Running head: AGGRESSION AND SEXUAL BEHAVIOR IN PORNOGRAPHY

Aggression and Sexual Behavior in Best-Selling Pornography: A Content Analysis

Update

Robert Wosnitzer, B.A. New York University 54 Barrow Street, #3B New York, NY 10014 212.741.6426 rjw246@nyu.edu

Erica Scharrer, Ph.D.
University of Massachusetts, Amherst
Department of Communication
309 Machmer Hall
Amherst, MA 01003
413.545.4765
scharrer@comm.umass.edu

Ana Bridges, M.S.*
Department of Psychology
University of Rhode Island
Chafee Building, Room 301
Kingston, RI 02881
401.814.2193
abri7799@postoffice.uri.edu

Chyng Sun, Ph.D. New York University 726 Broadway, 6th Floor New York, NY 10012 212.992.9147 ChyngS@aol.com

Rachael Liberman, B.A. New School for Social Research 1029 W. Wolfram, #1 Chicago, IL 60657 630.715.0877 rachaelliberman@gmail.com Aggression and Sexual Behavior in Best-Selling Pornography: A Content Analysis Update

Submitted to: **International Communication Association** Mass Communication Division November 1, 2006

Abstract

The pornography industry remains fast growing and lucrative, producing 13,000 adult video titles every year with annual sales of 12 billion dollars. This current study analyzes the content of the most popular pornographic videos, with the objectives of updating its depictions of aggression, degradation and sexual practices and comparing its results to both previous content analysis studies and the survey reported in *The Social Organization of Sexuality* (1994). The authors argue for a sampling method that can collect videos that are representative of mainstream, popular pornography on a national level, and for a definition that can best capture the sexualized aggression portrayed in such pornography. The current study indicates an unequivocal rise of aggression in pornography in both verbal and physical forms, compared to previous studies. The majority of the perpetrators are males; females are almost always the victims and they most often show pleasure after being aggressed against. When compared with the survey results reported in *The Social Organization of Sexuality*, our content analysis reveals that pornography frequently portrays sexual practices that are rare in real life and are desired by neither men nor women.

2

Aggression and Sexual Behavior in Best-Selling Pornography: A Content Analysis Update

The pornography industry remains fast growing and lucrative, with annual sales growing from eight billion dollars in 1996 (Stack, Wasserman, & Kern, 2004) to over twelve billion dollars by 2005 (AVN, 2006). Currently, more than 13,000 adult videos are produced annually in the United States, an increase of 60% over the same ten-year period (AVN, 2006). By comparison, the major Hollywood studios released 549 new titles in 2005, with revenues of eight-plus billion dollars (MPAA, 2006). Although consumers access pornographic materials in a number of forms—including the Internet, cable and hotel video on demand (VOD), the telephone, and magazines—videotapes (VHS) and digital video discs (DVD) remain the most popular. In fact, rentals at adult video stores increased from 75 million in 1986 to 665 million just ten years later (Stack et al., 2004), culminating in over 950 million adult videos rented annually by 2005 (AVN, 2006). Video rentals generated over four billion dollars in 2005, representing 34% of the total market for all adult products (AVN, 2006).

The research community has largely focused on the effects of pornography consumption, and hotly contested debates have surfaced regarding whether all pornography or whether particular types of pornography are cause for alarm. Comparatively few studies have attempted to document the content patterns in pornographic materials, leading to some unsubstantiated claims regarding the nature of the content. As Nina Hartley, a self-described feminist pornography performer and producer, states, "by focusing on one or two examples [that one] finds particularly heinous, [one] obscures the broader truth, which is that the marketplace of sexual entertainment contains products for almost every taste and orientation, including material made by and for heterosexual women and couples, lesbians and gay men" (Hartley, 2005, p. 1). Such claims of diversity are tested in the present study, which joins a relatively small number of

precursors in performing a systematic content analysis of top-circulating adult videos, thereby illuminating the current status of the themes and messages apparent in popular pornography, offering a vital update to the existing bodies of work available.

The study at hand takes up two central issues that have been particularly understudied in past research. First, at the heart of many of the controversies about pornography is the topic of aggression and degradation. In the study at hand, the presence of aggression in the films is examined, as are numerous indicators of what constitutes degradation as contextualized in the symbolic field of the text. The social significance of these issues is undeniable, as much of the pornography effects research has shown pornography is more likely to have a negative influence on the thoughts, attitudes, or behavior of audience members if it features aggression (e.g., Donnerstein, Linz, & Penrod, 1987; Linz, Donnerstein, & Penrod, 1987). Although the ability of degradation in pornography to lead consistently to negative effects has been debated, there is evidence that degradation encourages males' dominant behavior toward women (Mulac, Jansma, & Linz, 2002), evaluating their real-life partners more harshly (Jansma, Linz, Mulac, & Imrich, 1997), displaying more negative attitudes toward women or sex (Zillmann, 1989; Zillmann & Bryant, 1982) or increasing proclivity toward coercive sex (Check & Guloien, 1989).

Second, representations of sexuality, sexual practices and corresponding gender roles are explored to determine what specific sexual acts and practices are being privileged within the texts. The pornographic construction is especially illuminated when compared in the current study with "real life" practices and preferences recounted by Laumann and colleagues in survey work with the Social Organization of Sexuality (Laumann, Gagnon, Michael & Michaels, 1994).

Literature Review

Defining Pornography and Other Key Terms

One of the difficulties in conducting a content analysis of pornographic films is defining what constitutes such films as well as measuring key concepts such as violence, sexual violence, and degradation. The Attorney General's Commission on Pornography (1986) defined pornography as "material predominantly sexually explicit and intended for purposes of sexual arousal" (pp. 228-229). Pornography has also been defined as "any sexually explicit material to which access was limited, either by signs or physical structure, to adults" (Barron & Kimmel, 2000, p. 162). Still others have distinguished between varying levels of sexual explicitness, employing terms such as "soft core" and "hard core" to differentiate between nudity with the inference of sexual acts and the actual depiction of sexual acts (Bauserman, 1996). In the current study, the designation of the films examined as "adult films" was ready made by employing lists provided by the Adult Video News (AVN) to constitute the population.

There is also considerable disagreement regarding whether violence and degradation are two separate concepts or are one unified concept. Palys (1986), for example, treats violence and degradation separately (definitions appear in the next section), whereas Dines, Jensen, and Russo (1998) have considered degradation a type of violence and Cowan and colleagues (Cowan, Levy, Lee, & Snyder, 1988) have conceived of violence as a type of degradation. McKee (2005) chooses to use the word "objectification" to encompass the dehumanizing depiction of some characters in pornography, and has suggested violence is a subtype of (as well as a causal contributor to) objectification. In the study at hand, for the sake of clarity and precision in coding, aggression—a term used instead of "violence" to signify a range of acts both severe and relatively more minor—and indicators of degradation are operationalized separately, although we certainly acknowledge the relationship between the two concepts.

A review of content analysis research (McKee, 2005) reveals that degrading depictions in pornography are typically defined as those that encompass unusual or non-normative sexual practices (with the assumption that participation in these acts is intrinsically degrading to a character) and those that imply differences in status between or among characters. In the current study, the first element of degradation is explored. We examine the prevalence in adult films of particular acts that are infrequent or absent in their incorporation in "real life" sexual practice (e.g., "ass-to-mouth" sequence, defined as the act of penetrative anal sex immediately followed by the performance of oral sex on the male; Laumann et al. [1994]). We also examine other sexual acts and practices that have been considered degrading in past scholarship due to their very nature (e.g., ejaculation on the face in which the male is typically in control and expressing agency and the woman is typically the relatively powerless recipient [Schauer, 2005]).

Violence, too, has proven to be a difficult concept to define and measure in past content analyses. Typically, physical acts are necessary for most content analysts to code something as violent, although verbal aggression is sometimes measured as a separate item in the analysis, as well. Generally, definitions of violence include behaviors directed from one character to another that are intended to cause harm, with the recipient motivated to avoid such harm (Donnerstein et al., 1987). Sexual violence is most often treated as a particular type of violence or aggression that occurs within the context of a sexual interaction between or among characters.

In the current study, a fairly liberal definition of aggression is employed in order to document the full range of aggressive acts contained within the films, even those that appear innocuous because they are obscured by titillating and explicit sexual acts, pleasurable responses, and lack of consequences. Thus, the definition introduced by Mustonen and Pulkkinen (1993) is employed, with aggression defined as any action causing or attempting to cause physical or

psychological harm to oneself, another person, animal, or inanimate object, intentionally or accidentally whereby harm is understood as assaulting another verbally or non-verbally.

Furthermore, in the study at hand, aggressive acts are not only distinguished (e.g., verbal vs. physical) and tallied, but the responses of the characters to aggressive incidents and interactions are recorded. Based on the central tenets of social cognitive theory (Bandura, 1994, 2001), a crucial element in observed instances of aggression is whether the aggressive act is met with a favorable or an unfavorable response. A favorable response—for instance, one in which a character gets away with being aggressive rather than is punished or even one in which that character is rewarded after being aggressive—sends a permissive message about aggression to audiences. On the other hand, an unfavorable response—in which a character that is aggressive receives an admonition or punishment or in which the recipient of the aggression is shown to be realistically harmed—sends a prohibitive message about aggression to audiences. This central concept of aggression theory is taken up in the study at hand in analyses of what characters experience immediately in response to a violent incident or interaction.

Evidence from Prior Content Analyses

The closest parallels to the research at hand are previous content analyses of adult videos. Other media forms used to distribute pornography have also been subject to content analysis, including magazines (Malamuth & Spinner, 1980; Matacin & Burger, 1987; Scott & Cuvelier, 1993) and the Internet (Gossett & Byrne, 2002). Yet, we focus here on videos available for purchase or rental, as the present content analysis analyzes this media form.

In one of the earliest content analyses of pornographic videos, Palys (1986) examined adult and XXX-rated videos taken at random from the shelves of video and sex stores in Vancouver, Canada. An additional 25 videos were purposefully chosen by Palys to represent

extreme violent pornography, resulting in a sample of 58 adult and 92 XXX-rated videos. About half of the scenes in the videos contained sex, aggression, and/or sexual aggression, with the adult videos containing more aggression and more severe and graphic acts than the XXX-rated.

Cowan, Lee, Levy, and Snyder (1988) used catalog lists from seven adult movie rental stores to determine which X-rated titles were most widely available. Of the 121 films resulting, 45 were randomly selected to constitute the sample. Each scene was coded for numerous variables, including physical aggression (the use of physical force, upon which the recipient displays pain or discomfort), verbal aggression (derogatory or abusive language or tone), submission (a character initially resists and then appears to consent or even enjoy the act), and status inequalities. Results showed 54% of the films contained dominance (one participant controlled the sex act) and/or exploitation (one person used the other such as by employing an inducement for sex, with men most often in the more powerful role), 23% contained physical aggression, 20% verbal aggression, 14% submission, and 39% status inequalities.

Yang and Linz (1990) used 90 R-, X-, and XXX-rated videos drawn from the catalog of an adult video store to examine the prevalence of sexual, violent, and sexually violent behavior (defined as deception, coercion, or aggression occurring in the context of sexual activity). With behavior as the unit of analysis, they found violent sexual behavior occurred with nearly equal frequency in R-, X-, and XXX-rated videos. Rape was the predominant form of sexually violent behavior, followed by exploitative and coercive sexual relations and sadomasochism. Males were both the most frequent recipients and the most frequent initiators of sexual behavior in Rrated and X-rated videos. Interestingly, women were "recipients of violence about twice as often in R-rated videos as in X-rated videos and are recipients of sexually violent behaviors approximately one and a half times more often in R-rated videos than in X-rated videos" (p. 38). Prince (1990) studied 32 pornographic feature films released between 1972 and 1985. Three units of analysis were used: characters (N = 429), sex scenes (N = 248), and violent acts (N = 44). Men and women in the films were equally likely to initiate sex, possessed similar numbers of sexual partners, told their sexual partner what they wanted in the sex scenes to an equivalent degree, and appeared fairly equally often in states of dress or undress. There were 51 scenes with abuse (21% of all scenes, ranging from "verbal threats and insults" to physical restraint to killings, p. 36), 67% of which featured a male abuser and 78% a female victim. Importantly, Prince found "Victims of the abuse resist their ill-treatment only 50% of the time" (p. 37).

Duncan (1991) randomly selected 10% of the videos available in the adult section of a video store, finding 13.6% of all scenes contained violent acts (one third of which were depictions of rape) and 18.2% "degrading acts" (the vast majority of which were verbal abuse, followed by much less frequent instances of bondage and incest). Duncan also discovered that all but two of the violent scenes and every one of the degrading scenes were also sex scenes.

Cowan and Campbell (1994) examined race and gender depictions in 54 videos that indicated interracial interactions between White and Black characters by their title or cover. Most central to the present study, their variables included physical aggression (with six indicators: "hair pulling, rape, holding down, penis slapping, hitting, and pinching," p. 328), verbal aggression ("verbal orders, name calling, coercion, and racial insults," p. 328) and cues indicating inequality ("clear age difference, role and occupational inequalities [pimp/whore, master/slave, boss/secretary], other inequalities, and presentation of the actor as stupid" (p. 328). They found men perpetrated more aggressive acts toward women in general, with more aggression geared overall toward Black women than White women. White men were found to be more aggressive (both physically and verbally) toward Black women and Black men more

aggressive toward White women. White women were ejaculated on the face more than Black women (43% vs. 28%), a variable that has been argued to suggest degradation (Schauer, 2005).

Monk-Turner and Purcell (1999) used a systematic sample of 40 commercially available X- and XXX-rated videocassettes from a national chain in the local market. A total of 209 vignettes were coded for sexual violence, degradation or dehumanizing themes (status inequality, vulgar references to women, subordination, ejaculation on females, sex for exchange, and casual sex), and intimacy. Results show an intimacy theme, present in 29% of all vignettes, was more common than violence against women, present in 17%. Subordination was present in 39% of the vignettes and male actors ejaculating on female characters occurred in 85%. More violence was found in interracial interactions than in same-race interactions.

To test differences across separate forms of media, Barron and Kimmel (2000) analyzed sexually violent content in magazines, videos, and Usenet, an Internet newsgroup. Fifty cases from each medium (150 total) were selected, most through random selection procedures. Using scene as the unit of analysis, coders applied a list of specific violent behaviors (including, but not limited to, verbal aggression, pushing, pulling hair, slapping, punching, threatening with weapon, choking, and using a weapon). Results revealed that Usenet was most likely to contain violent behavior (occurring in 42.1% of scenes), followed by video (26.9%), and magazines (24.8%). Usenet also contained more cases of coercive sex (26.4%) than the other two media (videos, 4.9% and magazines, 4.8%). In videos and Usenet, women were shown as submissive and men as dominant, whereas in magazines female characters typically held dominant positions. Most of the violence in magazines and videos occurred in the context of a consensual relationship.

Finally, in the most recent content analysis, McKee (2005) chose the top 50 of the most popular adult movies in Australia from two mail-order catalogs' best-seller lists. Violence was

measured, including both physical (defined as acts intended to cause harm that was unwelcome to the recipient) and verbal acts (defined as those that would be insulting or derogatory outside the sexual context). Results found women initiated sex more than men. Women performed oral sex on men with much greater frequency than men performed oral sex on women. Women were more likely than men to speak to the camera and they spoke longer and women looked at the camera slightly longer than their male counterparts. No gender differences emerged in terms of whether characters had names. Violence was rare, occurring in only 1.9% of the scenes.

A number of conclusions can be drawn from the review of the literature. There is ample evidence of degrading portrayals of women in pornographic adult videos as evidenced by submissive roles and particular sex acts (such as receiving ejaculation on the face). Sexual acts tend to emphasize the pleasure of men over the pleasure of women. Interracial content tends to be accompanied by higher levels of aggression. Extreme forms of violence such as rape, weapon use, and depictions of murder appear to be uncommon (although not unheard of), yet there is indication that portrayals of coercive sex frequently depict the victim as ultimately becoming aroused. Despite these conclusions, it has proven difficult to assess the nature of the popular adult film market from previous content analysis studies. Some studies have exclusively selected particular genres for analysis, such as interracial texts (Cowan & Campbell, 1994), while other, more general studies (Monk-Turner & Purcell, 1999; Prince, 1990; Yang & Linz, 1990) have mostly relied on sample methods of convenience, thereby constraining generalizability.

Indeed, the vicissitudes of the pornography industry and its distribution techniques prove problematic to any content analysis study. Currently, over 13,000 sexually explicit titles are produced annually (AVN, 2006), employing diffuse and non-traditional distribution channels. Pornographic videos, unlike Hollywood films, are almost always viewed in the privacy of one's

home, using VHS/DVD players, cable pay-per-view or, more recently, through Internet transmission. Thus, pornographic videos are most commonly obtained through local retail video chains¹, or through the recent phenomenon of online adult-only video rental services. Reliable and consistent data that indicate the popularity of films have historically been difficult to obtain.

To overcome these obstacles and strengthen the representative nature of the sample, the population of titles for this research was drawn from a list of the most popularly rented VHS and DVD titles as reported monthly by Adult Video News (commonly referred to as AVN), an industry-accepted publication with over 20 years of publication history (AVN, 2005). With a large and representative sample, vital questions that remain unanswered in the past research will be taken up in the present content analysis. What portrayals of sex acts are prevalent in popular adult videos, and how are they assigned to male and female characters? How do these representations converge (or diverge) with actual, lived experience? How do levels and types of aggression and indicators of degradation in a generalizable sample of the most popular adult films today compare to those found in the former studies?

Method

Population and Sample

The sample of titles for this research was drawn from a list of the most popularly rented VHS and DVD titles as reported monthly by AVN² (Appendix A). Each month, AVN issues a report, titled "Top 250 Rented VHS & DVD's," which is culled from sales and rental reports provided by independent retail video rental retail stores throughout the United States, including some online adult-only rental services³. For the study at hand, the top 50 titles from December 2004 through June 2005 were selected, providing a total of 300 titles. Duplications were omitted, resulting in a final population of 275 titles. These 275 titles were then subjected to random

generation, and the final sample was created by taking the first 50 titles from the list of randomly generated titles. Certain films were omitted for their idiosyncratic content (e.g. "gang bang" or "virtual sex" films)⁴. The final list of titles appears as Appendix I. The sample, therefore, is meant to be generalized to the top titles of this six-month period.

Definitions of Concepts and Operationalization

The unit of analysis is the *scene*, defined through the demarcation of the DVD menu, taken from the "scene selections" option available on the main menu of most (if not all) adult DVDs. In the rare instance that the DVD recording did not contain clear scene demarcations, coders were instructed to record a scene, through visual and auditory cues, that showed primary characters sexually interacting in a particular setting with a finite temporality. A new scene would be recorded as such if the primary characters change, or if the setting changes, or if a temporal break occurs. The second unit of analysis was each aggressive *act*. We elaborate on this in a subsequent section.

Coding Primary Characters. Primary characters were recorded for each scene. Primary characters were defined as only those characters engaged in explicit sexual interaction present within the scene. Characters engaged exclusively in masturbatory behavior, general "observers," or any other persons not explicitly engaged in sexual activity were not recorded. Primary character's gender and race was recorded, using obvious and unambiguous visual cues. Gender was recorded as "male," "female" or "other," where "other" could be trans-gendered people, animals, etc. Primary character's race was recorded as either "White," "Black," "Asian," "Latino/a," "Other" or "Unknown," respectively.

Other Aspect of Scene Visible. Coders were instructed to record the presence of the general, observable scene characteristics present. These variables included presence of condoms;

uses of sex toys or ordinary objects used sexually; and/or discussions of sexually-transmitted diseases, pregnancy, or safe sex. If any one of these elements was observed, it was recorded.

Ejaculation Position. Pornography's preoccupation with male ejaculation has been one area of concern, and debate, for scholars. While some theories contend that the visibility of the male ejaculation is "proof" of sexual pleasure and orgasm (Williams, 1999, p. 119), other scholars have argued that the location of male ejaculation is a primary component of female degradation that links the male sexual imagination with misogyny and objectification (Schauer, 2005, p. 54). Thus, coders were instructed to mark the "location" of the female character's body where the ejaculation occurred, using the following choices: mouth, face, breast, stomach, buttocks, internal, vagina (external), or "other." In the event of multiple, simultaneous ejaculations, coders were instructed to record "other" and specify the most predominant location, if possible, and notate "multiple locations."

Coding Sex Acts. While sexual acts, in isolation, may not be considered degrading or subordinating in and of themselves, the ways in which "sexuality portrays subordination" in pornography is of concern (Cowan & Dunn, 1994, p. 13), as are the ways in which the sexual acts represented in pornography correspond to "real life" sexual practices (Lauman et al, 1994). Hence, the types of sexual acts present within the scene were recorded. Coders were instructed to use the obvious visual cues to determine the presence of the following sexual acts: male-to-female oral sex, female-to-male oral sex, female-to-female oral sex, male-to-male oral sex, vaginal penetration with penis, vaginal double-penetration (simultaneous vaginal intercourse between one female and two males), simultaneous vaginal and anal penetration (one female being penetrated simultaneously, anally and vaginally, by two males), group sex (where numerous characters simultaneously engaged in various sexual acts), anal penetration with

14

penis, anal double-penetration (one female being anally penetrated by two separate males, simultaneously), and ass-to-mouth sequence (where one or more males anally penetrate a female immediately followed by the female performing oral sex on the male).

Coding Aggression. Acts of Aggression within each scene were recorded, using the PAT technique as identified in the National Television Violence Study (NTVS, 1998). The PAT technique tallies such instances by counting as a unique act each time the perpetrator, victim, or actual physical or verbal action (i.e., aggressive act) changes during the course of the scene; where P = perpetrator of the aggressive act, A = aggressive act, and T = target of aggressive act. An individual instance of aggression is recorded only when one of these three components changes (subsequent to initiation of the first aggressive act). For example, if a scene contains three characters (Character X, Y or Z) where Character X (the perpetrator, or P) strikes (the aggressive act, or A) Character Z (the target, or T), an aggressive act (the act, or A) is initiated and recorded. If *Character X* continues to strike *Character Z*, only the initial aggressive act is recorded once, regardless of how many times Character X strikes Character Z. If Character X (still the perpetrator, P) then kicks (the act) Character Z (still the target, T), a new instance of aggression is recorded, as the action materially changed. If *Character X* (the perpetrator) verbally aggresses (a new aggressive act, A) Character Y (now, a new target, T), another new act is noted. If one or more component of PAT changes, a new instance of aggression is recorded.

For the purposes of this study, the definition of violence and/or aggression is deployed as defined by Mustonen and Pulkkinen's research (1993). *Aggressive acts*, using auditory and visual cues employing the PAT technique, were recorded according to specific sub-type, either *Verbal* or *Physical*. The number of acts in which one character *physically* aggressed against another, defined as pushing/shoving; biting; pinching; pulling hair; spanking; open-hand

slapping; gagging (defined as when an object or body part, e.g. penis, hand, is inserted into a character's mouth, visibly obstructing breathing); choking (when one character visibly places his/her hands around another character's throat with applied pressure); threatening with weapon; kicking; closed-fist punching; bondage/confining; using weapons; and torturing, mutilating or attempting murder, were recorded. The number of acts of *verbal aggression*, defined as name calling/insults; threatening physical harm; and/or using coercive language, were recorded.

The genders of the perpetrator and victim were recorded, consistent with each aggressive act using the obvious visual cues. *Gender of Perpetrator* was recorded as either "male," "female," "other," or "unknown" if the perpetrator was not readily visible. *Gender of Victim* used the same scheme, while also adding "self" in order to record those aggressive acts that were initiated and perpetrated on the self.

Response of Victim to Specific Acts of Aggression. Victims' responses to the specific aggressive acts were recorded for each instance of aggression. For the purposes of this study, recording how victims respond when aggressed against was of primary concern. Consistent with theories of learned behavior (Bandura, 1994, 2001), the ways in which one responds to aggression and violence may increase that behavior's naturalization and acceptance. Behaviors that are met with positive consequences are considered to be reinforced, while behaviors that are punished or met with negative consequences are less likely to occur in the future as observers learn from media models. As a result, in the present study the victims' responses when aggressed were recorded as follows:

Victim Expresses Pleasures or Responds Neutrally. In this instance, the victim, verbally or physically, expressed pleasure or did not appear affected in any manner by the aggressive act and the scene continued without interruption.

Victim Expresses Displeasure & Perpetrator Ignores. The victim, verbally or physically, expressed displeasure at being aggressed against which the perpetrator ignored.

Victim Expresses Displeasure & Perpetrator Acknowledges with Positive Act. The victim, verbally or physically, expressed displeasure at being aggressed against and the perpetrator either stopped the aggressive action or expressed remorse.

Victim Expresses Displeasure & Perpetrator Acknowledges with Negative Act. The victim, verbally or physically, expressed displeasure at being aggressed against and the perpetrator increased the aggressive action(s), either in severity or frequency, or continued with other aggressive acts.

Positive Behaviors. Rather than attempt to define these a priori, coders were provided with some examples of positive behaviors as identified by various sex and relationship researchers (cf. Denney, Field, & Quadagno, 1984; Guo, Ng, & Chan, 2004), such as kissing, hugging, and/or giving one another compliments, and coded for their presence. Additionally, any positive behaviors represented within the scene were qualitatively described with as much as detail as possible.

Intercoder Reliability

The sample was coded by three female coders of differing age, race, and educational backgrounds. All were highly trained in the method and coding scheme. Prior to coding the actual sample, the authors coded a randomly chosen pornographic film to devise the method and coding schemes. Coders were given an initial training session conducted by one of the authors, where one pilot video was viewed and the coding scheme discussed in detail. The coders then independently coded the first five titles from the sample (for a total of 26 scenes), and reliability results were computed. After the initial round yielded unacceptable rates of agreement, minor

changes and definitional clarifications were executed. The coders re-coded the same five films, reaching acceptable levels of agreement on nearly all variables. Levels of agreement concerning the recording of aggression remained problematic and further definitional clarifications were made. When disagreements were experienced, it was discussed in detail whether or not it was an instance that required coding. On the third round of pilot testing, using Holsti's coefficient of reliability for all variables, it was determined that the overall composite level of agreement across all variables and all pairs of coder comparisons was .958 (Appendices B and C). Having established an acceptable rate of agreement in the pilot data, the three coders coded the remainder of sample films using the same techniques and operational definitions from the third round of pilot testing.

Results

Characters

The number of main characters that were portrayed in a given scene ranged from 1 to 19, with an average of 3.23 (SD = 2.09). Males comprised 53.1% of the main characters. The majority of characters (82.2%; n = 804) were not of a visually-recognizable minority group; 8.8% (n = 78) were African-American, and only 2.5% (n = 24) were Asian.

Sexual Health & Sexual Devices

Of the 304 scenes analyzed, only one (0.3%) showed characters discussing pregnancy concerns or the risks of sexually transmitted diseases (STDs). Condoms were used in 10.9% (n = 33) of scenes. Sexual devices (such as vibrators) were used in 19.1% of scenes analyzed in the current study, most frequently in scenes with female-to-female sex acts.

Aggression in Popular Pornography

On the whole, the pornographic scenes analyzed in this study were aggressive; only 10.2% (n=31) of scenes did not contain an aggressive act. Across all scenes, a total of 3,376 verbal and/or physically aggressive acts were observed. On average, scenes had 11.52 acts of either verbal or physical aggression (SD=15.04), and ranged from none to 128. Physical aggression (M=9.31, SD=12.30) was much more common than verbal aggression (M=2.13, SD=4.01), occurring in 88.2% (n=268) of the scenes, while expressions of verbal aggression occurred in 48% (n=146) of the scenes. By far the most common verbally aggressive act was name calling (e.g., "bitch," "slut;" 97.2% of verbally aggressive acts; n=614). Spanking (35.7%; n=980), gagging (27.7%; n=759), and open-hand slapping (14.9%; n=408) were the most frequently observed physically aggressive acts. Other physically aggressive acts recorded included a character's hair being pulled (10.1%; n=276), choking (6.7%; n=184) and some form of bondage or confinement (1.1%; n=30).

Women were overwhelmingly the victims of such aggression. Across all acts of aggression – both physical and verbal – 94.4% (n = 3,191) of the aggressive acts recorded were directed towards women (Table 1). Men were the perpetrators of aggression more than twice as often as women, committing 72.7% (n = 2,452) of the aggressive acts recorded. In contrast, women were perpetrators of 27.0% (n = 911) of all aggressive acts. Even when women were perpetrators, their targets were frequently other women (16.7%; n = 563). Men were victims of only 4.0% (n = 134) of aggressive acts perpetrated by women. Male-to-male aggression was present in only 0.6% (n = 19) of the recorded instances, and was most often verbal (only 4 instances of physical aggression with male perpetrator and male victim were recorded).

There were significant differences in the types of aggressive acts males and females experienced [$\chi^2(13) = 234.51$, p<.001]. Women were significantly more likely to be spanked, choked, and gagged than men. Aggregately speaking across the sample spectrum, women were verbally insulted or referred to in derogatory terms 534 times, while men experienced similar verbal assaults in only 65 instances. Women were spanked on 953 occasions, visibly gagged 756 times, experienced an open hand slap 361 times, had their hair pulled or yanked on 267 separate occasions, and were choked 180 times. Men, on the other hand, were spanked only 26 times, experienced an open hand slap in 47 instances, and, for all other aggressive acts, were aggressed against fewer than 10 times.

When aggressed against, 95.2% (n = 3196) of victims responded with either expressions of pleasure (encouragement, sexual moans, and so forth) or neutrally (e.g., no change in facial expression or interruption to actions). There was a significant difference between female and male victims' responses to aggressive acts [χ^2 (1) = 51.31, p<.001]. Females were significantly more likely to express pleasure or neutrality when aggressed against (95.9%; n = 3049) than men (84.0%; n = 147). In contrast, men were four times more likely to show displeasure when aggressed against (16.0%, n = 28) compared to women (4.1%; n = 132).

Positive Behaviors

Even when using a liberal definition, only 9.9% (n = 30) of scenes contained positive behaviors. Most of the positive behaviors were kissing; but laughing, embracing, caressing, verbal compliments, and statements of "making love" or "I love you" were also noted. Scenes that contained positive behaviors were significantly less likely to contain aggression [t (110.88) = 6.31, p < .001]. On average, scenes with positive behaviors contained 4.00 acts of aggression (SD = 5.04), while scenes without contained three times this amount (M = 12.36, SD = 15.56).

Sexual Acts: A Comparison with "Real Life" Preferences and Practices

The most frequent sexual act portrayed in the sample was female-to-male oral sex, appearing in 90.1% (n = 274) of the scenes coded. Vaginal intercourse was the second-most frequent sexual act, appearing in 86.2% (n = 262) of the scenes. Anal sex appeared in 55.9% (n = 356) of the scenes, with 41.1% (n = 125) "ass-to-mouth," 18.1% (n = 55) simultaneous vaginal and anal penetration, and 2.0% (n = 6) anal double penetration. To our knowledge, no previous content analysis study of pornography has coded the "ass-to-mouth" sequence. Portrayals of homosexuality occurred only for women, with female-to-female oral sex taking place in 22.7% (n = 69) of the scenes.

Respondents in the Social Organization of Sexuality's survey (Laumann et al., 1994) reported engagement with and a preference for a variety of sexual acts. These data allow for comparisons to be drawn between actual reported behavior and the sexual world portrayed in pornography (Table 2). American men and women overwhelmingly both prefer (83.8% of men; N = 1,396; 76.8% of women; N = 1,730) and engage in (95.0% of men; 97.0% of women) vaginal intercourse, rendering it a "near universal practice" (Laumann et al, 1994, p. 97). The practice of and preference for oral sex proves more complex. Interestingly, 45% of men and 28.8% of women surveyed reported a preference for receiving oral sex from their partner. In contrast, 33.5% of men and 16.5% of women reported preferring to perform oral sex on their partners. However, larger numbers reported having engaged in oral sex at least once in their lifetime. A full 78.7% (N = 1,038) of men and 73.1% (N = 1,660) of women experience being the recipient of oral sex from their sexual partners. Similarly, 76.6% (N = 1,321) of men and 67.7% (N = 1,661) of women report having performed oral sex on their partner over a similar time span. Anal intercourse was reported to be sexually appealing to only 4.1% (N = 1,350) of men and 1%

(N = 1,724) of women, yet 25.6% (N = 1,309) of men and 20.4% (N = 1,658) of women report engagement in anal sex at least once during their lifetime.

More scenes in the current sample of adult films contain female-to-male oral sex (90.1%) than male-to-female oral sex (53.9%). As indicated above, both men and women surveyed prefer receiving oral sex rather than performing it on their partners, indicating that sexual preferences and pleasure are skewed more towards men than women in pornography. The popular pornography sampled in our study over-emphasizes anal penetration, as well, present in more than half of the scenes (55.9%, N = 304) and appearing more frequently than portrayals of maleto-female oral sex (53.9%; n = 164). As reported above, a small minority of both men and women surveyed found the act of anal sex appealing, while slightly higher numbers reported past engagement in the act. While these "real life" instances may be interpreted in a number of ways, Laumann et al (1994) clarify the practice of anal sex as a largely idiosyncratic event, stating, "Anal intercourse, then, is not only far less frequently experienced over the life course [than other sexual practices], but also far less likely to become a common or even an occasional sexual practice once it has been experienced" (p. 107). The data available from Laumann and colleagues (1994) precludes the opportunity to compare the "non-normative" acts present in pornography, as questions about ass-to-mouth, double anal penetration, and simultaneous anal and vaginal penetration were simply not posed.

Male Ejaculation

Pornographic scenes nearly always ended with visible male ejaculation – and invariably occurred on or within a female character's body. The male ejaculation almost always visibly occurred outside of the female recipient's vagina (96.7%; n = 295), and most frequently in her mouth (58.6%; n = 178). Two locations where ejaculation was received on the female body that

can be considered as evidence of degradation were relatively uncommon in the sample but still present, in multiple locations (12.2% of scenes; n = 37) and on the face (3.9%; n = 12). Table 3 provides a more precise breakdown of the male ejaculation position. There are no data contained in the Social Organization of Sexuality (Laumann et al, 1994) to compare with the ejaculation position data in these pornography scenes.

Discussion

The majority of the studies extant on pornography have focused exclusively on either its content or its effects. While this study provides an important update to content analyses of adult videos, we further argue that through examining the most widely circulated pornography, our study may provide a link between content and effects since the most popular content arguably has the most potential impact on society. We concur with McKee's (2005) argument that it is important to analyze not only what is available to consumers but also what they are *really* watching. In the past, although researchers attempted to sample popular titles, their methods were occasionally ad hoc, subjective, or unsystematic. In order to achieve objectivity and reflect national distribution, we randomly selected titles from the *Adult Video News's* best selling list of compiled monthly sales records from retail and online stores across the United States. Our content analysis, therefore, describes material not only recently produced but also widely circulated and sought out by consumers.

The major contribution of this study is its updated reporting and refined analysis of aggression and indications of degradation. Regarding the latter point, although past researchers suggest that some non-normative sexual practices may be intrinsically degrading to a character, we believe that the meaning of a sex act is contextual and may not be predetermined. Therefore, we simply recorded the specific sex acts in order to achieve precision and objectivity, allowing

visibility of the contextual field for interpretation. One specific sexual act we examined was location of ejaculation. Cowan and Campbell (1994) define men ejaculating on women's face or mouth as degrading and found that a significant number of female characters (32%) received such treatment. Monk-Turner and Purcell (1999) consider all male ejaculation on a woman's body degrading and observed that the majority of the scenes contain such depictions (85%). If using Cowan and Campbell's definition of degradation as indicated through the ejaculation position, our results yield an assertion that a significant number of the scenes are degrading (male ejaculation in or on a woman's face or mouth total 62%). According to Monk-Turner and Purcell, almost all the scenes in our analysis are degrading, as they nearly all demonstrated ejaculation on some portion of the woman's body. Either way, our study suggests a significant increase in the depiction of women being degraded compared with findings from the previous studies. Furthermore, in what appears to be a first in pornography content analysis research, we found an additional particular sex act that can arguably be placed in the category of degradation: the "ass-to-mouth" sequence, which appeared in nearly half of the scenes. In an analysis of the meaning of that act, Dines (2006) states:

One of the newer marketing ploys in gonzo is called ATM (ass to mouth),⁷ where the male performer anally penetrates a woman and then sticks his penis into her mouth, often joking about her having to eat shit. In this pornography the code of debasement is most stark. There is no apparent increase in male sexual pleasure by moving directly from the anus to the mouth outside of the humiliation that the woman must endure. (p. 286)

If we accept Dines' argument and add "ass-to-mouth" to the category of degradation, the frequency of women being degraded in current popular pornography is phenomenally higher in our findings than in any of the previous studies.

Our study also indicates an unequivocal rise of aggression in pornography. Past estimates have ranged from 13.6% to 27.9% of scenes in adult films containing aggression (Barron & Kimmel, 2000; Cowan et al., 1988; Duncan, 1991; Monk-Turner & Purcell, 1999). Our study found 48% of scenes portrayed verbal aggression and a full 88.2% portrayed physical aggression in some form. If we combine both physical and verbal aggression, our findings indicate that nearly 90% of the scenes contained at least one aggressive act, with an average of 12 acts of aggression per scene. The prevalence of aggression and violence in our content analysis has repercussions for potential effects on viewers (e.g., Donnerstein et al., 1987; Linz et al., 1987).

When we compare our results with those of former studies, we see that although aggression amounts do not increase linearly over time, aggression rates have nearly tripled from earlier content analyses. There are three possible explanations for this increase. First, it is possible that in the past two decades, mainstream pornography has become much harsher and more aggressive compared to samples in previous studies. Second, this dramatic increase may indicate the possibility of prior studies' limitations in capturing the content of popular pornography due to sampling limitations. Third, definitions of aggression and methods of coding may have varied across studies. We do not believe that this third explanation fully captures the increased aggression rates we found in this study, since virtually all previous studies have used similar definitions of aggression as those that we employed, including coding for the presence of "playful" spanking, consensual "rough play" and/or consensual sadomasochistic practices (with the exception of McKee, 2005).

The finding that female victims tend to respond to being aggressed in a neutral or violence-reinforcing manner is also an important finding from the present study. Social cognitive theory (Bandura, 1994, 2001) suggests that whether an individual will model aggression learned

from viewing a media text depends in large part on whether or not the act they observed was rewarded or punished. Our findings show that aggression in the context of adult videos almost never meets with some sort of negative circumstance or comeuppance for the perpetrator. Rather, it is either merely absorbed by the characters (and therefore the perpetrator "gets away with it") or it is reinforced by a favorable reception from the victim. By extension, viewers of pornography are learning that aggression during a sexual encounter is pleasure-enhancing, and may be more likely to aggress against their own, real-life partners (Bandura, 1994, 2001).

Another contribution of the current study is its comparison of content patterns in mainstream pornography with the actual practices and preferences of adults according to survey results conducted by Laumann and colleagues (1994). While we draw several possibilities from that analysis, any conclusions must be tempered with a renewed call for detailed sociological research updating "real life" sexual practices and preferences, as Laumann and colleagues' data is dated by over 10 years for comparison purposes. Nevertheless, the world of pornography seems to differ dramatically from the stated sexual preferences of U.S. adults. This is perhaps not surprising if we consider the world of pornography to be fantasy-oriented rather than realistic, presenting an interpretation of consumer's idealized vision or "fantasy" of sexual relations rather than ones more likely to be experienced. Second, it appears that the majority of the content of the videos sampled is skewed toward males' sexual preferences over that of females as evidenced by the frequent sexual acts of female-to-male oral sex, the erstwhile visibility of male ejaculation, and the preponderance of specific configurations of anal sex with females as recipients.

Although this research offers advancements in sampling and relatively novel aspects of research design, nonetheless it has some limitations. First, our three coders were all female. Past research has indicated that women tend to hold differential views of pornography in general and

of violence and degradation portrayed in pornography in particular, compared to men (Cowan & Dunn, 1994). Yet, recently Glascock (2005) found no differences in ratings of degradation between males and females when they were exposed to 20-30 minutes of a pornographic film. Nonetheless, a mixture of male and female coders may be a more ideal configuration.

Second, despite our finding that aggression is much more common than had been claimed in past research, employing the PAT technique is actually a fairly conservative strategy for measuring the presence of aggression. The PAT technique does not distinguish between multiple instances of an act with the same victim and perpetrator and a single instance of such an act. For example, a perpetrator slapping a victim once would be coded in exactly the same fashion as a perpetrator slapping a victim multiple, consecutive times. Thus, importantly, our account of the amount of aggression in widely circulating adult videos can be construed as an underestimation.

Prince (1990) advocates for the use of content analyses to engage in the inquiry of a text's ideological values as well as to integrate quantitative measures with qualitative ones. He thus states, "content analysis can provide information about the distribution of codes across a body of material, and it may be an important means of evaluating claims regarding the ideological content of texts and of enabling theory to dialectically move forward" (p. 40). We agree with Prince's vision and particularly find the additional method of qualitative analysis valuable, if not imperative, in examining the definition and operation of 'violence' and 'degradation' because meanings need to be generated from a contextual field and cannot exist in isolation (Dines et al., 1998). Audience research is clearly needed to better understand how the messages are interpreted. Pornographers often argue that the sexual practices, behaviors and attitudes researchers have defined as degrading or violent are desired by the female performers or even women in real life. We need empirical data to understand what women really think about

the representations in pornography- do they find "ejaculating in a woman's mouth" degrading or pleasurable? Audience research studies on pornography users are also crucial for understanding both why certain representations are so popular and what meanings audiences are actively generating from their reception. Regardless of its limitations and the directions of future research, the current study demonstrates clearly that the world depicted in the content of adult videos contains substantial amounts of aggression, numerous indications of degrading depictions of women, and a high occurrence of sexual acts in which most adults in the "real world" may not prefer to engage.

Footnotes

¹According to *AVN*, 34% of pornographic texts are consumed through video sales and rentals, 6% through cable pay-per-view, 4% through hotel in-room video on demand, and 20% through Internet sources. Clearly, video sales and rentals are the preferred method of consumption in the U.S. (AVN, 2006).

- ² AVN, while not a "traditional" research publication, is the leading reporter of record for the adult industry, with a monthly circulation of over 25,000 (ww.avnid.com).
- ³ As related to one of the authors in a telephone conversation with *Adult Video News* on August 1, 2006.
- ⁴ For example, the videos 65 Guy Cream Pie, Virtual Sex with Rocki Rhodes, and several iterations of Cum Buckets (#1, #4) were omitted. 65 Guy Cream Pie, a "gang-bang" film, is a film that contains only one (long) scene, with 65 males having sex with 1 female; Virtual Sex with Rocki Rhodes is a "virtual point-of-view" film, where the female character sexually "interacts" with an unknown male/camera; finally, the Cum Buckets series of films, classified as "wall-to-wall", are out-takes of clips taken from other previously produced pornographic videos, and only depict the moment of male ejaculation repeatedly.
- ⁵ For vaginal intercourse, Laumann et al (1994) provide scant statistical data, stating, "Vaginal intercourse was excluded from the table [detailing sexual acts] owing to the lack of notable variation in its distribution across the master status variables" (p.97).
- ⁶ The coding scheme deployed in our study did not require coders to count the ways that sex toys were used in the scenes. However, the coders qualitatively described numerous instances of sex toys, primarily in their function as penetrative objects within the "all-girl" scenes. The coders reported a frequent presence of vaginal and anal penetration with sex toys, which is not included in the statistical data. If we were to include this data, it is likely that these numbers would report even higher occurrences.
- ⁷ For a review of popular ATM movies, see http://theatmmachine.thebestporn.com/ (last visited Dec. 26, 2005).

References

- Attorney General's Commission on Pornography. (1986). Final Report, Department of Justice.

 Washington, DC: U.S. Government Printing Office.
- AVN. (2005). Top 250 VHS & DVD rentals. Retrieved July, 2005, from http://www.avn.com/index.php?Primary_Navigation=Charts
- AVN. (2006, January). State of the U.S. adult industry. Adult Video News, 22, 30-31.
- Bandura, A. (1994). Social cognitive theory of mass communication. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research*. (pp. 121-154). Hillsdale, NJ: Erlbaum.
- 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*, 8, 161-168.
- Bauserman, R. (1996). Sexual aggression and pornography: A review of correlational research.

 *Basic and Applied Social Psychology, 18, 405-427.
- Check, J. V. P., & Guloien, T. H. (1989). Reported proclivity for coercive sex following repeated exposure to sexually violent pornography, nonviolent dehumanizing pornography, and erotica. In D. Zillmann & J. Bryant (Eds.), *Pornography: Research advances and policy considerations* (pp. 159-184). Orlando, FL: Academic Press.
- Cowan, G., & Campbell, R.R. (1994). Racism and sexism in interracial pornography: A content analysis. *Psychology of Women Quarterly*, *18*(3), 323-338.
- Cowan, G., & Dunn, K. F. (1994). What themes in pornography lead to perceptions of the degradation of Women? *Journal of Sex Research*, 31(1), 11-21.

- Cowan, G., Lee, C., Levy, D., & Snyder, D. (1988). Dominance and inequality in x-rated videocassettes. *Psychology of Women Quarterly*, *12*, 299-311.
- Denney, N.W., Field, J.K., & Quadagno, D. (1984). Sex differences in sexual needs and desires.

 *Archives of Sexual Behavior, 13, 233-245.
- Dines, G. (2006). *The white man's burden: Gonzo pornography and the construction of black masculinity*. Paper presented at Sex for Sale at Yale University in New Haven, Conn.
- Dines, G., Jensen, R., & Russo, A. (1998). *Pornography: The production and consumption of inequality*. New York: Routledge.
- Donnerstein, E., Linz, D. G., & Penrod, S. (1987). *The question of pornography*. New York: Free Press.
- Duncan, D. F. (1991). Violence and degradation as themes in "adult" videos. *Psychological Reports*, 69, 239-240.
- Glascock, J. (2005). Degrading content and character sex: Accounting for men and women's differential reactions to pornography. *Communication Reports*, 18(1), 43-53.
- Gossett, J. L., & Byrne, S. (2002). 'Click here': A content analysis of internet rape sites. *Gender and Society*, 16(5), 689-709.
- Guo, Y.N., Ng, E.M.L., & Chan, K. (2004). Foreplay, orgasm and after-play among Shanghai couples and its integrative relation with their marital satisfaction. *Sexual and Relationship Therapy*, 19, 65-78.
- Hartley, N. (2005). Feminists for porn. Retrieved February 2, 2005, from http://www.counterpunch.org/hartley02022005.html

- Jansma, L. L., Linz, D. G., Mulac, A., & Imrich, D. J. (1997). Men's interactions with women after viewing sexually explicit films: Does degradation make a difference?

 *Communications Monographs, 64(1), 1-24.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.
- Linz, D. G., Donnerstein, E., & Penrod, S. (1987). The findings and recommendations of the Attorney General's Commission on Pornography: Do the psychological facts fit the political fury? *American Psychologist*, 42, 946-953.
- Malamuth, N., & Spinner, B. (1980). A longitudinal content analysis of sexual violence in the best-selling erotic magazines. *The Journal of Sex Research*, 16(3), 226-237.
- Matacin, M. L., & Burger, J. M. (1987). A content analysis of sexual themes in Playboy cartoons. *Sex Roles*, *17*(3/4), 179-186.
- McKee, A. (2005a). The need to bring the voices of pornography consumers into public debates about the genre and its effects. *Australian Journal of Communication*, 32(2), 71-94.
- McKee, A. (2005b). The objectification of women in mainstream pornographic videos in Australia. *The Journal of Sex Research*, 42(4), 277-290.
- Michael, R. T., Gagnon, J. H., Laumann, E. O., & Kolata, G. (1994). *Sex in America: A definitive survey*. Boston: Little Brown and Company.
- Monk-Turner, E., & Purcell, H. C. (1999). Sexual violence in pornography: How prevalent is it? *Gender Issues*, 17(2), 58-67.
- MPAA. (2006). *Research & statistics*. Retrieved September 28, 2006 from http://www.mpaa.org/researchStatistics.asp

- Mulac, A., Jansma, L. L., & Linz, D. G. (2002). Men's behavior toward women after viewing sexually-explicit films: Degradation makes a difference. *Communication Monographs*, 69(4), 311-329.
- Mustonen, A., & Pulkkinen, L. (1993). Aggression in television programs in Finland. *Aggressive Behavior*, 19(3), 175-183.
- Nagle, J. (1997). Whores and other feminists. New York: Routledge.
- NTVS. (1998). National television violence study: Executive summary. 3, 54.
- Palys, T. S. (1986). Testing the common wisdom: The social content of video pornography. *Canadian Psychology*, 27(1), 22-35.
- Prince, S. (1990). Power and pain: Content analysis and the ideology of pornography. *Journal of Film and Video*, 42(2), 31-41.
- Schauer, T. (2005). Women's porno: The heterosexual female gaze in porn sites "for women". Sexuality & Culture, 9(2), 42-64.
- Scott, J. E., & Cuvelier, S. J. (1993). Violence and sexual violence in pornography: Is it really increasing? *Archives of Sexual Behavior*, 22(4), 357-371.
- Stack, S., Wasserman, I., & Kern, R. (2004). Adult social bonds and use of internet pornography. Social Science Quarterly, 85, 75-88.
- Williams, L. (1999). *Hardcore: Power, pleasure, and the 'frenzy of the visible'*. Berkeley: University of California Press.
- Yang, N., & Linz, D. (1990). Movie ratings and the content of adult videos: The sex-violence ratio. *Journal of Communication*, 40(2), 28-42.
- Zillmann, D. (1989). Effects of prolonged consumption of pornography. In D. Zillmann & J. Bryant (Eds.), *Pornography: Research Advances and Policy Considerations*

(pp. 127-158). Hillsdale, NJ: Lawrence Erlbaum.

Zillmann, D., & Bryant, J. (1982). Pornography, sexual callousness, and the trivialization of rape. *Journal of Communication*, 32(4), 210.

Table 1 Perpetrators and Victims of Aggression, by Gender

		% of Total
Gender	n	Aggressive Acts
Male Perpetrator		
Female Victim	2406	71.5
Male Victim	19	0.6
Self Victim	17	0.5
Unknown (e.g. off-camera)	2	0.1
Female Perpetrator		
Female Victim	565	16.7
Male Victim	135	4.0
Self Victim	213	6.2
Unknown	5	0.1
(Other)	7	0.2
(Missing)	7	0.2

Table 2 Sexual Acts Portrayed in Sample vs. Preferences/Practices

		Males		Females	
Sexual Act	% of Scenes Portraying Act	% Very Appealing	% Engage in Life	% Very Appealing	%Engage in Life
Female-to-Male Oral	90.1	45.0	78.7	16.5	67.7
Vaginal Penetration	86.2	83.8	95.0	76.8	97.0
Anal Penetration	55.9	4.1	25.6	1.0	20.4
Male-to-Female Oral	53.9	33.5	76.6	28.8	73.1
Ass-to-Mouth Sequence	41.1				
Female-to-Female Oral	22.7			2.9	
Simultaneous Vaginal/Anal	18.1				
Group Sex	11.5	13.3		1.1	
Anal Double Penetration	2.0				
Vaginal Double Penetration	1.6				
Male-to-male Oral	0.0	3.2			

Table 3

Ejaculation Position

Location	n	% of Scenes
Mouth	178	58.6
Multiple Locations	37	12.2
Breasts	21	6.9
Face	12	3.9
Internal, Vagina	9	3.0
Stomach	4	1.3
Buttocks	4	1.3
External, Vagina	1	0.3
Other (e.g. anus, thighs, feet)	36	11.8
None	2	0.6

Appendix A

VIDEO TITLE	PRODUCTION COMPANY	YEAR
Angel Plush*	Ninn Worx	2004
Beautiful Girls 18*	Evil Angel	2004
Belladonna's Fucking Girls	Evil Angel	2004
Krystal Method*	Club Jenna	2004
Teen Fuck Holes*	Platinum X Pictures	2004
Bet Your Ass	Evil Angel	2004
Big Booty White Girls	Evil Angel	2004
Black Poles Cumming in White Hol		2004
Swallow My Squirt	Vivid Video	N/A
Jack's Playground 15	Digital Playground	2004
Seed of Seymore	Pure Play Media/Seymore Butts	2004
Just Fuckin'	Evil Angel	2004
Fully Loaded	Platinum X Productions	2004
Rocco's Best Teens	Evil Angel/Siffredi Produzioni	2005
New Trix	Zero Tolerance	2004
Beautiful Girls 16	Evil Angel	2004
Teenage Spermaholics 3	Red Light District	2004
Cum Craving Teens	Elegant Angel	2005
Dementia	Mayhem	2003
Taste Her Ass	Platinum X	2004
Key Party	Vivid Video	2004
•	Elegant Angel	2004
Big Black Wet Asses 2	Hustler Video	2003
Barely Legal Innocence		
Anal Teen Tryouts 7	Devil's Film	2004
Redheads Have More Anal Fun	Pure Play Media/Seymore Butts	N/A
I'm Your Slut 3	Red Light District	2004
Mouth 2 Mouth	Diabolic Video Productions	2004
Assman 26	Anabolic	2003
Rocco: Animal Trainer 16	Evil Angel	2004
New Whores	Mayhem	2004
No Swallowing Allowed #4	Diabolic	2004
Asian Vacation	Shane's World	2004
Last Girl Standing	Vivid Video	2003
Angels of Debauchery 3	Evil Angel	2004
Ass Obsessed 3	Red Light District	2004
Barely Legal 50	Hustler Video	2004
Manuel Ferrara's POV	Red Light District	2004
Fishnets	Zero Tolerance	2004
Undertow	Sin City Productions	2004
Boob Bangers	Evil Angel	2004
Euro Domination	Euro Angel	2004
Cabaret Bizarre	Evil Angel	2004
Legal Skin 17	Smash Pictures	2005
Cum Swappers	Hustler Video	2004
I Love It Black	Elegant Angel	2004
Double Teamed 4	Shane's World	2004
Blow Me Sandwich 6	Zero Tolerance	2004
The Masseuse	Vivid Video	2004
POV Pervert 4	Red Light District	2004
	0	

^{*} Titles used in pilot data

Appendix B Intercoder Agreement Matrix for All Coding Pair Comparisons Averaged Across All Variables

	Coder 1	Coder 2	Coder 3
Coder 1		0.854	0.836
Coder 2	0.854		0.888
Coder 3	0.836	0.888	
Average Agreemen	t	0.859	
Composite Coefficient Agreement		0.958	

Appendix C Average Intercoder Agreement, By Variable

	Average Agreement
Primary Character Gender	0.826
Primary Character Race	0.650
Ejaculation Position	0.941
Presence of Condoms	1.000
Presence of Sex Toys	1.000
Presence of NonSexual Object	1.000
Discussion of STD/Safe Sex	1.000
Sadomasochism Scene	1.000
Verbal Aggression	0.661
Physical Aggression	0.661
Gender of Perpetrator	1.000
Gender of Victim	1.000
Victim Response to Aggression	1.000