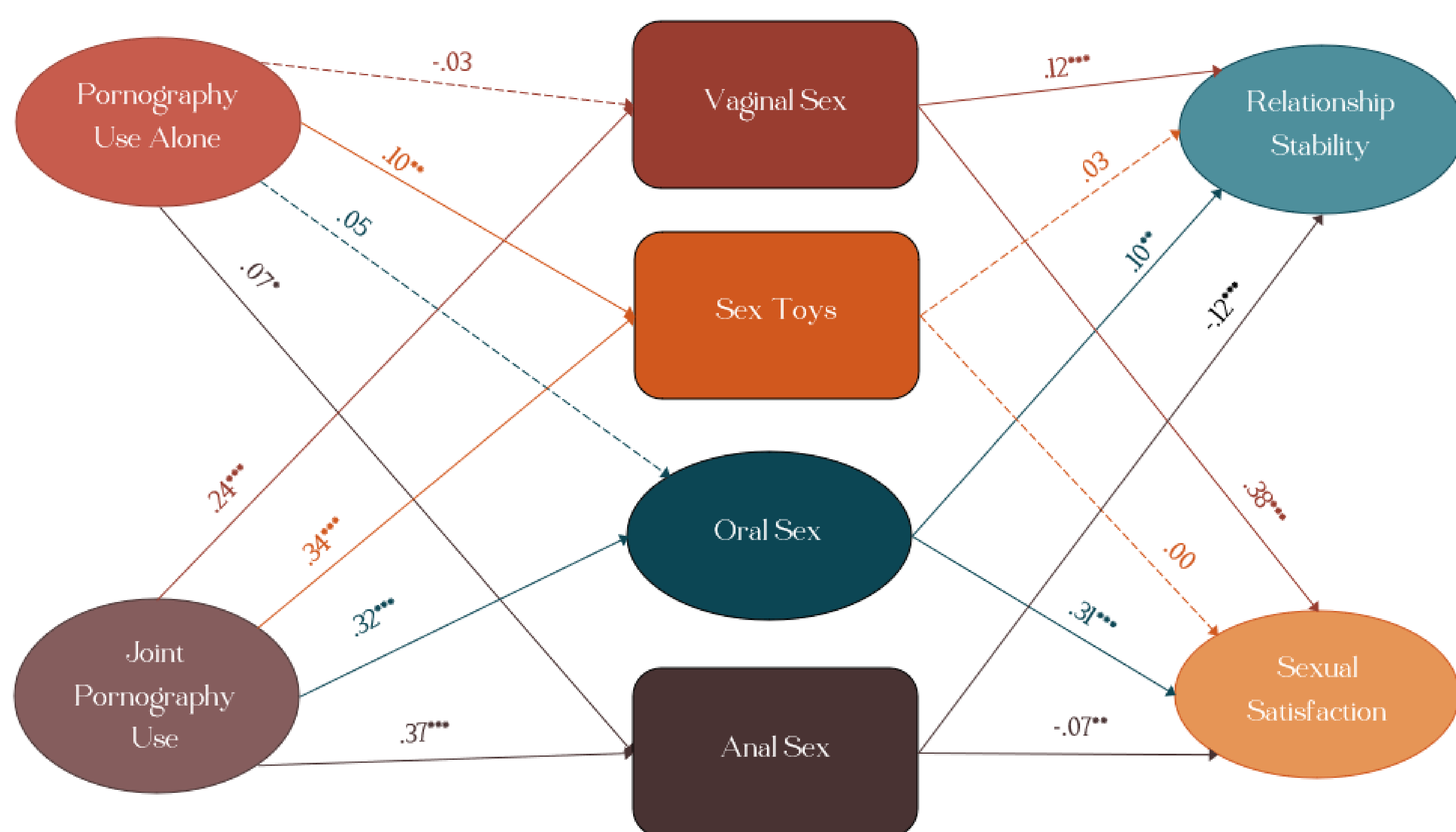


Introduction and Review of Literature

Examining patterns of pornography use among couples (use alone vs. joint use) has been of interest to scholars (Bridges & Morokoff, 2011; Grov et al., 2011; Rodrigues, 2021; Willoughby & Leonhardt, 2018; Yucel & Gassanov, 2010). Generally, joint pornography use tended to have positive or null associations, whereas pornography use alone tended to have negative associations with relationship outcomes. In addition, pornography use is related to the frequency of sexual experiences and sexual behaviors. Research shows that pornography use is associated with increases in both casual (Vandenbosch & Van Oosten, 2018) and extramarital sex (Wright & Randall, 2012). Pornography use is also associated with specific sexual behaviors such as oral sex, anal sex, and even submissive sexual behaviors (Herbenick et al., 2020; Mahapatra & Saggurti).

Although pornography use has been linked to both relationship outcomes and sexual behaviors in previous research, no study has explored mediated associations between all three simultaneously or explored how individual and joint pornography use may have different impacts on sexual behaviors in committed relationships. The purpose of this study is to further understand how pornography use is associated with relationship outcomes through the mediating effects of sexual behaviors.

Figure 1
Model predicting relationship outcomes



* $p < .05$; ** $p < .01$; *** $p < .001$

Results

Figure 1 shows the model in the current study, which had adequate overall fit ($\chi^2(424) = 4868.036$, $p < .001$; RMSEA = .065 [90% CI = .063, .066]; CFI = .924; TLI = .907; SRMR = .087) and accounted for 30% of the variance in relationship stability and 52% of the variance in sexual satisfaction. Pornography use alone was only significantly positively related to the frequency of sex toy use ($\beta = .10$, $p = .003$) and anal sex ($\beta = .07$, $p = .043$), but not with the other sexual behaviors. Joint pornography, use on the other hand, was significantly positively associated with all the sexual behaviors including vaginal sex ($\beta = .24$, $p < .001$), sex toys ($\beta = .34$, $p < .001$), oral sex ($\beta = .32$, $p < .001$), and anal sex ($\beta = .37$, $p < .001$). Vaginal sex was positively associated with both relationship stability ($\beta = .12$, $p < .001$) and sexual satisfaction ($\beta = .38$, $p < .001$), as was oral sex ($\beta = .10$, $p = .003$; $\beta = .31$, $p < .001$; relationship stability and sexual satisfaction, respectively). Anal sex was negatively associated with both relationship stability ($\beta = -.12$, $p < .001$) and sexual satisfaction ($\beta = -.07$, $p = .001$).

Table 1 shows the standardized indirect effects on sexual satisfaction. The total indirect effect of pornography use alone on sexual satisfaction was not significant ($p = .880$), but the effect of joint pornography use was ($\beta = .160$, $p < .001$). While total indirect effect and the specific indirect effects through vaginal sex ($\beta = .089$, $p < .001$) and oral sex ($\beta = .099$, $p < .001$) were positive, the pathway through anal sex was negative ($\beta = -.026$, $p = .002$). Table 2 reveals the same pattern of the indirect effects on relationship stability. The total effect of pornography use alone on relationship stability was not significant ($p = .550$). For joint pornography use however, the sum was significantly positive ($\beta = .026$, $p = .024$). Similar to the indirect effects on sexual satisfaction, vaginal ($\beta = .029$, $p < .001$) and oral sex ($\beta = .032$, $p = .005$) were positive while anal sex was negative ($\beta = -.044$, $p < .001$).

Method

Sample. The final sample consisted of 2556 individuals in a committed, romantic relationship and identified as mostly or completely heterosexual.

Pornography use was measured using the short form of the Pornography Usage Measure was utilized (Busby et al., 2020) for this study. Participants were given 7 specific content questions and responded with the frequency of how often they use it. The possible response categories ranged from 1 ("Never") to 6 ("Every day or almost every day").

Sexual behaviors were measured by asking participants: "How often do you engage in the following sexual behaviors with your partner?". Possible responses ranged from 0 ("Never") to 7 ("More than once a day").

Relationship stability was measured using items from the RELATE survey (Busby et al., 2001), which were adapted from previous work (Booth et al., 1985). Participants responded on a scale from 1 ("Never") to 5 ("Very Often").

Sexual satisfaction was measured with the Golombok-Rust Inventory of Sexual Satisfaction (Rust & Golombok, 1985).

Participants were asked questions about their sexual relationship, with possible responses on a scale from 1 ("Never") to 5 ("Very Often").

Control variables included relationship length, religiosity, life satisfaction, and education.

Table 1
Indirect effects on sexual satisfaction

	Sum of indirect β	p-value	Vaginal β	p-value	Toys β	p-value	Oral β	p-value	Anal β	p-value
Pornography Use Alone	-.003 (.023)	.880	-.012 (.014)	.376	.000 (.002)	.846	.014 (.012)	.239	-.005 (.003)	.080
Joint Pornography Use	.160 (.022)	.000	.089 (.014)	.000	-.001 (.007)	.846	.099 (.015)	.000	-.026 (.008)	.002

Note. Standard errors in parentheses.

Table 2
Indirect effects on relationship stability

	Sum of indirect β	p-value	Vaginal β	p-value	Toys β	p-value	Oral β	p-value	Anal β	p-value
Pornography Use Alone	-.005 (.008)	.550	-.004 (.005)	.550	.003 (.003)	.286	.005 (.004)	.271	-.008 (.004)	.059
Joint Pornography Use	.026 (.012)	.024	.029 (.008)	.000	.009 (.008)	.252	.032 (.011)	.005	-.044 (.009)	.000

Note. Standard errors in parentheses.

Discussion and Conclusion

The purpose of this study was to uniquely show how sexual behaviors act as a mediator between pornography use and relationship outcomes. Joint pornography use has more consistent relationships to behavior frequency than pornography use alone, which is in line with past research (Bridges & Morokoff, 2011; Grov et al., 2011; Yucel & Gassanov, 2010). Using pornography with a partner is a markedly different behavior than using pornography alone in a relationship. There seems to be a compounding effect of pornography use when it is used with a partner rather than alone. It is possible that sexual scripts are more salient and easily enacted when they are learned with a partner, which is what other scholars have found as well (Grov et al., 2011; Olmstead et al., 2013).

All the sexual behaviors except for use of sex toys was significantly associated with both relationship stability and sexual satisfaction. Both vaginal sex and oral sex had positive relationships with both outcomes but had stronger relationships with sexual satisfaction. Anal sex frequency, on the other hand, had a negative association with both outcomes, but a stronger association with relationship stability. This finding lends support to a growing body of research that the experience of anal sex in heterosexual relationships is frequently a negative experience that may undermine relationship well-being, especially for women (Faus & Gonzalez, 2014; Faustino & Gavey, 2021; McBride, 2019). Sexual behaviors did mediate the relationship between pornography use and relationship outcomes, but only through specific pathways. Vaginal sex and oral sex were significant positive mediators of the relationships between joint pornography use and both relationship stability and sexual satisfaction, but the pattern flips for anal sex in that it is a negative mediator of the same relationships.