

NCOSE Research Institute Research Spotlight

Study:

[Fiona Vera-Gray et al., “Sexual Violence as a Sexual Script in Mainstream Online Pornography,” *The British Journal of Criminology* \(2021\): 1-18, doi:10.1093/bjc/azab035.](#)

Abstract:

This article examines the ways in which mainstream pornography positions sexual violence as a normative sexual script by analysing the video titles found on the landing pages of the three most popular pornography websites in the United Kingdom. The study draws on the largest research sample of online pornographic content to date and is unique in its focus on the content immediately advertised to a new user. We found that one in eight titles shown to first-time users on the first page of mainstream porn sites describe sexual activity that constitutes sexual violence. Our findings raise serious questions about the extent of criminal material easily and freely available on mainstream pornography websites and the efficacy of current regulatory mechanisms.

Study Highlights:

This study used sexual script theory to examine pornography and sexual violence, using the World Health Organization’s definition of sexual violence, which includes coercive and criminal acts not necessarily involving physical aggression.¹ The study explored three research questions: 1) is pornography that describes criminal acts of sexual violence being advertised to a first-time user of mainstream online pornography; 2) how common is the script of sexual violence in the content advertised to a first-time user of mainstream online pornography; and 3) how is the boundary between consensual and criminal sexual practices communicated to a first-time user of mainstream online pornography.

Researchers analyzed 131,738 pornography titles² appearing on **the landing pages** of the three most popular online pornography websites in the United Kingdom (**Pornhub, XVideos, and XHamster**) over a period of 6 months during 2017-2018. The titles were analyzed for keywords indicating the following four broad categories of sexual violence: sexual activity between family members, aggression and assault, image-based sexual abuse, and coercive and exploitative sexual activity.

The methodology used – a web-crawler which took a snapshot of the landing pages every hour – allowed for the collection of content **on the landing pages which was not adjusted to repeat user tastes**. Thus, the data collected reflects what the operators of these websites chose to advertise on their home pages.

It is important to note that researchers excluded all materials identified as BDSM. As they explained, this means the actual number of sexually violent pornography titles on the landing pages of these websites is undercounted.

The study reported:

- **1 in every 8 (12%) titles described activities that constitute sexual violence.** By category, the most common form of sexual violence described was sexual activity between family members, followed by physical aggression and sexual assault, image-based sexual abuse, and coercive and exploitative sexual activity, respectively.
- **The word ‘teen’ was the most frequently occurring word in both the entire data set (7.7%) and specifically the titles that described sexual violence (8.5%).** ‘Teen’ was a more commonly used term to describe pornography than any descriptions of sexual acts or body parts. ‘Teen’ was also used more frequently in sexually violent content. This finding is in line with prior research which reported that the majority of pornography portraying exploitation occurred in ‘teen’ pornography versus ‘MILF.’³
- **Incest was the most common category of sexual violence found: 6.4% (n=8,421) of titles used a family relationship descriptor.** Of those, 5,785 titles (4.4%) explicitly described sexual activity between family members. Step relationships were less commonly portrayed than blood relationships, with most of the titles describing incest referring to immediate family members (mother, father, sister, son, and daughter). Mothers were the family member most often portrayed as engaging in sex with other family members, particularly their sons.
- **The second most common category was physical aggression and sexual assault.** There were 5,389 titles (4.1%) that described aggression and assault, although this is probably a low estimate because, as noted earlier, BDSM titles were excluded. Some of the keywords explored in this category included ‘force,’ ‘grope,’ ‘molest,’ ‘kick,’ ‘punch,’ ‘slap,’ ‘brutal,’ ‘throat/skullf***ed,’ and ‘pound.’ **The word ‘teen’ was found in 11.8% of the titles in this category** and there were 1,017 titles (18.9%) referring to anal sex. This suggests a link between physically and sexually violent scripts in mainstream pornography and descriptions of teens,⁴ as well as anal sex. In addition, **the word ‘black’ was in the top twenty most frequent words in this category** but not others, appearing in 4% of the titles, thus “suggesting another connection between scripts of physical aggression and sexual assault and racialized descriptions of black performers” (p. 9).
- **Image-based sexual abuse was the third most common category of sexual violence being depicted in 2.2% of titles.** This category included so-called revenge porn, upskirting, and spy cam video titles. The predominant focus in this category was on voyeurism, with ‘voyeur’ and ‘hidden’ being the most common words identified.
- **Sexually coercive and exploitive content was described in 1.7% of titles.** The three most common words in this category all emphasized youth: ‘schoolgirl’ (17.6%), ‘girl’ (9.6%), and ‘teen’ (8.8%).

Commentary from the NCOSE Research Institute:

This study performed the largest analysis of online pornographic titles to date. It provides valuable evidence of the mainstreaming of sexual violence by top pornography websites because the study’s methodology utilized pornography titles that were advertised on the landing pages of

the top three pornography websites in the U.K. to first-time users, and thus provides insight into the actions of the pornography sites themselves. Analysis revealed that the top three pornography websites in the U.K. (Pornhub, XVideos, and XHamster) market pornography that includes sexual violence from the very outset of the user experience – no click required.

This study is also unique for its emphasis on sexual violence (as defined by the World Health Organization) in pornography titles, not only physical violence (e.g., slapping, hitting, hair pulling, choking, etc.) as in other pornography content analyses.⁵ It is our view that the omission of categories of sexual violence (e.g., incest, coercion, non-consensually distributed material, etc.) in other pornography website content analyses results in under representation of the abusive sexual scripts in mainstream pornography.⁶

As noted above, this analysis revealed that 1 in every 8 (12%) titles described activities that constitute sexual violence: the most common form of sexual violence described was sexual activity between family members, followed by physical aggression and sexual assault, image-based sexual abuse, and coercive and exploitative sexual activity. Importantly, this is a low estimate of sexual violence in mainstream pornography because the study excluded BDSM content and did not analyze content beyond the landing pages of the websites reviewed.

The common use of the word ‘teen’ identified in the study suggests that these sites are likely hosting child sexual abuse material (CSAM). In fact, we know that they have hosted CSAM. See [Rose Kalemba and Pornhub: How MindGeek Exploited the Sexual Assault of a 14-Year-Old](#), as well as [The Children of Pornhub](#) and [Why Do We Let Corporations Profit from Rape Videos?](#) for illustrations of this point. Even if some of these videos do not actually depict minors, they nevertheless promote a sexual script premised on adult sex with minors (i.e., child sexual abuse).

Previous research has revealed that performers in ‘teen’ themed videos were portrayed as having less power and control than older performers.⁷ Shor (2018) reported that 90% of ‘teenage’ females in videos containing visible aggression displayed pleasure, compared to 54% when visible aggression was not present.⁸ Teenage performers were also significantly more likely to display pleasure in videos that included spanking, forced vaginal or anal penetration, and forced gagging than in videos without these acts, compared to ‘adult’ performers.⁹ As Shor astutely noted, “pornography featuring teenage performers enjoying (aggressive) sex with older men may also be problematic because of its potential contribution to notions of minors as legitimate targets for sexual encounters and sexual aggression and, consequently, to the abuse of teenagers and children.”¹⁰

The heavy reliance of the pornography industry on teen-themed pornography as identified in the Vera-Gray et al. study signals the mass appeal and profitability of pornography that either suggests or provides actual depictions of sex with minors. It can no longer be argued that Surface Web pornography sites are ‘safe’ and free from illegal content and abuse. In fact, much of their material may be criminally obscene and depict evidence of real sexual assaults and non-consensual distribution. In this way, the Surface Web is becoming, or has become, the new Dark Web.

It is also important to recognize that children who end up on these sites are being exposed and socialized to sexual violence right from the start. Adults who have been viewing/addicted to pornography for years have escalated to sexually violent content, but children using these sites are being thrown into the deep end. This has serious implications, since other research has found that individuals who engaged in adult pornography use at a younger age were more likely to transition to deviant (i.e., child and animal pornography) use, demonstrating desensitization to adult hardcore pornography over time.¹¹

Vera-Gray et al. also noted that instead of clearly labelling content as sexual violence, most of the descriptions of serious sexual offences were portrayed as ordinary or even humorous. This has significant implications for society's understanding of the difference between sexual pleasure and sexual harm; the sexual scripts shown in pornography warp social understandings of the boundary between sex and sexual violence. This is especially concerning given the association between pornography use and sexual offending. A national longitudinal study of sexual offenses (e.g., sexual harassment, sexual assault, coercive sex, and rape) among youth aged 10–21 years found that the average age of first perpetration was between 15 and 16 years old, and after controlling for potentially influential characteristics, current exposure to violent pornography was strongly associated with the emergence of sexual violence perpetration.¹²

Vera-Gray et al. also strongly challenged the notion that the pornography industry is capable of self-regulation. As the authors explained, there is an obvious gap between what pornography companies say they prohibit and what is actually available on their sites. The terms of pornography sites claim that they prohibit depictions of incest, implied acts of sexual violence, and any content that promotes or encourages criminal behavior. This is not limited to “real” sexual violence but includes simulations. Their findings, however, impugn the validity of pornography companies' promises to self-regulate. It is absurd to claim these sites can self-regulate when their terms clearly ban content they openly promote on their sites. Pornhub, XVideos, and XHamster have failed to enforce their own policies for years. In addition, the clear prohibitions on this kind of material given in the site terms and subsequent failure to enforce these terms creates a disconnect, encouraging users to believe that this content does not describe, promote, or endorse unlawful activity. This actively warps even further the boundary between what is considered sex and what counts as sexual violence.

In summary, “mainstream online pornography is a key social institution” for developing norms of sexual conduct (p. 14). This study provides powerful evidence that major pornography sites are socializing users to view sexual violence as normal.

¹ The World Health Organization defines sexual violence as “any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work.” See Krug et al., “World Report on Violence and Health,” (World Health Organization, Geneva, 2002).

² The original sample included 150,000 titles. Titles not communicating a sexual script (e.g., “share my vid please,” or with only the performer's name or name of a production studio) were removed.

³ Sarah A. Vannier, Anna B. Currie, and Lucia F. O'Sullivan, “Schoolgirls and Soccer Moms: A Content Analysis of Free ‘Teen’ and ‘MILF’ Online Pornography,” *Journal of Sex Research* 51, no. 3 (2014): 253–264, doi: 10.1080/00224499.2013.829795.

⁴ This finding is line with previous research which found that titles for films with teenage female performers were more likely to suggest aggression, include anal penetration, and facial ejaculation. See Eran Shor, “Age, Aggression, and Pleasure in Popular Online Pornographic Videos,” *Violence Against Women* (2018): 1-19, doi:

10.1177/1077801218804101. Of note, videos including more than two participants were not included in the analysis.

⁵ For instance, see Niki Fritz et al., “A Descriptive Analysis of the Types, Targets, and Relative Frequency of Aggression in Mainstream Pornography,” *Archives of Sexual Behavior* 49, (2020): 3041-3053, doi:10.1007/s10508-020-01773-0, and Yanyan Zhou and Bryant Paul, “Lotus Blossom or Dragon Lady: A Content Analysis of ‘Asian Women’ Online Pornography,” *Sexuality & Culture* 20 (2016): 1083–1100, doi: 10.1007/s12119-016-9375-9.

⁶ Other content analyses with which we are familiar have analyzed actual pornography video scenes for acts of physical violence (e.g. hitting, slapping, hair pulling, choking, etc.) instead of pornography video titles for sexually violent scripts as in the Vera-Gray study under discussion. So, while the content under review here is different (titles versus scenes), analyses of physical violence in pornography scenes have omitted themes of sexual violence (e.g, incest, kidnapping, sexual exploitation, non-consensual distribution) and thus under represent the extent of sexually abusive and violent content present in mainstream pornography.

⁷ Vannier, Currie, and O’Sullivan, *ibid.*

⁸ Eran Shor, “Age, Aggression, and Pleasure in Popular Online Pornographic Videos,” *Violence Against Women* (2018): 1-19, doi: 10.1177/1077801218804101. Of note, videos including more than two participants were not included in the analysis.

⁹ *Ibid.* The performers’ self-declarations, as well as classification categories and tags were used to distinguish “teen” pornography from “adult.” As was noted by the researcher, “it is often impossible to know whether a performer is indeed a teenager or not.” Importantly, the company MindGeek which owns the website Pornhub.com is currently under investigation by Canada’s House of Commons Standing Committee on Access to Information, Privacy and Ethics for child sexual abuse material and non-consensually recorded and/or distributed sexual content on the site. It is therefore entirely possible, and indeed probable, that some of the “teen” content analyzed by researchers may have included actual minors. According to Pornhub’s annual report, “teen” was among its top 20 search terms in 2019.

¹⁰ Shor, *ibid.*, 15.

¹¹ Kathryn Seigfried-Spellar and Marcus K. Rogers, “Does Deviant Pornography Use Follow a Guttman-Like Progression?” *Computers in Human Behavior* 29, no. 5 (2013): 1997-2003, doi:10.1016/j.chb.2013.04.018.

¹² Michelle L. Ybarra and Richard E. Thompson, “Predicting the Emergence of Sexual Violence in Adolescence,” *Prevention Science* 19, no. 4 (2018): 403–415, doi. 10.1007/s11121-017-0810-4. Note: this finding was not significant for attempted rape only.