

Age, Aggression, and Pleasure in Popular Online Pornographic Videos

Violence Against Women

1–19

© The Author(s) 2018

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/1077801218804101

journals.sagepub.com/home/vaw**Eran Shor¹**

Abstract

This article analyzes the content of 172 popular videos from the pornographic website PornHub.com. Although I found no difference between the levels of aggression in videos featuring teenage performers and those featuring adult performers, the former were more likely to have a title that suggests aggression and to include anal penetration and facial ejaculation. In addition, although all female performers were more likely to express pleasure following aggression, this association was stronger in videos featuring teenage performers. These videos portray aggression and degradation as both *consensual*— i.e., men dominating *willing* women—and *sensual*— i.e., producing pleasure for both men and women.

Keywords

pornography, aggression, age

Introduction

Over the last two decades, the Internet has become a major source for dating, romantic relationships, and sexual education, especially among youth and adolescents (Manganello, 2008). More specifically, Internet pornography now allows easy access, affordability, and anonymity (Cooper, 1998) and has become the main source of pornography consumption over the last decade (Hald, Malamuth, & Lange, 2013). The growing popularity of sexually explicit equivalents to YouTube (such as YouPorn), which are free and require no credit card or age verification, along with technological developments that increased the range and mobility of the means used to access such

¹McGill University, Montreal, Quebec, Canada

Corresponding Author:

Eran Shor, Department of Sociology, McGill University, 855 Sherbrooke Street West, Montreal, Quebec, H3A2T7, Canada.

Email: eran.shor@mcgill.ca

websites, have led to a historic shift in the availability of pornographic materials (Owens, Behun, Manning, & Reid, 2012; Smith, 2013).

Although free online pornography differs substantially from other pornographic forms (e.g., magazines and rental videos) in terms of accessibility, affordability, and anonymity, researchers have only begun analyzing the content of Internet pornography in recent years (Gorman, Monk-Turner, & Fish, 2010; Klaassen & Peter, 2015; Zhou & Paul, 2016). Furthermore, only a few studies differentiated between various categories and characteristics of performers (e.g., Zhou & Paul, 2016), and only one of these studies (Vannier, Currie, & O'Sullivan, 2014) has examined the effects of performers' age on the content of pornographic videos. Vannier et al. found that older female performers had a higher status, were more agentic, and were more likely to be in control when compared with younger performers. Yet, the authors did not examine the prevalence of aggressive and potentially degrading acts in each of these age groups, although such acts may have the greatest negative impact on viewers.

The current study seeks to further enhance our knowledge about the content of online pornographic materials through addressing the following two research questions:

Research Question 1: Do videos featuring teenage performers differ from those featuring older performers in terms of their level of aggression, their depiction of arguably degrading or risky acts, and the levels of affection they portray?

Research Question 2: Do teenage performers react differently to aggressive acts (e.g., showing more pleasure or pain) than their older counterparts?

Given the findings by Vannier et al. (2014) regarding younger women's lower status and agency, one might suspect that younger women may also have less control over sexual interactions and, therefore, they would be more likely to be treated as sexual objects and subjected to more aggressive and degrading acts, especially when paired with older male performers. In addition, they might be instructed to react favorably to aggression and lack enough experience or power to resist such instructions.

The Importance of Studying Aggression in Videos Featuring Younger Performers

This research is particularly important because of the potential harmful effects of aggressive and risky practices in videos that include teenagers. No previous study has systematically examined the particular types of pornographic materials that adolescents (as compared with adults) are most likely to consume. Indeed, it is quite likely that videos featuring teenage female performers are watched by both younger and older audiences. Still, interviews with male adolescents and young adults reveal that they often actively search for contents that feature younger women and teenagers (Kimmel, 2008). Furthermore, it seems safe to assume that these videos are likely to have a relatively substantial effect on young viewers' sexual scripts and behaviors. Such videos often depict scenarios that are closer and more relevant to adolescents' lives (e.g., allegedly "first-time" sexual experiences or sexual interactions in locations

such as classrooms or fraternity houses). In addition, the performers themselves are roughly the same age as adolescent viewers, making them more likely to be understood as role models for young women and potential romantic and sexual partners for young men. As online pornography serves as a major source of sex education and sexual scripting, it is possible that many adolescents are particularly likely to model their sexual behaviors and interactions after those they see in videos that include other younger people.

The extent of sexual information available to American adolescents in public schools continues to be limited, with the widespread implementation of abstinence-only sexual education and the limited coverage of many important sexual education topics in these schools (Fields, 2008; Smith, 2013). This lack of formal sex education is coupled with very little or no opportunity to discuss sexual topics with parents or even friends, as asking peer group members about sexual behaviors exposes one to ridicule for being ignorant about sex. Consequently, many teenagers actively seek information and pornographic materials online. They report that they use these explicit materials as a major source of information about sex, often incorporating what they learn into their lives and sexual practices (Smith, 2013; Ybarra, Strasburger, & Mitchell, 2014). Moreover, some scholars have argued that adolescents are particularly susceptible to the possible harmful effects of Internet pornography, due to their limited experience of intimate relationships, and possibly greater cortical vulnerability to porn misuse (Owens et al., 2012).

Considering the centrality of Internet pornography in the lives and sexual education of most adolescents, it is especially important to examine aggressive and potentially degrading or risky acts and materials that include younger female performers as these are most likely to serve as role models, figures of identification, or potential romantic partners for younger viewers. Although some scholars have noted positive aspects related to the growing availability of sexually explicit media (Duggan, Hunter, & Vance, 1994; McKee, 2014; Strossen, 1995; Watson & Smith, 2012), most previous research has focused on the potential harmful effects of pornographic materials. Kjellgren, Priebe, Svedin, and Langstrom (2010), for example, found that frequent use of pornographic materials was associated with sexually coercive behaviors among young Swedish men. A similar relationship was found among Italian (Bonino, Ciairano, Rabaglietti, & Cattelino, 2006) and American (Alexy, Burgess, & Prentky, 2009; Malamuth, Addison, & Koss, 2000) adolescents.

Pornography also appears to influence viewers' gender and sexual attitudes, as well as their dating and sexual scripts. Multiple surveys suggest that exposure to pornography is associated with attitudes supporting violence against women, sexual harassment, and sexual coercion (Hald et al., 2013; Hald, Malamuth, & Yuen, 2010; Malamuth, Hald, & Koss, 2012; Mohr & Zanna, 1990; Strouse, Goodwin, & Roscoe, 1994). Such attitudes were found to be especially prevalent among users of aggressive media (Connolly, Friedlander, Pepler, Craig, & Laporte, 2010; Malamuth et al., 2000). Experimental studies further suggest that the relationship between exposure to pornography and attitudes supportive of sexual aggression may be a causal one (Allen, D'Alessio, & Brezgel, 1995; Flood, 2009). If porn viewing indeed influences attitudes,

this in turn may serve as an explanatory pathway to dating and sexual violence. Indeed, recent studies report that young men who hold attitudes that endorse traditional gender roles and those who support dating violence and sexual aggression against women are more likely to actually engage in dating violence (Reyes, Foshee, Niolon, Reidy, & Hall, 2016; M. Russell et al., 2014; Vagi et al., 2013).

Beyond their possible effect on aggressive behaviors and attitudes, pornographic materials may also provide viewers (in particular young viewers) with cognitive scripts and behavioral guidelines for sexual interactions. Social learning theory (Bandura, 2001) offers that individuals learn various behaviors by observing others both in real life and in the media. Sexual script theories (Huesmann, 1986; Kimmel, 2007; Shor, 2015; Shor & Simchai, 2009, 2012; Simon & Gagnon, 1973, 1984) further suggest that our daily behaviors, including sexual behaviors, are habitually compared with a cognitive script and that this cognitive script is largely shaped by mass media. Viewers of pornographic materials may be internalizing the sexual scripts they view, which in turn may influence their sexual fantasies and behaviors and shape new sexual norms or help to further entrench traditional norms (Vannier et al., 2014).

Research on adolescents supports these ideas as young people often report using media images and scripts to model their romantic and sexual relationships (Flood, 2009; Manganello, 2008). Interviews with young adolescents in various countries further reveal that many of them learn about sexuality from online pornography and then incorporate what they learned into their lives (Smith, 2013). Teenagers testify that they adopt sexual scripts from Internet pornography and believe that these provide useful guidelines for their sexual experiences (Peter & Valkenburg, 2010).

Performers' Age, Aggression, and Degradation in Pornography

Previous estimates of the prevalence of aggression in pornographic media vary greatly, ranging from 1.9% (McKee, 2005) to 88.8% (Bridges, Wosnitzer, Scharrer, Sun, & Liberman, 2010). However, most previous studies examined magazines, books, and rented videos (Barron & Kimmel, 2000; Bridges et al., 2010; Dietz & Sears, 1988; Malamuth & Spinner, 1980; McKee, 2005; Monk-Turner & Purcell, 1999; Scott & Cuvelier, 1993), which differ substantially from free Internet pornography in terms of accessibility, affordability, and anonymity. Such differences are especially important when considering adolescent viewers, who have been consuming Internet pornography in growing numbers, following the historical shift that made these materials much more accessible (Smith, 2013). Only during the last 6 years, have studies begun to examine more systematically the content of free Internet pornographic videos and the prevalence of aggression in them (Gorman et al., 2010; Klaassen & Peter, 2015; Zhou & Paul, 2016), leaving substantial room for further investigation.

Furthermore, despite the rich body of literature examining aggression in pornography, most previous content analyses of pornographic videos did not differentiate between various categories and characteristics of performers (Vannier et al., 2014). One such important characteristic that has yet to receive sufficient attention is age. A recent study of Internet searches for sexual materials revealed that one in six of these

searches included an age-related adjective, most commonly one that is related to teenagers (Ogas & Gaddam, 2011). Yet, no previous study has examined the effects of performers' age on depictions of aggressive and degrading practices in pornographic videos.

The only study to date that did examine differences in content by age was a recent study by Vannier et al. (2014). The authors compared a random sample of videos from the "Teen" and "MILF" categories of readily accessible pornographic websites. They found remarkably similar characteristics across video types, including in the race of performers, the context of the act, the types of sexual behaviors displayed, and the general script guiding the sexual interaction. Still, Vannier et al. also found some important differences between the two age groups. Female performers appearing in the "MILF" category displayed more agency and initiation of sexual activities, were more likely to control the pace and direction of the sexual activity, and portrayed women with a higher professional status when compared with performers in "teen" videos. Although the study by Vannier et al. offers important insights into some potential differences between videos that include younger and older performers, it did not examine the issue of aggressive and potentially degrading or harmful acts. Such acts have been at the focus of much of the other research on pornographic materials due to their serious potential influences on viewers.

The current study seeks to fill this empirical gap. It compares videos featuring younger and older performers, focusing on a wide array of aggressive and potentially degrading or risky acts, as well as performers' responses to these acts. The findings from the study by Vannier et al. (2014) suggest that the age of female performers may be negatively correlated with aggression (i.e., that younger performers may be expected to suffer from more aggression than older performers). If teenage performers are portrayed as having less power and control over sexual interactions compared with older performers, it may follow that they are also more likely to be treated as sexual objects and thus be subjected to aggressive and degrading acts. Furthermore, although the porn industry is often characterized by strict scripts and considerable control of producers and directors over these scripts, certain studies suggest that female (and male) performers sometimes do have some agency in determining the sexual interaction and the type of acts that are included in this interaction (Miller-Young, 2010, 2014). Being younger and less experienced, teenager performers may be more vulnerable and less able to resist unwanted aggressive or degrading acts.

Beyond the acts themselves, it is also interesting to examine whether the responses of younger and older women to these acts differ. The coding of performers' response to acts of aggression and humiliation is important to produce a more refined analysis of how pornography portrays aggression and of the messages that it conveys about this aggression. Bridges et al. (2010) reported that an overwhelming majority of the female performers in pornographic rental videos either did not respond or responded with enjoyment following an aggressive act against them. Bridges et al. argue that this may show that consumers of pornography are aroused by the sexual dominance and humiliation of seemingly willing women and that such content increases the risk of rendering aggression against women normative and invisible. It is important to

examine whether positive responses to aggression are more common in videos that feature teenagers as these videos are especially likely to shape the sexual norms and scripts of the adolescents who watch them. Again, one might expect that younger performers, who are marketed as having less agency, experience, and control, would be portrayed as less likely to fend off aggression and more likely to perform pleasure in response to aggressive and degrading acts.

Method

Sample and Data

The sampling strategy and sample are described in detail in two other recent papers, which focus on racial and ethnic differences in violence (Shor & Golriz, 2018) and on temporal changes in violence (Shor & Seida, 2018). The research team coded mainstream videos from PornHub, one of the world's top adult websites. Similar to other recent analyses (Bridges et al., 2010; Klaassen & Peter, 2015; McKee, 2005), we included in the sample the most watched videos from each of our predefined categories, seeking to increase generalizability and explore the porn content that is most likely to be watched by wide audiences (and therefore have a wider cultural impact). Our initial sampling strategy sought to increase representation for both women and men from multiple ethnic and racial groups. Accordingly, we employed a purposive sampling technique, including in the initial sample videos from the following PornHub categories: "All" (50 videos), "Interracial" (25 videos), "Ebony" (52 videos), "Asian/Japanese" (35 videos), "Latina" (19 videos), and "Gay" (25 videos). In total, this preliminary sampling resulted in a pool of 206 coded videos. The current analysis excludes all videos that contained more than two participants or only one participant (7 videos) and those featuring nonheterosexual couples (27 videos), as the latter rarely included teenage performers. This process resulted in a final sample of 172 videos.

Of the 172 videos in the final sample, 117 featured "adult" performers and 55 featured "teenager" performers (see details about the operationalization of age below). All of the videos were uploaded to PornHub between 2000 and 2016. About 95% of these videos were professionally produced, and their length was 3-87 min. The majority of male performers were White, whereas female performers were more evenly distributed among the racial/ethnic categories.

Operational Measurements

Age. To code the age of female and male performers, we used as cues the combination of performers' self-declarations about their age (when these existed), the titles of videos (e.g., "19-year-old Tatted Black Teen"), the categories in which videos were classified (e.g., "Teen" or "MILF"), and the tags ascribed to each video (e.g., "Teen," "Mature," "Old," and "MILF"). Using these cues, we coded the female performers in each video into one of four categories: (a) "teenager" (under the age of 20), (b) "adult" (about 20-40 years), (c) "middle-aged" (about 40-60 years), and "elderly" (above 60

years). As very few women were clearly over the age of 40 years, the analysis includes only comparisons between two age groups: “teenagers” and “adults.” Admittedly, it is often impossible to know whether a performer is indeed a teenager or not. That is, a performer’s actual age may in fact be different from what the video title, tag, or category suggests or from the age they are performing or declaring. Still, it is important to consider the *fantasy* that is marketed to viewers. This fantasy may determine the actual influence of the video and the images and stereotypes it conveys, which, in turn may affect viewers’ sexual ideologies, scripts, and behaviors.

Aggression/degradation. Shor and Golriz (in press) describe in detail the debate among scholars of pornography regarding the measurement of sexual aggression in pornographic materials. This debate emphasizes on one hand the importance of tracking and coding consent (McKee, 2005, 2015), but also, on the other hand, the problems with definitions that focus on consent (Bridges et al., 2010). Consequently, the current analysis adopts two alternative operational measurements of aggression. The first focuses on the acts themselves and on the apparent intent to cause harm, pain, or discomfort, in line with most previous studies of pornographic content (see Bridges et al., 2010). Following this definition (henceforth “Physical aggression: Visible”), the following acts are considered to be physically aggressive: (a) biting; (b) pinching; (c) kicking; (d) pulling hair; (e) hitting of the face; (f) hitting of the body; (g) choking; (h) forced gagging; (i) spanking; (j) sadomasochism; (k) rough handling (e.g., pushing, shoving, tossing, shaking); and (l) forceful penetration (vaginal or anal) with penis, hand, or another object, with an apparent intent to cause pain/discomfort. We also noted the duration of each of these acts relative to the duration of the entire video. Finally, acts such as ejaculation into a woman’s mouth or on her face are often not considered aggressive but many scholars nevertheless consider them to be degrading or humiliating (Bridges et al., 2010; Dines, 2006; Dworkin, 1994; Gorman et al., 2010), and male viewers often see them as an act of domination and degradation (Sun, Ezzell, & Kendall, 2016).

The second definition considers lack of consent as key for defining an act as aggressive or violent, in line with McKee’s (2005, 2015) conceptualization (henceforth “Physical aggression: Nonconsensual”). We watched carefully for both verbal and physical cues of lack of consent. These could include either explicit verbal requests to stop or avoid a certain act, nonverbal signs of resistance, attempts to avoid the act, or evident unhappiness at being in the situation or performing a certain act, which were nevertheless ignored by the sexual partner. Whenever such verbal or nonverbal cues appeared, we coded the video as containing nonconsensual aggression. For each of the videos, we also determined whether the *title suggests aggression*. Examples of titles suggesting aggression are “Gigantic Cock Rips Skinny Bitch” and “Teeny Booper [sic] Kidnapped by Huge Black Cock.” Examples of more neutral titles include “Stunning MILF Has the Most Spectacular Tits” and “Office Asian Fuck.” Finally, we also noted the occurrence of verbal aggression (including practices such as yelling, name-calling, threatening, and swearing), affection (e.g., kissing, caressing, face stroking, and sweet-talking), and women’s pleasure responses and displays (e.g., moaning, screaming in pleasure, or clearly pronouncing a climax).

Coding and Analytical Strategy

Two female coders worked on this project. Both were students with good familiarity with sexually explicit materials from previous research projects. They both coded all of the videos in the sample separately, and then met to compare their coding. The coders first met several times with the project leader (the author of this article), who trained them in the method and coding scheme. Before coding from the actual sample, they each separately coded five trial videos. The research team then met to discuss the coding and resolve unclear issues. Next, the two coders continued to code together all of the videos in the sample. When they encountered disagreements over the interpretation of content, they met with the project leader, and the entire research team discussed the issues and reached a resolution. Finally, the project leader watched *all* of the videos and coded each independently to ascertain coding accuracy, paying special attention to the coding of aggression. Remaining differences in coding were resolved through discussion between the members of the research team.

Intercoder agreement between students' coding and the project leader's coding was generally good, with 94.42% agreement for aggressive titles, 89.59% agreement for visible aggression, and 96.28% agreement for nonconsensual aggression. Kappa statistic scores for these three measures were 0.73, 0.77, and 0.81, respectively. Although previous studies have often used "scene" or "character" as their unit of analysis (Bridges et al., 2010; Cowan & Campbell, 1994; Klaassen & Peter, 2015; McKee, 2005), we chose to use the entire video as the unit of analysis to prevent overrepresentation for longer videos. However, most of the videos in the sample only consisted of one sex scene.

Results

Age and Aggression

Forty-three percent of the videos in the sample included visible aggression, whereas 15% included nonconsensual aggression. The analyses presented in the current article focus on age differences in these acts of aggression. Table 1 compares the frequency of aggressive acts in videos featuring teenage female performers with the frequency of these acts in videos featuring adult performers. The results show significant differences for a few of the measures. First, videos featuring female teenagers were about three times more likely to receive a title that suggests aggression compared with those featuring an adult female performer. However, when examining actual practices of aggression, teenage performers are not more likely to suffer from aggression than their adult counterparts.

Teenage performers were more likely to suffer from some unique forms of aggression and arguably degrading or risky acts. When compared with adult performers, teenage performers were more than twice (21.82 vs. 9.40%) as likely to be featured in videos featuring anal penetration, and about five times (12.73 vs. 2.56%) more likely to take part in videos featuring forceful anal penetration (with an apparent intent to

Table 1. Aggressive Acts: “Teenager” Versus “Adult” Videos ($N = 172$).

	“Teenager” ($n = 55$)	“Adult” ($n = 117$)	χ^2 (p value)
Video title suggests aggression	18.18%*	6.84%*	5.14 (.023)
Physical aggression: Visible (definition not considering consent)	36.36%	46.15%	1.46 (.226)
Physical aggression: Nonconsensual (definition considering consent)	10.91%	17.09%	1.12 (.291)
Verbal aggression	9.09%	13.68%	0.73 (.392)
Anal penetration	21.82%*	9.40%*	4.98 (.026)
Spanking	16.36%	11.97%	0.62 (.429)
Forceful vaginal penetration	14.55%	23.08%	1.68 (.195)
Forceful anal penetration	12.73%**	2.56%**	7.06 (.008)
Forced gagging	21.82%	25.64%	0.30 (.586)
Ejaculation on face (including in mouth)	65.45%*	45.30%*	6.01 (.014)

Two-tailed chi-square tests: * $p < .05$. ** $p < .01$.

cause pain). In addition, teenage performers were more likely than their adult counterparts to be part of videos in which the male performer ejaculated in their mouth or on their face (65.45 vs. 45.30%), acts that are considered degrading by at least some scholars of the pornography industry (Bridges et al., 2010; Dines, 2006; Dworkin, 1994; Gorman et al., 2010).

Age, Affection, and Pleasure

Table 2 presents results for measures of initiation, consent, affection, and pleasure. The table shows that in videos featuring teenage female performers, the male performer was nearly twice as likely to initiate the act than in videos featuring an adult female performer (61.82 vs. 35.04%). This finding corroborates that of Vannier et al. (2014), who reported that men were overall more likely to initiate sex in pornographic videos, although adult women were more likely to initiate the act than their teenage counterparts.

Response to Aggression by Age

Table 3 examines the interaction of visually aggressive acts with age and the effect of this interaction on female performers’ response to the acts.¹ The table shows a general tendency among female performers to react favorably (showing pleasure or even climaxing) to various acts of physical aggression, demonstrating the often-discussed association between aggression and female pleasure in pornographic videos. However, this tendency is especially strong (and much more likely to be statistically significant)

Table 2. Initiation, Consent, Affection, and Pleasure Displays: “Teenager” Versus “Adult” in Heterosexual Videos ($N = 172$).

	“Teenager” ($n = 55$)	“Adult” ($n = 117$)	χ^2 (p value)
Woman initiates sexual act	9.09%	17.95%	2.29 (.130)
Man initiates sexual act	61.82%**	35.04%**	10.91 (.001)
Woman’s verbal consent clearly indicated	16.36%	15.38%	0.03 (.869)
Man performs cunnilingus	25.45%	36.75%	2.16 (.142)
Man displaying clear affection	9.09%	13.68%	0.73 (.392)
Woman displaying clear affection	3.64%	2.56%	0.15 (.696)
Woman displaying pleasure	67.27%	75.21%	1.19 (.276)
Woman displaying climax	20.00%	11.97%	1.94 (.163)

Two-tailed chi-square tests: * $p < .05$. ** $p < .01$.

for teenagers. Thus, for example, as Figure 1 demonstrates, 90% of the teenage women in videos containing visible aggression displayed pleasure, compared with 54.29% when visible aggression was not present. Similarly, teenage performers displayed a sexual climax in 40.00% of the videos containing aggression in which they were featured, compared with 8.57% when visible aggression was not present. Differences in pleasure responses and climaxing between videos that portrayed aggression and those that did not were noticeably smaller and not statistically significant for adult women (see again Figure 1). We further examined this interaction between age and aggression, and the effect on pleasure displays, using multiple logistic regression, controlling for performers’ race/ethnicity, whether the video was produced by amateurs, video duration, number of views, and the year in which the video was uploaded (full results available from the authors). The results show a significant interaction effect, where teenage performers were more likely than older performers to react to aggressive acts by displaying pleasure.

Table 3 also shows that the relationship between age, aggression, and pleasure displays remains similar when examining specific aggressive acts. Teenage female performers were significantly more likely to display pleasure in videos that included spanking, forceful vaginal or anal penetration, and forced gagging than in videos that did not include these practices. Teenagers were also more likely to exhibit a climax in response to an aggressive act than in response to nonaggressive sexual acts. For adult performers, however, differences in pleasure responses and climaxing between those videos that featured aggression and those that did not were not statistically significant, despite a larger sample size.

Conclusion and Discussion

This study examined aggression in online pornographic videos, focusing on variations by performers’ age. Of the 172 videos of heterosexual couples (117 adult female

Table 3. Positive Responses to Aggression by Age and Type of Aggression (N = 172).

		Woman displaying pleasure			Woman displaying climax		
		“All ages” (N = 172)	“Teenager” (n = 55)	“Adult” (n = 117)	“All ages” (N = 172)	“Teenager” (n = 55)	“Adult” (n = 117)
Physical aggression—Visible	Yes (n = 74)	85.1% ^{**}	90.00% ^{**}	83.33%	21.6% [*]	40.00% ^{**}	14.81%
	No (n = 98)	63.3% ^{**}	54.29 ^{**}	68.25%	9.2% [*]	8.57% ^{**}	9.52%
	χ^2 (p value)	10.15 (.001)	7.37 (.007)	3.55 (.060)	5.25 (.022)	7.86 (.005)	0.77 (.379)
Spanking	Yes (n = 23)	87.0%	100.00% [*]	78.57%	21.7%	33.33%	14.29%
	No (n = 149)	70.5%	60.87% [*]	74.76%	13.4%	17.39%	11.65%
	χ^2 (p value)	2.73 (.099)	5.24 (.022)	0.10 (.756)	1.11 (.292)	1.20 (.274)	0.08 (.776)
Forceful vaginal penetration	Yes (n = 35)	82.9%	100.00% [*]	77.78%	25.7% [*]	37.50%	22.22%
	No (n = 137)	70.1%	61.70% [*]	74.44%	11.7% [*]	17.02%	8.89%
	χ^2 (p value)	2.29 (.130)	4.55 (.033)	0.12 (.725)	4.42 (.036)	1.79 (.181)	3.51 (.061)
Forceful anal penetration	Yes (n = 10)	80.0%	85.71%	66.67%	50.0% ^{**}	42.86%	66.67% ^{**}
	No (n = 162)	72.2%	64.58%	75.44%	12.4% ^{**}	16.67%	10.53% ^{**}
	χ^2 (p value)	0.29 (.592)	1.24 (.266)	0.12 (.728)	10.75 (.001)	2.62 (.106)	8.75 (.003)
Forced gagging	Yes (n = 42)	88.1% [*]	91.67% [*]	86.67%	19.1%	16.67%	20.00%
	No (n = 130)	67.7% [*]	60.47% [*]	71.26%	13.1%	20.93%	9.20%
	χ^2 (p value)	6.65 (.010)	4.15 (.042)	2.84 (.092)	0.91 (.340)	0.11 (.744)	2.47 (.116)

Two-tailed chi-square tests: *p < .05. **p < .01.

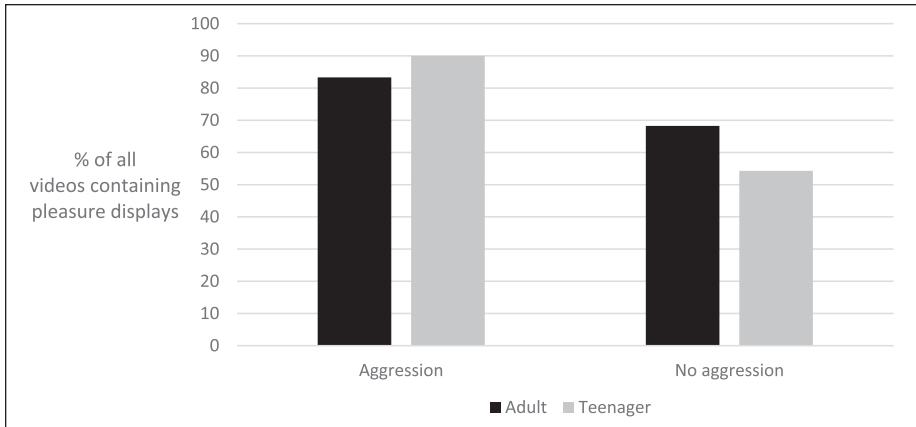


Figure 1. Female performers who displayed pleasure, by presence of aggression and age.

performers and 55 teenage female performers), 43.0% included visible aggression and 15.1% included nonconsensual aggression. Female performers of all ages were more likely to display pleasure in videos featuring visible physical aggression (85.1% of the videos) than in those that did not feature aggression (63.3%).

Teenage performers were subjected to levels of aggression that were quite similar to those experienced by older performers. Nevertheless, the results demonstrate a number of notable differences between videos featuring teenage performers and those featuring older performers. First, videos including teenage performers had titles that promised viewers a greater level of aggression than those including an older performer. This finding is important, as the experience of consuming a pornographic video includes not only the exposure to its visual content but also the fantasy associated with the promise in its title (Kimmel & Plante, 2004). Titles are therefore an important part of the fantasy marketed to viewers. When a title promises that teenagers will be “ravished,” “destroyed,” or “fucked hard,” this may affect fantasies and sexual scripts about what is considered acceptable/normative in having sex with young women and adolescents. Whether these titles are given by producers or by the individual who uploaded the video to the website, they suggest that viewers may expect teenage performers to be the recipients of greater aggression.

Moreover, videos featuring teenage performers were more likely to include practices that scholars often consider to be at the very least demeaning, if not aggressive or risky. These include anal penetration and ejaculation on the face and in the mouth. Although these acts are not commonly defined as aggressive, their prevalence in videos featuring teenage performers may signal to viewers of all ages that these acts are not only normative and legitimate, but perhaps even expected. Furthermore, although videos that feature younger female performers are likely watched by both older and younger men and women, their effect may be especially powerful on adolescents as they feature their age peers (for women) or their most likely potential sexual and

romantic partners (for men). Various scholars have noted that pornographic depictions increasingly serve to educate youth and instruct them on what acts may be considered acceptable and even normative (Smith, 2013; Weinberg, Williams, Kleiner, & Irizarry, 2010). One result of such legitimation and normative sexual scripts may come in the form of pressures (either by partners or by the desire to be “normal”) on young women to perform acts that they find unpleasant or degrading, leading to psychological distress. Men may also find some of these scripts unpleasant and demeaning, and the pressure to re-enact them with their sexual partners may lead to additional psychological distress.

The common depictions of unprotected anal penetration (in particular, forceful anal penetration) in videos featuring teenage performers may also have negative health consequences. Previous research has demonstrated that adolescents who viewed pornographic materials were more likely to engage in various risky sexual behaviors, including unprotected anal sex (Braun-Courville & Rojas, 2009; Haggstrom-Nordin, Hanson, & Tyden, 2005; Rogala & Tyden, 2003; Tyden, Olsson, & Haggstrom-Nordin, 2001; Tyden & Rogala, 2004). Other research has shown a relationship between pornography viewing and the risk for sexually transmitted diseases (STDs) among youth and adolescents (Reed, Miller, Raj, Decker, & Silverman, 2014). The findings of the current study provide one possible explanatory link for the relationship between porn viewing and STD prevalence. The high prevalence of unprotected anal intercourse in such videos may lead female teenagers to engage more frequently in unprotected anal sex, both because they are especially likely to model their sexual behaviors after videos including other teenage performers and because their partners who watch such videos may pressure them to engage in anal sex (Lewis et al., 2017). This, in turn, increases their risk for various STDs (Hess et al., 2013), especially as anal penetration is often forceful and aggressive (Stockman, Lucea, & Campbell, 2013).

Aggression and Pleasure Responses

Beyond the acts themselves, it is also very important to examine performers' responses to these acts. Similar to previous research (Bridges et al., 2010), the present study found that regardless of age, performers were likely to respond to aggressive acts toward them in a positive way (showing pleasure and even climaxing). However, teenage performers were especially likely to respond in this way. Almost without exception, teenager videos that included acts such as spanking, forceful vaginal and anal penetration, and forced gagging were also more likely to show pleasure responses by the teenage performer compared with teenager videos that did not include such aggressive acts. It is further important to note that only two of the videos in the sample (both featuring adult female performers) depicted a sadomasochistic interaction, a genre in which mixed feelings and interchanging expressions of pleasure and pain are perhaps to be expected.

Thus, whether female pleasure responses directly follow the aggressive act or whether they happen during a later part of the video, these responses solidify the association between violence and pain on one hand and pleasure on the other hand. This

common script suggests that female performers—in particular young performers—enjoy aggressive sex more than they do nonaggressive sexual acts. Even when they do not appear to enjoy these acts (such as in cases where the acts clearly elicit painful responses or requests to cease), this response is likely to change later in the video and never provides grounds for terminating the sexual interaction. This fact signals that aggression is normative and either enhances or simply does not interfere with women's (especially young women's) ability to experience sexual pleasure.

The findings regarding the link between aggression and pleasure responses thus reinforce some of the contentions of feminist scholars who emphasize the potential harms of pornography. These scholars have argued that pornography fosters misogyny and violence against women by portraying women as sexual objects who enjoy being humiliated, degraded, and treated aggressively by men (Brownmiller, 1975; Dines, Jensen, & Russo, 1998; Dworkin, 1989; Dworkin & MacKinnon, 1988; D. Russell, 2000). Although not all videos in the sample exemplify these claims, nearly half of them do. I concur, therefore, with the conclusions of Bridges et al. (2010) that most contemporary pornography does not seem to perpetuate a particular rape myth (i.e., that women first express pain and resistance to men's aggression, but eventually express enjoyment). However, a considerable portion of popular pornographic videos does legitimate and even celebrate aggression and degradation by portraying these acts as both *consensual*—showing the dominance and aggression of men over *willing* women—and *sensual*—producing pleasure and satisfaction for both men and women. That is, these videos still reinforce the idea that women desire and derive pleasure from aggressive and degrading sexual practices, an idea that serves to perpetuate a rape culture.

Moreover, the findings reveal that the image of pleasure following aggression is particularly common in videos that include adolescent women (or female performers who depict adolescents). Previous research has reported that adolescent and young women face a substantially higher risk of experiencing inter-partner violence and sexual violence than older women (Stockl, March, Pallitto, & Garcia-Moreno, 2014). Although depictions of most aggressive acts were not more common in videos featuring teenage performers, the strong association between aggression and pleasure responses in teenager videos conveys the message that such aggression is more acceptable, perhaps even desirable, to bring young women to a climax. The fact that young performers appear to enjoy aggressive acts much more is likely to influence cognitive sexual scripts and attitudes about the acceptability (or even desirability) of aggression in sexual and romantic relationships. Such scripts and attitudes, in turn, have been shown to be associated with actual dating and sexual violence among adolescents and young adults (Foshee, Bauman, & Fletcher Linder, 1999; Foshee, Linder, MacDougall, & Bangdiwala, 2001; Malik, Sorenson, & Aneshensel, 1997; O'keefe & Treister, 1998).

The strong association between sexual aggression and pleasure responses in pornographic videos featuring teenage performers may also lead to negative psychological effects for both women and men. When young women watch videos of their peers, in which aggressive and degrading acts are mostly associated with pleasure, they may

feel pressures to also enjoy (or at least pretend to enjoy) such acts. Young men may also find such scripts limiting and distressing as these seem to demand that they act aggressively against their romantic and sexual partners if they wish to satisfy their partners' sexual fantasies and urges. Such mutual misconceptions may in turn lead to what social psychologists call "the Abilene Paradox" (Harvey, 1974), in which a group of people (in this case, a couple) decide on a course of action that is counter to their preferences because each member mistakenly believes that their own preference is counter to that of the group and therefore does not raise objections. In this scenario, men who watch pornography may engage in aggressive sexual acts with their partners simply because they believe such acts are normative and likely to extract a pleasurable response. Ironically, this may indeed be the response to such aggression as young women may also feel normative pressures to perform a pleasurable response, even when it is disingenuous.

Finally, beyond its effect on younger viewers, 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. The sexualization of very young women and girls and the targeting of younger women by both younger and older (at times much older) men convey that these practices are not only acceptable, but in fact may also be normative and desirable.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Note

1. As the definition of nonconsensual aggression largely relies on performers' expressions of displeasure, I only examine here acts of visible aggression and exclude from the analysis the measure focusing on nonconsensual aggression, to prevent conflating the dependent and independent variables.

References

- Alexy, E., Burgess, A., & Prentky, R. (2009). Pornography use as a risk marker for an aggressive pattern of behavior among sexually reactive children and adolescents. *Journal of the American Psychiatric Nurses Association, 14*, 442-453.
- Allen, M., D'Alessio, D., & Brezgel, K. (1995). A meta-analysis summarizing the effects of pornography: II. Aggression after exposure. *Human Communication Research, 22*, 258-283.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology, 3*, 265-299.

- Barron, M., & Kimmel, M. (2000). Sexual violence in three pornographic media: Toward a sociological explanation. *Journal of Sex Research, 37*, 161-168.
- Bonino, S., Ciairano, S., Rabaglietti, E., & Cattelino, E. (2006). Use of pornography and self-reported engagement in sexual violence among adolescents. *European Journal of Developmental Psychology, 3*, 265-288.
- Braun-Courville, D., & Rojas, M. (2009). Exposure to sexually explicit web sites and adolescent sexual attitudes and behaviors. *Journal of Adolescent Health, 45*, 156-162.
- Bridges, A. J., Wosnitzer, R., Scharrer, E., Sun, C., & Liberman, R. (2010). Aggression and sexual behavior in best-selling pornography videos: A content analysis update. *Violence Against Women, 16*, 1065-1085.
- Brownmiller, S. (1975). *Against our will: Men, women, and rape*. New York: Simon & Schuster.
- Connolly, J., Friedlander, L., Pepler, D., Craig, W., & Laporte, L. (2010). The ecology of adolescent dating aggression: Attitudes, relationships, media use, and socio-demographic risk factors. *Journal of Aggression, Maltreatment & Trauma, 19*, 469-491.
- Cooper, A. (1998). Sexuality and the Internet: Surfing into the new millennium. *CyberPsychology & Behavior, 1*, 187-193.
- Cowan, G., & Campbell, R. (1994). Racism and sexism in interracial pornography. *Psychology of Women Quarterly, 18*, 323-338.
- Dietz, P. E., & Sears, A. E. (1988). Pornography and obscenity sold in "adult bookstores": A survey of 5132 books, magazines, and films in four American cities. *Journal of Law Reform, 21*, 7-46.
- Dines, G. (2006). The White man's burden: Gonzo pornography and the construction of Black masculinity. *Yale Journal of Law and Feminism, 18*, 283-297.
- Dines, G., Jensen, R., & Russo, A. (1998). *Pornography: The production and consumption of inequality*. New York: Routledge.
- Duggan, L., Hunter, N., & Vance, C. (1994). False promises: Feminist antipornography legislation. In A. Jaggar (Ed.), *Living with contradictions* (pp. 165-170). Boulder, CO: Westview Press.
- Dworkin, A. (1989). *Pornography: Men possessing women*. New York: Dutton.
- Dworkin, A. (1994). Why pornography matters to feminists. In A. Jaggar (Ed.), *Living with contradictions* (pp. 152-153). Boulder, CO: Westview Press.
- Dworkin, A., & MacKinnon, C. (1988). *Pornography and civil rights: A new day for women's equality*. Minneapolis, MN: Organizing Against Pornography.
- Fields, J. (2008). *Risky lessons: Sex education and social inequality*. New Brunswick, NJ: Rutgers University Press.
- Flood, M. (2009). The harms of pornography exposure among children and young people. *Child Abuse Review, 18*, 384-400.
- Foshee, V., Bauman, K., & Fletcher Linder, G. (1999). Family violence and the perpetration of adolescent dating violence: Examining social learning and social control processes. *Journal of Marriage and Family, 61*, 331-342.
- Foshee, V., Linder, F., MacDougall, J., & Bangdiwala, S. (2001). Gender differences in the longitudinal predictors of adolescent dating violence. *Preventive Medicine, 32*, 128-141.
- Gorman, S., Monk-Turner, E., & Fish, J. N. (2010). Free adult Internet web sites: How prevalent are degrading acts? *Gender Issues, 27*, 131-145.
- Haggstrom-Nordin, E., Hanson, U., & Tyden, T. (2005). Associations between pornography consumption and sexual practices among adolescents in Sweden. *International Journal of STD & AIDS, 16*, 102-107.

- Hald, G. M., Malamuth, N. M., & Lange, T. (2013). Pornography and sexist attitudes among heterosexuals. *Journal of Communication, 63*, 638-660.
- Hald, G. M., Malamuth, N. M., & Yuen, C. (2010). Pornography and attitudes supporting violence against women: Revisiting the relationship in nonexperimental studies. *Aggressive Behavior, 36*, 14-20.
- Harvey, J. (1974). The Abilene paradox: The management of agreement. *Organizational Dynamics, 3*, 63-80.
- Hess, K., Javanbakht, M., Brown, J., Weiss, R., Hsu, P., & Gorbach, P. (2013). Intimate partner violence and anal intercourse in young adult heterosexual relationships. *Perspectives on Sexual and Reproductive Health, 45*, 6-12.
- Huesmann, L. R. (1986). Psychological processes promoting the relation between exposure to media violence and aggressive behavior by the viewer. *Journal of Social Issues, 42*, 125-139.
- Kimmel, M. (Ed.). (2007). *The sexual self: The construction of sexual scripts*. Nashville: Vanderbilt University Press.
- Kimmel, M. (2008). *Guyland: The perilous world where boys become men*. New York: HarperCollins.
- Kimmel, M., & Plante, R. (2004). The gender of desire: The sexual fantasies of women and men. In M. Kimmel & R. Plante (Eds.), *Sexualities: Identities, behaviors, and society* (pp. 123-136). New York: Oxford University Press.
- Kjellgren, C., Priebe, G., Svedin, C., & Langstrom, N. (2010). Sexually coercive behavior in male youth: Population survey of general and specific risk factors. *Archives of Sexual Behavior, 39*, 1161-1169.
- Klaassen, M., & Peter, J. (2015). Gender (in)equality in Internet pornography: A content analysis of popular pornographic Internet videos. *Journal of Sex Research, 52*, 721-735.
- Lewis, R., Tanton, C., Mercer, C., Mitchell, K., Palmer, M., Mac-dowall, W., & Wellings, K. (2017). Heterosexual practices among young people in Britain: Evidence from three national surveys of sexual attitudes and lifestyles. *Journal of Adolescent Health, 61*, 694-702.
- Malamuth, N. M., Addison, T., & Koss, M. (2000). Pornography and sexual aggression: Are there reliable effects and can we understand them? *Annual Review of Sex Research, 11*, 26-91.
- Malamuth, N. M., Hald, G. M., & Koss, M. (2012). Pornography, individual differences in risk and men's acceptance of violence against women in a representative sample. *Sex Roles, 66*, 427-439.
- Malamuth, N. M., & Spinner, B. (1980). A longitudinal content analysis of sexual violence in the best-selling erotic magazines. *Journal of Sex Research, 16*, 226-237.
- Malik, S., Sorenson, S., & Aneshensel, C. (1997). Community and dating violence among adolescents: Perpetration and victimization. *Journal of Adolescent Health, 21*, 291-302.
- Manganello, J. (2008). Teens, dating violence, and media use: A review of the literature and conceptual model for future research. *Trauma, Violence, & Abuse, 9*, 3-18.
- McKee, A. (2005). The objectification of women in mainstream pornographic videos in Australia. *Journal of Sex Research, 42*, 277-290.
- McKee, A. (2014). The relationship between attitudes towards women, consumption of pornography, and other demographic variables in a survey of 1,023 consumers of pornography. *International Journal of Sexual Health, 19*, 31-45.
- McKee, A. (2015). Methodological issues in defining aggression for content analyses of sexually explicit material. *Archives of Sexual Behavior, 44*, 81-87.

- Miller-Young, M. (2010). Putting hypersexuality to work: Black women and illicit eroticism in pornography. *Sexualities, 13*, 219-235.
- Miller-Young, M. (2014). *A taste of brown sugar: Black women in pornography*. Durham, NC: Duke University Press.
- Mohr, D., & Zanna, M. P. (1990). Treating women as sexual objects [microform]: Look to the (gender schematic) male who has viewed pornography. *Personality and Social Psychology Bulletin, 16*, 296-308.
- Monk-Turner, E., & Purcell, C. (1999). Sexual violence in pornography: How prevalent is it? *Gender Issues, 17*, 58-67.
- Ogas, O., & Gaddam, S. (2011). *A billion wicked thoughts: What the Internet tells us about sexual relationships*. New York: Penguin.
- O'Keefe, M., & Treister, L. (1998). Victims of dating violence among high school students: Are the predictors different for males and females? *Violence Against Women, 4*, 195-223.
- Owens, E., Behun, R., Manning, J., & Reid, R. (2012). The impact of Internet pornography on adolescents: A review of the research. *Sexual Addiction & Compulsivity, 19*, 99-122.
- Peter, J., & Valkenburg, P. M. (2010). Processes underlying the effects of adolescents' use of sexually explicit Internet material: The role of perceived realism. *Communication Research, 37*, 375-399.
- Reed, E., Miller, E., Raj, A., Decker, M., & Silverman, J. (2014). Teen dating violence perpetration and relation to STI and sexual risk behaviours among adolescent males. *Sexually Transmitted Infections, 90*, 322-324. doi:10.1136/sextrans-2013-051023
- Reyes, H. L., Foshee, V., Niolon, P. H., Reidy, D., & Hall, J. (2016). Gender role attitudes and male adolescent dating violence perpetration: Normative beliefs as moderators. *Journal of Youth and Adolescence, 45*, 350-360.
- Rogala, C., & Tyden, T. (2003). Does pornography influence young women's sexual behavior? *Women's Health Issues, 13*, 39-43.
- Russell, D. (2000). Pornography and rape: A causal model. In D. Cornell (Ed.), *Feminism and pornography*. New York: Oxford University Press.
- Russell, M., Cupp, P., Jewkes, R., Gevers, A., Mathews, C., LeFleur-Bellerose, C., & Small, J. (2014). Intimate partner violence among adolescents in Cape Town, South Africa. *Prevention Science, 15*, 283-295.
- Scott, J. E., & Cuvelier, S. J. (1993). Violence and sexual violence in pornography: Is it really increasing? *Archives of Sexual Behavior, 22*, 357-371.
- Shor, E. (2015). The Westermarck hypothesis and the Israeli Kibbutzim: Reconciling contrasting evidence. *Archives of Sexual Behavior, 44*, 2139-2150.
- Shor, E., & Golriz, G. (2018). Gender, race, and aggression in mainstream pornography. *Archives of Sexual Behavior*. Advance online publication. doi: 10.1007/s10508-018-1304-6
- Shor, E., & Seida, K. (2018). "Harder and harder"? Is mainstream pornography becoming increasingly violent and do viewers prefer violent content? *Journal of Sex Research*. Advance online publication. doi: 10.1080/00224499.2018.1451476
- Shor, E., & Simchai, D. (2009). Incest avoidance, the incest taboo, and social cohesion: Revisiting Westermarck and the case of the Israeli Kibbutzim. *American Journal of Sociology, 114*, 1803-1842.
- Shor, E., & Simchai, D. (2012). Exposing the myth of sexual aversion in the Israeli Kibbutzim: A challenge to the Westermarck hypothesis. *American Journal of Sociology, 117*, 1509-1513.
- Simon, W., & Gagnon, J. (1973). *Sexual conduct: The social sources of human sexuality*. New Jersey: Transaction Publishers.

- Simon, W., & Gagnon, J. (1984). Sexual scripts. *Society, 22*, 53-60.
- Smith, M. (2013). Youth viewing sexually explicit material online: Addressing the elephant on the screen. *Sexuality Research and Social Policy, 10*, 62-75.
- Stockl, H., March, L., Pallitto, C., & Garcia-Moreno, C. (2014). Intimate partner violence among adolescents and young women: Prevalence and associated factors in nine countries: A cross-sectional study. *BMC Public Health, 14*, Article 751.
- Stockman, J., Lucea, M., & Campbell, J. (2013). Forced sexual initiation, sexual intimate partner violence and HIV risk in women: A global review of the literature. *AIDS and Behavior, 17*, 832-847.
- Strossen, N. (1995). *Defending pornography: Free speech, sex, and the fight for women's rights*. New York: Anchor Books.
- Strouse, J., Goodwin, M., & Roscoe, B. (1994). Correlates of attitudes toward sexual harassment among early adolescents. *Sex Roles, 31*, 559-577.
- Sun, C., Ezzell, M., & Kendall, O. (2016). Naked aggression: The meaning and practice of ejaculation on a woman's face. *Violence Against Women, 23*, 1710-1729.
- Tyden, T., Olsson, S., & Haggstrom-Nordin, E. (2001). Improved use of contraceptives, attitudes toward pornography, and sexual harassment among female university students. *Women's Health Issues, 11*, 87-94.
- Tyden, T., & Rogala, C. (2004). Sexual behaviour among young men in Sweden and the impact of pornography. *International Journal of STD & AIDS, 15*, 590-593.
- Vagi, K., Rothman, E., Latzman, N., Tharp, A., Hall, D., & Breiding, M. (2013). Beyond correlates: A review of risk and protective factors for adolescent dating violence perpetration. *Journal of Youth and Adolescence, 42*, 633-649.
- Vannier, S. A., Currie, A. B., & O'Sullivan, L. F. (2014). Schoolgirls and soccer moms: A content analysis of free "teen" and "MILF" online pornography. *Journal of Sex Research, 51*, 253-264.
- Watson, M. A., & Smith, R. D. (2012). Positive porn: Educational, medical, and clinical uses. *American Journal of Sexuality Education, 7*, 122-145.
- Weinberg, M., Williams, C., Kleiner, S., & Irizarry, Y. (2010). Pornography, normalization, and empowerment. *Archives of Sexual Behavior, 39*, 1389-1401.
- Ybarra, M., Strasburger, V., & Mitchell, K. (2014). Sexual media exposure, sexual behavior, and sexual violence victimization in adolescence. *Clinical Pediatrics, 53*, 1239-1247.
- Zhou, Y., & Paul, B. (2016). Lotus blossom or dragon lady: A content analysis of "Asian women" online pornography. *Sexuality & Culture, 20*, 1083-1100.

Author Biography

Eran Shor is an associate professor in the Department of Sociology, McGill University. In his work, he examines the causes and effects of political conflict and violence, focusing on state counterterrorist policies and human rights practices. His other research interests include inequality in media coverage of ethnic minorities and women, the effects of social stressors and social relationships on health, and the dynamics of sexual attraction.