 years (SD = 23.3). 54% of the sample were in their first marriage, 22% were cohabiting, 18% were remarried, 5% were dating and 1% were in an open relationship. In terms of education and income, the average gross monthly household income was $4,783 (SD = $2,787) and 77% received some education after high school. 36% had completed a Bachelor’s degree or higher. The largest religious denomination was Protestant Christian (29%) followed by no affiliation (27%) and Roman Catholic (18%). 43% reported never attending religious services, 23% attend once or twice per year, 11% attend several times per year, 9% attend at least monthly, and 14% attend weekly.

Measures

Pornography Use Alone and Jointly with a Partner

Pornography use, both alone and jointly with a partner, was assessed by measuring the frequency of viewing specific types of sexually explicit material as suggested by Busby and colleagues (2020; see also Willoughby & Busby, 2016). Measuring pornography use in this way, by asking about the viewing of specific content items, helps eliminates the risk of participants responding with differing perceptions of what is considered pornography. Participants were given the prompt, “Please indicate how often in the last 12 months you have viewed or used the following sexual content” with the following response categories: “Never (1), Once a month or less (2), 2 or 3 days a month (3), 1 or 2 days a week (4), 3 to 5 days a week (5), every day or
almost every day (6).” Participants were asked to respond to all of the items both for how often they used the content alone and how often they used the content with a partner. The seven specific pieces of content included items such as “An image of a heterosexual couple having sex which shows the man’s penis penetrating the woman”, “A video showing two naked women or men manually stimulating each other” and “A video of a woman or man alone masturbating”. Items measuring use alone had a Cronbach’s alpha of .92 for men and .94 for women, indicating high reliability. Joint use was comprised of all of items drawn from both men and women and had a Cronbach’s alpha of .96.

**Couple Communication about Pornography**

Couple communication about pornography was assessed using a single latent variable made up of six items, three from each partner. These items were combined, rather than separated by gender, in order to focus on the shared couple process around communication. Items were created for the study with responses ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). Items were “We have discussed pornography limits and boundaries in our relationship”, “We have set rules for pornography use in our relationship” and “We talk about pornography openly in our relationship”. Reliability was adequate with Cronbach’s alpha at .83.

**Relationship Quality**

Relationship quality was created as two latent variables, one for each partner. Each latent variable was created with fifteen items, drawing from three measures: relationship satisfaction, relationship stability and sexual satisfaction. The decision to combine these outcomes into one latent variable came from a desire to capture a more holistic sense of the relationship rather than narrowing in on one particular aspect. Previous literature has highlighted the limitations of
focusing outcomes on singular satisfaction scales (e.g., Fowers et al., 2016).\textsuperscript{1} Taken as a whole scale, Cronbach’s alpha for this measure was .92 for men and .93 for women.

**Relationship Satisfaction.** Relationship satisfaction was measured with six items taken from the RELATE assessment (Busby et al., 2001). Participants were asked “In your relationship, how satisfied are you with the following?” and the six items were “the physical intimacy you experience”, “the love you experience”, “how conflicts are resolved”, “the amount of relationship equality you experience”, “the quality of your communication” and “your overall relationship with your partner.” Categories of response ranged from very dissatisfied (1) to very satisfied (5). This scale had good reliability for both men and women with a Cronbach’s alpha of .90 and .92, respectively.

**Relationship Stability.** Relationship stability was also measured with items taken from the RELATE assessment (Busby et al., 2001). Three items were used, “How often have you thought your relationship (or marriage) might be in trouble?”, “How often have you and your partner discussed ending your relationship (or marriage)?”, and “How often have you broken up or separated and then gotten back together?”. Response items ranged from never (1) to very often (5) and were reverse scored for use in this study. For this scale, Cronbach’s alpha was .84 for both men and women, also indicating adequate reliability.

**Sexual Satisfaction.** Sexual satisfaction was measured using six items from the GRISS assessment (Rust & Golombok, 1985). Items included, “Are you dissatisfied with the amount of variety in your sex life with your partner?”, “Do you find the sexual relationship with your partner satisfactory?”, “Do you feel there is a lack of love and affection in your sexual relationship?”, “Are you satisfied with the amount of time you and your partner spend on

\textsuperscript{1} As a test, the model was run with relational outcomes not combined into the latent variable. Results showed largely the same patterns.
foreplay?”, “Do you have sexual intercourse as often as you would like?” and “Do you feel dissatisfied with the amount of time your partner spends on intercourse itself?”. Response choices ranged from never (1) to very often (5). Cronbach’s alpha was .87 for men and .85 for women indicating adequate reliability.

**Controls**

Recent scholarship has admonished caution in the use of control variables in research on pornography. Wright (2021) argued that overcontrol in pornography use literature has the potential of leading to Type II errors and increases the chance of misunderstanding of the roles that particular variables play. In order to account for these issues, this study followed recommendations (Wright, 2021) to test unadjusted models as well as those inclusive of control variables. Models for this study were run first without control variables and then followed up with the controls included. Analyses showed slight differences in coefficients but patterns were consistent between models so only full results are reported in this paper.

Six control variables were chosen for use in models: relationship length, relationship status, race, education level, religiosity and masturbation. Controls were chosen for their relevance to the focal variables of this study. First, relationship length was used as a control to account for potential differences in relationship quality based on couple relationship history. For example, relationship length has been to shown to interact with sexual communication and gender to predict relationship satisfaction (Montesi et al., 2011) and there are declines documented in sexual satisfaction based on relationship duration (Schmiedeberg & Schröder, 2016). Relationship length was assessed with one item asking, “How long have you been in this relationship total?”. Participants responded in months. Second, relationship status was used to account for differences based on whether the couple is married or not (e.g., satisfaction and
stability; Willoughby, 2021). Relationship status was assessed with one item asking, “What best describes your current relationship status?” Participants were given six choices: exclusively dating, cohabiting, first marriage, married but separated, remarried, and open relationship. The variable was coded with one (1) representing those who were married and (0) representing the other categories. Third, race was considered as a control. Racial differences have been noted comparing White participants to those of other races (i.e., Black Americans more likely to view pornography, Perry & Schleifer, 2019; West, 2022). Race was coded with one (1) representing White participants and (0) representing non-White participants. Fourth, education level was also used as a control to account for potential differences since for example, education levels have been associated with relational stability (Torr, 2011; Van Bavel et al., 2018). Participants were asked for their “highest completed level in school.” Response categories ranged from less than high school (1) to advanced degree (JD, PhD, MD, etc.) (7). Fifth, religiosity was included for its relevance to pornography use. Previous literature has identified higher religiosity to be associated with lower pornography use (e.g., Poulsen et al., 2013) and further, that religious persons viewing pornography are likely to experience distress (Grubbs et al., 2019; Leonhardt et al., 2018; Nelson et al., 2010). For religiosity, four items were used to create a latent variable. These items asked participants how often “spirituality is an important part of my life” was true of them, “how often do you pray (commune with a higher power)”, “how important is your religious faith to you?” and “how often do you attend religious services? Cronbach’s alpha was .87 for men and .85 for women indicating adequate reliability. Finally, some scholars have argued that because pornography and masturbation share a great deal of overlap, it is possible that associations with pornography use are instead a reflection of the influence of masturbation (Perry, 2020; Prause, 2019). In order to address this potential confounder, masturbation
frequency was controlled for. Participants were asked, “how frequently do you masturbate?” with responses ranging from never (1) to daily (5).

**Results**

**Preliminary Analysis**

Data were cleaned using StataSE 17 (StataCorp, 2021). Preliminary bivariate correlations were first examined to establish baseline associations between variables. Table 2 summarizes these findings, as well as descriptive statistics. Male pornography use was negatively correlated with both male ($r = -.20, p < .001$) and female relationship quality ($r = -.14, p < .001$). Joint pornography use was positively associated with female relationship quality ($r = 0.11, p = .005$). Female pornography use was associated with neither male or female relationship quality. Finally, couple communication about pornography was positively correlated with both male and female relationship quality (Male: $r = .122, p = .004$; Female: $r = .259, p < .001$).

**SEM Results**

Following bivariate correlations, data was transferred to Mplus Editor 8 (Muthén & Muthén, 1998-2017) and variables were examined via Actor-Partner Structural Equation Modeling. Figure 1 illustrates the full proposed model to be tested. The model was first tested with a measurement model, then with structural pathways and finally with the inclusion of the moderator. Communication about pornography was modeled first as an independent variable in the initial structural model to test its unique association with male and female relationship quality and then as an interaction with each pornography use variable, which were also tested for associations with both male and female relationship quality (see recommendations from Kline, 2015).
An initial measurement model was examined to ensure that all items loaded properly on their associated latent constructs and that there was model fit for the data. Good model fit was determined based on recommendations from several scholars (Hu & Bentler, 1999; Steiger, 2007; Wang & Wang, 2012), which specified that adequately fitting models should have comparative fit index (CFI) > .90, Tucker–Lewis index (TLI) > .90, root mean square error of approximation (RMSEA) ≤ .07, and standardized root mean square residual (SRMR) ≤ .08. Based on these recommendations, the initial measurement model showed good overall fit, Chi Square (3003) = 50296.24, \( p < .001 \); RMSEA = .044 [90% CI = .042, .045]; CFI = .921; TLI = .931; SRMR = .075.

Most items loaded on to their respective latent construct at acceptable levels (loadings > .40). Table 3 shows factor loadings for all latent variables. There were two exceptions to expected variable loadings. For both men and women, one of the items contributing to relationship quality did not load above .40. This item was one from the stability measure asking “How often have you broken up or separated and then gotten back together?”. For men this item loaded at .29 and for women it loaded at .31. The model was tested without these items and it did not significantly alter model fit or results. Since there were no noteworthy changes and because the item in question is part of an established scale (Relationship Stability; Busby et al., 2001), the decision was made to allow the item to remain in the model.

When structural pathways were added, the overall model continued to have good fit, Chi Square (2988) = 49545.26, \( p < .001 \); RMSEA = .043 [90% CI = .042, .044]; CFI = .923; TLI = .916; SRMR = .077. At this step of the analysis, standardized path coefficients showed that male pornography use was significantly negatively associated with male (\( \beta = -.281; p < .001 \)) and female relationship quality (\( \beta = -.279; p < .001 \)). Joint pornography use was positively associated
with female relationship quality ($\beta=.233; p=.002$). Communication about pornography was positively associated with both male ($\beta=.122; p=.006$) and female relationship quality ($\beta=.242; p<.001$). All other paths were not significant. Overall, this model accounted for 8% of the variance in male relationship quality and 13.3% of the variance in female relationship quality.

Communication about pornography use was then modeled as a moderator between pornography use and relationship quality. Standardized path coefficients showed the same patterns as identified in the previous model. Male pornography use was significantly negatively associated with male ($\beta=-.281; p<.001$) and female relationship quality ($\beta=-.282; p<.001$). Joint pornography use was positively associated with female relationship quality ($\beta=.259; p=.002$). Communication about pornography was positively associated with both male ($\beta=.123; p=.012$) and female relationship quality ($\beta=.232; p<.001$). One control variable, female education level, was positively associated with female relationship quality ($\beta=.066; p=.028$). All other paths, including all moderating paths, were not significant, suggesting that communication about pornography did not act as a moderator between pornography use and relational quality. Overall, the full model with moderators accounted for 8.3% of the variance in male relationship quality and 14.2% of the variance in female relationship quality.

**Discussion**

The purpose of this study was to examine the associations between male, female and joint pornography use, communication about pornography and male and female relational quality and to determine whether communication about pornography functioned as a moderator between pornography use and relational quality. Analyses revealed that individual male pornography use was negatively associated with relational quality for both men and women and that joint pornography use was positively associated with relational quality for women. Additionally,
communication about pornography was positively associated with relationship quality for both men and women. However, communication about pornography did not moderate any associations between pornography use and relationship quality. These findings corroborate those in the sexuality literature that highlight the positive association between content specific communication and relationship outcomes (Frederick et al., 2017; Thomas et al., 2015; Timm & Keiley, 2011; Wright et al., 2019) and provide a valuable initial look at communication about pornography in conjunction with pornography use and couple outcomes.

An initial contribution of this study is in the comparison of its findings to previous literature regarding the associations between pornography use and relational quality. Although many studies have established patterns between these two variables (i.e., meta-analysis, Wright et al., 2017) there have also been a number of calls for better measurement and data analysis to ensure that conclusions drawn may be as accurate as possible (Fisher & Kohut, 2020). Scholars have highlighted that research on couples and pornography needs to include dyadic data and joint pornography use (Campbell & Kohut, 2017), utilize improved measurement for pornography use (Busby et al., 2020; Kohut et al., 2020), and to include controls such as masturbation (Perry, 2020; Prause, 2019). This study incorporated all of those suggestions by utilizing a dyadic data set of 713 different gender couples, including joint pornography use in a structural equation model, using a measure for pornography use made up of specific content items and reported results both with and without control variables.

When all of these recommendations were taken, the findings both replicate and diverge from previous results. First, in confirmation of hypothesis one, men’s pornography use was associated with negative relationship quality for both men and women. This aligns with the majority of pornography research (see meta-analysis, Wright et al., 2017). There are a number of
explanations that have been offered over time to explain this finding including theories of internalized sexual scripts (norms about sexuality that individuals internalize through socialization, Simon & Gagnon, 1986; for pornography specific examples: Bridges et al., 2016; Leonhardt et al., 2019), objectification theory (“sexual objectification occurs when a woman's sexual parts or functions are separated out from her person”, Fredrickson & Roberts, 1997, p. 35; for pornography specific example: Tylka & Kroon Van Diest, 2015), and anxiety and distress from pornography use (Grubbs et al., 2019; Leonhardt et al., 2018; Staley & Prause, 2013), each of which could negatively impact relational outcomes. Drawing from the previously described Symbolic Interactionism lens (Blumer, 1969), the cases for sexual scripting and objectification have particular relevance because all three approaches illustrate that meanings are essential to explaining such outcomes. Given that men’s use is consistently linked to negative outcomes, it is clear that the meanings made around it do not contribute positively to relationships. These processes deserve further attention as the current findings, combined with previous data, illustrate that men’s individual pornography use is negatively associated with relationship outcomes.

Parting from hypothesis two, women’s pornography use was not significantly associated with relationship quality, however, in partial confirmation of hypothesis three, joint use was associated with positive relationship quality for women, but not for men. Previous literature has identified positive associations from female pornography use (i.e., Brown et al., 2017; Poulsen et al., 2013; Willoughby et al., 2021a). While each of the aforementioned studies utilized dyadic data and analyses, they did not specifically include or capture joint use. In contrast, in the present study, when joint use was included, the previously identified positive effects seem to appear in joint use rather than female use. This suggests that findings identifying positive associations
when reporting on female porn use, may actually be capturing joint use instead. In the current study the correlation between female use and joint use was 0.81 ($p<.001$) meaning that most women who use pornography independently also engaged in shared use with their partner. Women use shared pornography use as a tool to expand sexual variety, increase communication about sexual issues and to improve sexual intimacy (Litsou et al., 2021). Such purposes for use would suggest that the meanings created around joint pornography use for women are aligned with relationship development and closeness which would naturally lead to positive relational outcomes for them. While there are a number of aspects of gender that would impact differences between how men and women experience pornography (i.e. paradigm and value differences Willoughby et al., 2016; content viewed, French & Hamilton, 2018; sexual scripting, Simon & Gagnon, 1986; Zitzman & Butler, 2009), these findings also seem reflective of Kohut and colleagues’ (2018; 2021) assertion that patterns of similar and shared use differentiate positive outcomes more so than gender.

A second and perhaps the most important contribution of this study is the specific examination of communication about pornography. In line with hypothesis four, analyses showed that couple communication about pornography (in this study, talking openly about pornography and discussing limits and rules for the use of pornography) was positively associated with relationship quality for both men and women. This link is a valuable first step in understanding that a couple’s discussions around pornography may impact their relationship quality. Interpreting these findings is somewhat limited due to the cross-sectional nature of the data. Couples who have conversations about pornography are likely to have shared expectations, boundaries and meaning around the topic (Blumer, 1969) which all contribute to a more positive relational environment. However, while discussing pornography may certainly improve
relationship quality for some couples, it is also possible that more satisfied couples are more likely to communicate in the first place (Lavner et al., 2016). But regardless of direction, it is clear that communication about pornography is associated with couple well-being and will be valuable to continue examining in future literature. More thorough research to understand this role of communication will improve the recommendations that can be offered to couples by researchers, clinicians and educators.

One noteworthy finding comes in the comparison of the association between communication about pornography and relationship quality for men and women. While the overall association was positive for both, the standardized results showed a larger effect for women (β=.232; p <.001) than for men (β=.123; p =.012). This suggests, in line with literature around gender and communication (Gamble & Gamble, 2020; Palczewski et al., 2017), that the impact of communication in a couple may be different for opposite gendered partners. Broadly, this is likely due to differences in experiences and interpretations from each individual and highlights the importance of creating shared meaning through conversations as a couple (Blumer, 1969). Further, because women are often socialized to be more relationally or communally oriented than men (Eagley, 2009; Emmers-Sommer et al., 2013) there is likely an especially high value placed on creating shared meaning. Essentially, women may benefit, even more so than men, from intentional interactions around the topic of pornography.

The third contribution of this study is in showing that communication about pornography does not act as a moderator in the associations between pornography use and relational quality. While this null finding did not confirm hypothesis five, it should not suggest that communication about pornography is not an important variable for scholars to continue to explore. One possibility for why there is a lack of moderation present may be that the measurement used did
not adequately capture the nature of communication about pornography. The measure asked only about the presence of rules, limits and discussions about pornography content but did not pursue any exploration of the quality of that communication. It seems likely that a couple who sets rules about pornography in mutual agreement, through discussion and compromise would have very different outcomes than one whose rules came out through fights or arguments about perceived infidelity (e.g., Ashton et al., 2018; Vogeler et al., 2018; Zitzman & Butler, 2009). It may be that communication about pornography cannot be effectively separated into content and quality but instead, the two aspects should be studied in tandem. In this case, it would be most appropriate to model communication about pornography in a different way, such as a mediator between pornography use and relational outcomes or even as an antecedent to pornography use. For example, it seems possible that communication about pornography could influence pornography use frequency through the setting of rules for its use. A couple who establishes a clear and agreed upon limit for their use of pornography might have a reduced frequency of pornography use and could then theoretically have higher relationship quality. Future studies utilizing longitudinal data will be best suited to build on these initial findings and explore mediation type models or other possibilities for how communication about pornography influences relationships.

It is also possible that communication about pornography is only be impactful to the extent that both partners are aware of each other’s pornography use. Initial findings illustrate that unknown use (Willoughby & Leonhardt, 2020) has been associated with less sexual satisfaction. It may be that it does not matter whether a couple has discussed pornography use if their behavior is then incongruent with agreed upon rules and limits. It would be important to compare how communication about pornography is related to reports about partner knowledge of use. Another possible explanation for these findings may be that communication about pornography,
while positively associated to relationship quality overall, simply does not compensate for the influence pornography has on the relationship itself. For any given couple communication would still be important, but on an overall level, the associations between pornography use and relationship quality may be too robust to be impacted by only the presence or absence of content communication.

Implications

There are several valuable implications that are suggested by this study. First, the association between communication about pornography and relationship quality suggests the value in encouraging couples to specifically discuss and address expectations for pornography use within their relationship (Olmstead et al., 2013). Premarital education programs (Fincham et al., 2011; Markman et al., 2022) often encourage discussions of satisfaction and intimacy and could benefit couples by including and encouraging pornography as a topic to be addressed. In therapeutic settings, counselors can use this information to guide clients toward interactions in which the couple discusses their values around pornography (Tworeig & Crosby, 2010) and uses that to create shared meaning about the topic (Blumer, 1969). The clinician could then assist the couple in negotiating and setting boundaries around anticipated pornography use (Ford et al., 2012). While the findings in this study indicate that communication about pornography does not negate impacts from use, there is still likely a benefit to conversations between partners around the topic and educators and clinicians can offer support in that process.

Limitations and Future Directions

Despite these contributions to the scholarship around couples and pornography and the strong research design addressing previous issues, the present study is not without limitation. There are several key areas that will benefit from attention in future research. First, as discussed
previously, the data analyzed in this study was cross-sectional so findings cannot be viewed as
causal. There has been some initial longitudinal work considering pornography use and
relationship quality (i.e., Huntington et al., 2021) but the role of communication about
pornography will need to be similarly evaluated. For example, it seems likely that there is
potential of bidirectional influence between relationship quality and communication as
longitudinal pathways have been identified in both directions (Lavner et al., 2016). Future
research will ideally look at this association longitudinally, in order to establish directionality.

A second limitation in this study is that while the sample was recruited from across the
country, it is not truly representative of all couples in the United States. Participants were
recruited using several quotas (age, race, education and geographic region) in the selection
process but the final sample did not match the categories from census data (e.g., original quotas
would have led to a sample higher in racial diversity). The results therefore, should not be
overgeneralized. Future studies will need better sampling in order to present more representative
findings. Further, this study only includes those couples who are comprised of different gender
partners. All same-gender couples were removed in order to examine the role of gender in the
analyses. While many relationship principles, such as the value of communication, are the same
regardless of gender (Diamond & Dehlin, 2022) and can be extrapolated to such couples, future
research should look specifically at the unique experiences of sexually and gender diverse
couples.

A final limitation for this study was in the measure used for communication about
pornography. It would be valuable to consider how communication about pornography fits
within the broader construct of sexual communication (i.e., Catania et al., 1988). In this study,
sexual communication literature was used to extrapolate expected results for communication
about pornography but their association has not been empirically examined to illustrate to what extent the two have shared variance. Comparing the influence of sexual communication and pornography specific communication could potentially offer additional and unique insights.

In sum, this study offered an important look at the associations between male, female and joint pornography use, communication about pornography and relationship quality in different-gender couples in the United States. As expected, there is a positive link between discussing pornography and relationship quality however, communication does not moderate the association between pornography and relationship quality and there is still a great deal to explore in this area. Exactly what couples discuss and establish as limits around pornography, if couples know about each other’s pornography use when they make such agreements, and the quality of the communication processes used will all be valuable contributions to future scholarship.
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Table 1

*Sample Demographic Information*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n=713 couples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age</td>
<td>43 years (SD 11.89)</td>
</tr>
<tr>
<td>Average Relationship Length</td>
<td>13 years (SD = 23.3)</td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
</tr>
<tr>
<td>First Marriage</td>
<td>54%</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>22%</td>
</tr>
<tr>
<td>Remarried</td>
<td>18%</td>
</tr>
<tr>
<td>Dating</td>
<td>5%</td>
</tr>
<tr>
<td>Open Relationship</td>
<td>1%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>84%</td>
</tr>
<tr>
<td>Black</td>
<td>7%</td>
</tr>
<tr>
<td>Mixed/Other</td>
<td>4%</td>
</tr>
<tr>
<td>Asian</td>
<td>3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1%</td>
</tr>
<tr>
<td>Native American</td>
<td>1%</td>
</tr>
<tr>
<td>Average Gross Monthly Income</td>
<td>$4,783 (SD = $2,787)</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>2%</td>
</tr>
<tr>
<td>High School</td>
<td>22%</td>
</tr>
<tr>
<td>Some College</td>
<td>25%</td>
</tr>
<tr>
<td>Associate’s</td>
<td>14%</td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>24%</td>
</tr>
<tr>
<td>Master’s</td>
<td>10%</td>
</tr>
<tr>
<td>Advanced Degree (JD, PhD, MD, etc)</td>
<td>3%</td>
</tr>
<tr>
<td>Religious Attendance</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>43%</td>
</tr>
<tr>
<td>1-2 Per Year</td>
<td>23%</td>
</tr>
<tr>
<td>Several Times Per Year</td>
<td>11%</td>
</tr>
<tr>
<td>At Least Monthly</td>
<td>9%</td>
</tr>
<tr>
<td>Weekly</td>
<td>14%</td>
</tr>
</tbody>
</table>
Table 2

Bivariate Correlations and Descriptive Statistics for Variables/Scales of Interest

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Male Individual Pornography Use</td>
<td>.</td>
<td>.</td>
<td>.</td>
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<tr>
<td>2. Joint Pornography Use</td>
<td>.48***</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
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<tr>
<td>3. Female Ind. Pornography Use</td>
<td>.47***</td>
<td>.81***</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
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<tr>
<td>4. Couple Communication about Porn</td>
<td>.12**</td>
<td>.29***</td>
<td>.21***</td>
<td>.</td>
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<td>.</td>
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<tr>
<td>5. Male Relationship Quality</td>
<td>-.20***</td>
<td>.03</td>
<td>.00</td>
<td>.12**</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
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<tr>
<td>6. Female Relationship Quality</td>
<td>-.14***</td>
<td>.11**</td>
<td>.02</td>
<td>.26***</td>
<td>.69***</td>
<td>.</td>
<td>.</td>
<td>.</td>
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<tr>
<td>7. Relationship Length</td>
<td>-.09*</td>
<td>-.07</td>
<td>-.12**</td>
<td>-.00</td>
<td>-.04</td>
<td>.02</td>
<td>.</td>
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<tr>
<td>8. Male Education Level</td>
<td>.03</td>
<td>.06</td>
<td>.03</td>
<td>.07</td>
<td>.05</td>
<td>.17***</td>
<td>.04</td>
<td>.</td>
<td>.</td>
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</tr>
<tr>
<td>9. Female Education Level</td>
<td>.06</td>
<td>.06</td>
<td>.05</td>
<td>.03</td>
<td>.04</td>
<td>.11**</td>
<td>.05</td>
<td>.52***</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>10. Male Religiosity</td>
<td>-.04</td>
<td>.07</td>
<td>.01</td>
<td>.15***</td>
<td>.08</td>
<td>.15***</td>
<td>.04</td>
<td>.17***</td>
<td>.10**</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>11. Female Religiosity</td>
<td>-.05</td>
<td>.06</td>
<td>-.02</td>
<td>.14**</td>
<td>.07</td>
<td>.10*</td>
<td>.06</td>
<td>.10**</td>
<td>.09*</td>
<td>.71***</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>12. Male Masturbation</td>
<td>.58***</td>
<td>.22***</td>
<td>.25***</td>
<td>.05</td>
<td>-.11**</td>
<td>-.05</td>
<td>-.07</td>
<td>.04</td>
<td>.01</td>
<td>-.07</td>
<td>-.08*</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>13. Female Masturbation</td>
<td>.31***</td>
<td>.34***</td>
<td>.51***</td>
<td>.08</td>
<td>.02</td>
<td>-.08*</td>
<td>-.13**</td>
<td>-.05</td>
<td>-.02</td>
<td>-.07</td>
<td>-.10*</td>
<td>.36***</td>
<td>.</td>
</tr>
<tr>
<td>Mean</td>
<td>2.31</td>
<td>1.56</td>
<td>1.65</td>
<td>3.06</td>
<td>3.87</td>
<td>3.75</td>
<td>156.9</td>
<td>3.67</td>
<td>3.91</td>
<td>2.60</td>
<td>3.01</td>
<td>3.38</td>
<td>2.87</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.30</td>
<td>.87</td>
<td>.92</td>
<td>1.33</td>
<td>.75</td>
<td>.85</td>
<td>283.3</td>
<td>1.56</td>
<td>1.40</td>
<td>1.29</td>
<td>1.23</td>
<td>1.54</td>
<td>1.45</td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td>.94</td>
<td>.96</td>
<td>.93</td>
<td>.83</td>
<td>.92</td>
<td>.93</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001
Table 3

*Standardized Factor Loadings for all Latent Variables*

<table>
<thead>
<tr>
<th>Individual Pornography Use</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>An image of a woman alone posing in a suggestive way without any clothes on.</td>
<td>0.80</td>
<td>0.79</td>
</tr>
<tr>
<td>A short video depicting a couple having consensual sex. The women’s breasts are shown but neither partner’s genitalia is shown.</td>
<td>0.79</td>
<td>0.80</td>
</tr>
<tr>
<td>A picture of a couple having sex, the women’s breasts are shown but neither partner’s genitalia are shown.</td>
<td>0.77</td>
<td>0.80</td>
</tr>
<tr>
<td>An image of a heterosexual couple having sex which shows the man’s penis penetrating the woman.</td>
<td>0.90</td>
<td>0.82</td>
</tr>
<tr>
<td>A video showing two naked women or men manually stimulating each other.</td>
<td>0.84</td>
<td>0.81</td>
</tr>
<tr>
<td>A video of a woman or man alone masturbating.</td>
<td>0.82</td>
<td>0.85</td>
</tr>
<tr>
<td>A video that graphically depicts a three-way sexual encounter.</td>
<td>0.83</td>
<td>0.79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Joint Pornography Use</th>
<th>From Men</th>
<th>From Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>An image of a woman alone posing in a suggestive way without any clothes on.</td>
<td>0.61</td>
<td>0.81</td>
</tr>
<tr>
<td>A short video depicting a couple having consensual sex. The women’s breasts are shown but neither partner’s genitalia is shown.</td>
<td>0.63</td>
<td>0.79</td>
</tr>
<tr>
<td>A picture of a couple having sex, the women’s breasts are shown but neither partner’s genitalia are shown.</td>
<td>0.61</td>
<td>0.78</td>
</tr>
<tr>
<td>An image of a heterosexual couple having sex which shows the man’s penis penetrating the woman.</td>
<td>0.71</td>
<td>0.89</td>
</tr>
<tr>
<td>A video showing two naked women or men manually stimulating each other.</td>
<td>0.70</td>
<td>0.92</td>
</tr>
<tr>
<td>A video of a woman or man alone masturbating.</td>
<td>0.68</td>
<td>0.91</td>
</tr>
<tr>
<td>A video that graphically depicts a three-way sexual encounter.</td>
<td>0.67</td>
<td>0.88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Couple Communication About Pornography Use</th>
<th>From Men</th>
<th>From Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have discussed pornography limits and boundaries in our relationship</td>
<td>0.61</td>
<td>0.87</td>
</tr>
<tr>
<td>We have set rules for pornography use in our relationship</td>
<td>0.55</td>
<td>0.81</td>
</tr>
<tr>
<td>We talk about pornography openly in our relationship.</td>
<td>0.40</td>
<td>0.46</td>
</tr>
</tbody>
</table>
Table 3 continued

*Standardized Factor Loadings for all Latent Variables*

<table>
<thead>
<tr>
<th>Individual Relationship Quality</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you dissatisfied with the amount of variety in your sex life with your partner?</td>
<td>0.48</td>
<td>0.48</td>
</tr>
<tr>
<td>Do you find the sexual relationship with your partner satisfactory?</td>
<td>0.61</td>
<td>0.57</td>
</tr>
<tr>
<td>Do you feel there is a lack of love and affection in your sexual relationship?</td>
<td>0.64</td>
<td>0.69</td>
</tr>
<tr>
<td>Are you satisfied with the amount of time you and your partner spend on foreplay?</td>
<td>0.56</td>
<td>0.58</td>
</tr>
<tr>
<td>Do you have sexual intercourse as often as you would like?</td>
<td>0.48</td>
<td>0.54</td>
</tr>
<tr>
<td>Do you feel dissatisfied with the amount of time your partner spends on intercourse itself?</td>
<td>0.43</td>
<td>0.46</td>
</tr>
<tr>
<td>In your relationship, how satisfied are you with the following?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The physical intimacy you experience.</td>
<td>0.73</td>
<td>0.75</td>
</tr>
<tr>
<td>The love you experience.</td>
<td>0.83</td>
<td>0.87</td>
</tr>
<tr>
<td>How conflicts are resolved.</td>
<td>0.73</td>
<td>0.77</td>
</tr>
<tr>
<td>The amount of relationship equality you experience.</td>
<td>0.77</td>
<td>0.80</td>
</tr>
<tr>
<td>The quality of your communication.</td>
<td>0.73</td>
<td>0.81</td>
</tr>
<tr>
<td>Your overall relationship with your partner.</td>
<td>0.87</td>
<td>0.90</td>
</tr>
<tr>
<td>How often have you thought your relationship (or marriage) might be in trouble?</td>
<td>0.68</td>
<td>0.71</td>
</tr>
<tr>
<td>How often have you and your partner discussed ending your relationship (or marriage)?</td>
<td>0.55</td>
<td>0.56</td>
</tr>
<tr>
<td>How often have you broken up or separated and then gotten back together?</td>
<td>0.29</td>
<td>0.31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religiosity</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality is an important part of my life.</td>
<td>0.90</td>
<td>0.86</td>
</tr>
<tr>
<td>How often do you pray (commune with a higher power)?</td>
<td>0.88</td>
<td>0.86</td>
</tr>
<tr>
<td>How important is your religious faith to you?</td>
<td>0.93</td>
<td>0.92</td>
</tr>
<tr>
<td>How often do you attend religious services?</td>
<td>0.71</td>
<td>0.66</td>
</tr>
</tbody>
</table>
Figure 1

Proposed Actor-Partner Structural Equation Model Illustrating Associations between Pornography Use and Relationship Quality, Moderated by Communication About Pornography.
Figure 2

Actor-Partner Structural Equation Model Results Depicting Standardized Associations between Pornography Use and Relationship Quality, Moderated by Communication About Pornography.

Note: Model Fit Statistics: Chi Square(2988) = 49545.26, p < .001; RMSEA = .043 [90% CI = .042, .044]; CFI = .922; TLI = .916; SRMR = .077. Model controlled for relationship length, relationship status, race of both partners, education level for both partners, religiosity of both partners and masturbation frequency for both partners. * p < 0.05, ** p < 0.01, *** p < 0.001