A Longitudinal Content Analysis of Sexual Violence in the Best-Selling Erotic Magazines

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Abstract

In light of theoretical and empirical suggestions that mass media violent erotica may have antisocial effects, a content analysis was performed to ascertain the amount of sexual violence in the pictorials and cartoons of Playboy and Penthouse magazines. This analysis included all issues of the two magazines from January, 1973 through December, 1977. While the two raters, a male and a female, showed relatively high reliability in their ratings of sexual violence within the pictorial stimuli, less agreement was found on cartoon stimuli. Pictorial violent sexuality was found to increase significantly over the five years analyzed both in absolute numbers and as a percentage of the total number of pictorials, although even by 1977 only about 5% of the pictorials were rated as sexually violent. No significant changes in the percentage of sexually violent cartoons were found over the years, although in Penthouse there was an increase in the absolute number of such cartoons. Throughout this five-year period, however, Penthouse was found to have a greater percentage of sexually violent cartoons than Playboy (approximately 13% vs. 6%). The results are discussed within the context of empirical research in the area and the possibility that sexually violent stimuli may contribute to a "cultural climate" promoting a sexist ideology.

Feminist writers (Brownmiller, 1975; Gager & Schurr, 1976; Johnson & Goodchilds, 1973; Kotash, 1978) have forcefully argued that sexually violent materials within the mass media, particularly within pornography, constitute "hate literature" against women that has undesirable effects on attitudes and behavior. This assertion seems inconsistent with the findings of the President's Commission on Pornography (1970). The

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Commission concluded that the evidence failed to reveal any adverse effects of pornography. The studies conducted by the Commission, however, did not adequately distinguish between materials that merely depicted explicit sexual content and those involving violent portrayals of sexual relationships (Cline, 1973; Davis & Braucht, 1973).

The significance of this distinction may be of particular importance in light of apparent recent trends in the pornography industry that have taken place since the Commission’s research. While it has been found that violent sexual portrayals are common within “hard core” pornography (Smith, 1976), recent news articles (Time, 1976, 1977; Village Voice, 1977) have asserted on the basis of casual observation that the incidence of sexually violent portrayals has risen sharply within varied areas of the mass media, including “soft core” erotica1. Unfortunately, as Smith (1976) has noted, “one of the most glaring omissions in the continuing controversy over the publication and the dissemination of pornography is the absence of any systematic examination of the actual content of such material” (p. 16).

On theoretical grounds there may be reason for concern about exposure to such fusion of sexuality and violence. Firstly, modeling and disinhibition effects may occur, as strongly suggested by considerable data on the effects of exposure to mass media violence on children and adults (Loye, Gorney & Steele, 1977; Parke, Berkowitz, Leyens, West & Sebastian, 1977; Surgeon General’s Committee, 1972). These effects would seem as likely when the violence is presented within a sexual as within a nonsexual context. Secondly, the coupling of sex and violence may involve a conditioning process whereby violent acts become associated with sexual pleasure, a powerful unconditioned stimulus and reinforcer. In fact, current treatment for violent sexual behavior and/or fantasies, whether by means of orgasmic reorientation (Davison, 1968), covert sensitization (Brownell, Hayes & Barlow, 1977; Hayes, Brownell & Barlow, in press) or a combination of such procedures (Abel, Blanchard & Becker, 1978) is based on the premise that the association of fantasies with sexual arousal may result in therapeutic changes in fantasies and behavior. From a learning perspective, it is equally likely that exposure to violence juxtaposed with sexually arousing stimuli could increase sexual arousal to such

1 The terms erotica and pornography are used interchangeably herein to refer to stimuli designed to be sexually arousing without distinction as to whether the content is considered offensive. It is, however, recognized that stimuli containing sexual violence would be judged as highly offensive by many individuals.
violent stimuli and possibly lead to concomitant changes in behavior. Finally, the information conveyed in much of the sexually violent materials is that women are basically masochistic and in need of male domination (McConahay & McConahay, Note 1; Smith, 1976). This may be critical from a cognitive perspective as it would suggest to the reader that even if a woman seems disinterested or repulsed by a pursuer, she will eventually respond favorably to forceful advances, violence, and overpowering by a male assailant (Brownmiller, 1975; Johnson & Goodchilds, 1973).

The purpose of the present study was to objectively and systematically examine the assertions that sexually violent portrayals have increased in recent years within “soft core” erotica. A content analysis was performed on the pictorials and cartoons of the two best-selling (Santana, 1978) male-oriented erotic magazines—Playboy and Penthouse. Pictorials and cartoons were selected on the basis of a recent survey (Stauffer and Frost, 1976) in which these stimuli were rated by males as the type within erotic magazines that they would most want to read or view.

Method

Scope of the Study

The study was conducted at the beginning of 1978. It was arbitrarily decided to study a five-year period. Thus, the pictures and cartoons in all issues of the two magazines from January, 1973 through December, 1977 were rated. Included were single cartoons interspersed throughout the magazines as well as cartoon “stories” that often appeared at the end of the magazines, extended over several pages, and were regular magazine features (e.g., “Wicked Wanda”).

Raters

One male and one female rated all issues of both magazines. The male rater was a 26-year-old graduate student who was generally familiar with male-oriented magazines and with newspaper articles hypothesizing an increase in sexually violent material in the mass media. The female rater was 23 years old and was selected from a number of candidates interested in a research assistant’s position because, as determined in an interview,
she was not familiar with hypotheses of an increase in mass media sexual violence.

**Criteria**

The raters were not given any formal training and were told that their judgments should correspond to those of the “average” person. They were instructed to rate as sexually violent those stimuli that depicted rape, sadomasochism or exploitative/coercive sexual relations. Ratings were made as to whether a stimulus was sexually violent or not, without distinguishing among different types of perceived sexual violence.

Each page that contained at least one cartoon or pictorial stimulus was rated according to whether it did or did not contain sexual violence. The only exception to this was that centerfolds, which generally covered two or three pages, were counted as only one page of sexual material. If the stimulus was ambiguous as to its violent nature, the raters were instructed to be conservative and not rate it as sexually violent.

The selection of a page as the unit of analysis was judged preferable to rating each stimulus separately since there were often stimuli involving a variety of elements that did not fall into separate units. While this was particularly true of the cartoon “stories” in which a single page contained many related and unrelated segments, this was also often true of pictorial features depicting scenes from movies, in which several consecutive frames from the same movie might be presented. Since these movie stills in particular seemed to constitute a potentially difficult area within the pictorials for an objective content analysis, it was decided to list whether the pictorial stimulus was from a feature on movies or not.

**Results**

*Interrater Correlations*

Pearson Product-Moment correlations on the number of pages per issue that contained sexual violence were computed between the two raters. The number of pages per issue was chosen as the unit of analysis for two reasons. Firstly, the major interest and hypotheses of the study concerned trends from issue-to-issue over the five-year period. Thus, computing reliability coefficients on a page-by-page basis, while more accurate in some sense, would have little bearing on the questions of
interest. Secondly, it was felt that a page-by-page analysis may have yielded artificially inflated reliability coefficients; the large majority of stimuli in the magazines was nonviolent in nature, and rater agreement on these stimuli was virtually inevitable. Thus, any disagreement on the materials of interest—sexually violent stimuli—would have been masked to some extent, and the analysis might have suggested a greater reliability than actually existed for the sexually violent materials.

Interrater correlations were computed separately for movie and other pictorial stimuli. The correlations for the two raters of the number of pages containing sexually violent pictorials, $r(118) = .81, p < .0001$, and picture movie stills, $r(118) = .79, p < .0001$, were comparable and relatively high, thus justifying their combination into one category. Judgments on the number of pages with cartoons depicting sexual violence were not as highly correlated, $r(118) = .56, p < .001$.

**Absolute Number of Pages**

Since ratings were made of two measures (i.e., pictorials and cartoons), multivariate analyses of variance (Manova) were carried out in order to consider the effect on both variables simultaneously. Magazines, years\(^2\), and raters were independent variables, and pages with pictorials or cartoons depicting sexual violence were the dependent variables.

Figures 1 and 2 present the average ratings per issue of the absolute number of sexually violent pictorials and cartoons, respectively, as a function of year, magazine, and rater. Results indicated a significant linear trend over years, $F(2,219) = 8.79, p < .0003$. Examination of the standardized discriminant weights (SDW)\(^3\) indicated that this trend was accounted for by both measures, with the pictures receiving a somewhat heavier weight (SDW = .82) than the cartoons measure (SDW = .49). Univariate analyses similarly yielded a significant linear trend for pictures, $F(1,220) = 13.40, p < .0004$, and for cartoons, $F(1,220) = 5.81, p < .02$.

The Manova, however, also yielded a significant linear interaction

\(^2\) The years analyzed constituted the five levels of this independent variable. The twelve months of each year were the “cases.”

\(^3\) Manova is carried out by forming the linear combination of the dependent measures that best discriminates between groups. The weighting each standardized measure receives in this linear combination is indicated by its standardized discriminant weight (SDW). The relative magnitude of these SDWs may be used to indicate each measure’s nonredundant contribution to group differences.
Fig. 1. Mean number of sexually violent pictorials per issue as a function of year, magazine and rater.

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between year and magazine, $F(2,219) = 6.90, p < .002$. Examination of the SDWs indicated that this multivariate effect was largely attributable to the cartoon measure (SDW = .90) rather than the pictorial measure (SDW = .35). Univariate analyses resulted in similar conclusions, with a significant interaction for the cartoon measure, $F(1,220) = 12.16, p < .006$, but not for the pictorial measure, $F(1,220) = 2.66, p < .11$. As can be seen in Figure 2, the basis for this interaction was a substantial increase over the years of sexually violent cartoons in *Penthouse* but not in *Playboy*.

An additional interaction was obtained between the rater and magazine variables, $F(2,219) = 4.90, p < .01$. The SDWs indicated that this effect was almost exclusively due to the cartoon (SDW = .99) rather than the pictorial (SDW = .01) measures. Similar conclusions emerge from the univariate analyses, indicating a rater-magazine interaction for cartoons, $F(1,200) = 9.85, p < .002$, but not for pictorials, $F(1,220) = .12$. As indicated in Figure 2, the male rater generally perceived a greater number of sexually violent cartoons in *Penthouse* than did the female rater, whereas in *Playboy* the female rater generally perceived more such violent stimuli.

**Proportion of Pages**

A second Manova was carried out with the dependent measures being (1) the number of pages with pictures depicting sexual violence divided by the total number of pages having pictures with sexual content (see Figure 3), and (2) the number of pages with cartoons depicting sexual violence divided by the total number of pages containing cartoons of any kind (see Figure 4). This analysis was undertaken to assess any changes in the proportions of pictures and cartoons that contain sexual violence.

This Manova yielded a linear trend over years, $F(2,219) = 5.27, p < .006$. Examination of the discriminant weights indicated that it was almost entirely due to an increase in the proportion of pictures with sexual violence (SDW = .99) rather than the proportion of pages with sexually violent cartoons (SDW = −0.21). Univariate analyses similarly yielded a significant linear trend for the proportion of pictures, $F(1,220) = 10.11, p < .002$, but not for the proportion of cartoons, $F(1,220) = .26, p > .10$.

Analysis of the proportion data also revealed a significant effect for magazines, $F(2,219) = 30.76, p < .0001$. Examination of the discriminant
Fig. 3. Percentage of sexually violent pictorials as a function of year, magazine and rater

Fig. 4. Percentage of sexually violent cartoons as a function of year, magazine and rater
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weights indicated that this difference was largely due to the proportion of cartoons with sexual violence (SDW = 1.00) rather than the proportion of sexually violent pictures (SDW = -0.10). Univariate analyses similarly showed a very clear effect for the proportion of cartoons, $F(1,219) = 61.16, p < .0001$, but not for the proportion of pictures, $F(1,219) = .13, p > .10$. As seen in Figure 4, *Penthouse* contained a greater proportion of sexually violent cartoons than did *Playboy*. This effect seems largely attributable to the "Wicked Wanda" cartoon series in *Penthouse* which contains a relatively high degree of sexual violence.

A multivariate interaction was obtained between rater and magazine, $F(2,219) = 4.11, p < .02$, due to the proportion of cartoons (SDW = 0.99), univariate $F(1,220) = 8.20, p < .005$, rather than pictorials (SDW = 0.08), univariate $F(1,220) = .16, p > .10$. This interaction was due to the male rater perceiving more sexually violent cartoon stimuli in *Penthouse*, while the female perceived more of these in *Playboy* than did the male rater.

**Discussion**

While the results provide some support for contentions that the amount of sexual violence in the two best-selling erotic magazines has increased over the five years analyzed, this pattern was not uniform in the two types of stimuli analyzed. With respect to pictorials, a relatively realistic stimulus, this increase over the years was clear and consistent in both magazines. It emerged in the ratings of the two raters in both the analyses of the absolute number of stimuli and the proportion of sexually violent stimuli relative to the total number of stimuli.

Conclusions concerning cartoons were less clear. Differences in the two raters’ judgments emerged which are not easily accounted for. These differences may reflect some ambiguity as to what constitutes sexual violence within a cartoon stimulus. Future research in this area should pay particular attention to developing reliable categories for rating sexual violence within cartoon stimuli prior to undertaking a content analysis. In light of these rater differences, only those effects noted by both raters will be described below.

When the absolute number of sexually violent cartoons is examined, a linear trend increase over years emerged due to an increase in *Penthouse* magazine. When an adjustment was made for the possibility of a general increase in the number of sexual stimuli by considering the proportion of cartoons with sexual violence, the data no longer indicated a linear trend.
This analysis did show, however, that throughout the five-year period the proportion of cartoons with sexual violence was greater in *Penthouse* than in *Playboy*.

The data revealed that in 1977 an individual examining the two best-selling erotic magazines would have been exposed to sexual violence in about 10% of the cartoons and close to 5% of the pictorial stimuli. While this constitutes a relatively small percentage, there exists the possibility that such materials contribute to a "cultural climate" (Brownmiller, 1975) which sanctions acts of violence against women. The effects of such materials cannot be considered only within the limited context of these erotic stimuli but within the larger context of other mass-media and nonmedia "messages." A message of female subordination communicated in varied forms may have summative effects in promoting a sexist ideology.

Recent laboratory research examining the effects of mass-media violent sexuality, such as those analyzed herein, indicate that they stimulate rape fantasies (Malamuth, in press), increase the levels of electric shock administered to a female victim in comparison to neutral, sexual, or aggressive stimuli (Donnerstein, in press; Malamuth, Note 2), and reduce perceptions of the degree of trauma suffered by a rape victim (Malamuth & Check, in press; Malamuth, Haber & Feshbach, 1980). Moreover, a number of studies have shown that sexual arousal to sexually violent pictorials and stories (but not arousal to nonviolent sexuality) is correlated with callous attitudes towards rape and with a self-reported possibility of committing a rape (Malamuth et al., 1980; Malamuth & Check, in press; Malamuth, Reisin & Spinner, Note 3).

In conjunction with the present data showing some increases in sexually violent stimuli, these findings point to the need for further research, particularly in nonlaboratory settings. Future research should examine the effects of varied types of sexually violent stimuli, by themselves and in the context of other communications, on such areas as beliefs about the appropriateness of using force in sexual relations, the meaning of disinterested responses, reactions to sexual assailants and victims, and the proclivity to actual acts of sexual violence.

Reference Notes


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