The Effect of Anger on Preference for Filmed Violence

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Abstract

Seventy-eight males were subjects in an investigation of the effects of anger on preference for filmed violence. Half of the subjects were insulted for their performance on a block assembly task, while half were given possitive feedback. Preference for film violence was measured by ratings of four film descriptions. Anger increased preference for film violence while decreasing preference for nonviolent film content. Two interpretations of the observed result were discussed in terms of their practical implications.

The relationship between media-portrayed violence and viewer's subsequent aggression has been the focus of much social psychological research in recent years. The evidence obtained from this research, while not overwhelming, has consistently demonstrated the facilitory and even instigating nature of this relationship (cf. Goranson, 1970). While no one study that has found this to be the case is beyond criticism, the consistent results have been obtained by various researchers using markedly different theoretical underpinnings and methodologies (cf. Berkowitz, 1965; Bandura, 1973; Tannenbaum & Zillman, 1975).

Concerned that the abundance of media-portrayed violence may be contributing to increasing levels of violence in America, critics of media violence have seized upon these research findings in support of their urgings that the amount of violent programming be curtailed. To the extent that this is done, they argue, the adverse consequences of such programming will be correspondingly reduced; in the persons prone to the instigation of aggression by it are less likely to be exposed.

Although the research on the relationship between media violence and aggression is prolific, it has, for the most part, neglected the role of voluntary and selective exposure to violent programming. Weiss (1969) points out that exposure to the natural media environment--unlike its laboratory counterpart--is highly voluntary, and factors determining exposure may be the most important determinants of media effects in any given instance. Thus, thevalidity of the reasoning that reduced media violence, in and of itself, will result in less media-elicited aggression is dependent on one implicit yet heretofore untested assumption: the

probability of exposure to media violence is independent of--does not interact with--the probability of elicitation of aggression by filmed violence. If, as has been assumed, probability of exposure is unrelated to factors governing probability of elicitation (i.e. whether or not the viewer is angry), then reducing the probability of exposure by reducing the amount of violent programming will have the desired effect. If, however, they are non-independent, alternative recommendations might be in order. Thus, for example, if angry persons avoid filmed violence, forewarning of violent program content might be as effective in reducing the incidence of film-elicited aggression as reducing the overall proportion of violent programs. Insuring the constant availability of non-violent alternatives might also be desirable. On the other hand-if angry persons seek out filmed violence, no reduction in media-elicited aggression would result unless violence was unavailable on any channel. That is, incidence of film-elicited aggression, on the average, would be a function of the proportion of time violent programming is available, rather than the total viewing time that contains violence.

The present study focuses on one factor found to affect reactions to filmed violence, that of anger. Do angry persons avoid filmed violence, do they seek it out, or is there no systematic effect of anger upon viewing preference? Surprisingly, there is little evidence in the literature on either selective exposure or aggression upon which to base a prediction. Research on selective exposure has been concerned primarily with attitudes and values, rather than drive states such as anger (cf. Freedman & Sears, 1965). There is some evidence that

attention to a particular topic or media content is motivated by its personal relevance. For example, Cartwright (1949) reported that most of the people who accepted free tickets to a movie already showed the behavior the movie was designed to encourage. Similar findings are summarized by Freedman and Sears (1965). Eron (1963) reported a significant positive relationship between the aggressiveness of third grade boys as judged by peers and preference for violent television programs. Assuming aggressive persons are more angry, these findings suggest that angry persons seek out filmed violence.

More pertinent, perhaps, is the finding that, immediately following a murder, neighborhood attendance significantly increased at the film In Cold Blood, while it decreased slightly at a control film, The Fox (Boyanowsky, Newtson, and Walster, 1972) This also implies that persons seek out media relevant to their immediate emotional state.

Berkowitz's (1965) formulation of anger as a drive state, consisting of activated aggressive tendencies or habits and heightened sensitivity to aggression-eliciting cues, also implies an approach tendency. Anger is said to activate aggressive habits, which then make salient cues associated with their past reinforcement. If this is so, then angry persons would seek out violent films because of their enhanced value as secondary reinforcers.

Alternatively, aggressive stimuli may be sought for the relevance to anticipated reinforcement, rather than their enhanced value as secondary reinforcers. Berkowitz (1965) identifies one component of anger as an intent to injure a specific target

(e.g., one's frustrator). If aggressive stimuli are sought on the basis of anticipated reinforcement, then expectation of aggression oportunity may be an important factor in seledtive exposure to violence. That is, angry persons may seek violent stimuli when their frustrator is available for attack, thus "priming" themselves for aggression, and avoid them when no opportunity to aggress is available.

Support for an avoidance tendency is scarce. Some normative date on preference for violent stimuli have been provided by Grossman and Choy (1971). Using non-angered subjects, they found a strong negative correlation between rated attractiveness of pictures and their rated aggressive content. These findings, however, are hard to reconcile with the popularity of violence as media content. The recent wave of oriental martial arts movies, which are as blatantly violent as pornography is sexual, suggests that violence may have a strong appeal to at least part of the population.

The present study investigated the influence of anger and expectation of aggression opportunity on subject's preference for violent films. Following either a positive or highly insulting evaluation of their performance on a task, subjects were asked (in a different context) to indicate their preference for four films. Two of these were described as violent, another was described as serene and tranquil. In addition, subjects anticipated either a chance to evaluate the person who evaluated them, a chance to evaluate a third person, or did not expect to act as an evaluator.

Method

Subjects

The subjects were male undergraduates who were paid for their participation. Out of a total of 103 subjects, 25 were excluded from the analysis. Of these, 14 were deemed suspicious as to the nature of the experimental manipulation. The decision to exclude these subjects was made during a post-experimental interview, by an interviewer blind as to their performance in the experiment. Eleven subjects were excluded on the basis of extremely low self-esteem ratings obtained prior to administration of the experiment. They were run through in the non-insult conditions, and their data discarded. All excluded subjects were replaced in the appropriate conditions, providing 78 subjects, 13 in each of six experimental conditions.

Measures

Subjects were first screened by a self-esteem measure (Rosenberg, 1965). Subjects scoring in the lower quartile on this measure were eliminated.

Six horizontal 100 mm continua served as a check on the insult manipulation. These consisted of adjective pairs (sad-happy, angry-not angry, bad-good, tense-relaxed, self-confident-insecure) assessing mood.

The measure of film preference employed four film descriptions, as follows:

Film No. 1--A brutal segment from a boxing film, depicting a savage heavyweight championship bout.

Film No. 2--A short film of a vicious and unprovoked attack by one teenage boy upon another.

Film No. 3--An exciting track film, showing Roger Bannister becoming the first man ever to run a mile in less than four minutes. It's man against clock.

Film No. 4--A tranquil survey of the natural beauty and variety of Europe's mountains and beaches.

Subjects rated these films, on the basis of the above descriptions, on scales ranging from "would prefer not to see" (one) to "would be very interested in seeing" (nine). Subjects were told they would view the film that they rated highest immediately after the rating.

Procedure

The subject was told that the experiment was concerned with "interpersonal evaluation" and that he was one of two subjects in his session. The subject was then informed that the experiment consisted of evaluator-evaluatee pairs, and that he had been assigned randomly to be the evaluatee. The subject who was evaluator in his session, he was further informed, was on the opposite side of a one-way mirror at the other end of the room. The mirror was covered by a curtain, which was raised only during the subject's task performance.

The subject was then given a complex block assembly task. Time to completion was recorded. The subject was then informed that the experimenter would discuss the subject's performance with the evaluator. When the experimenter returned, he gave the subject one of two bogus handwritten evaluations. Half of the subjects received a mildly positive evaluation (the no-insult

condition), while the other half received an extremely negative evaluation (the insult condition). Which of the two evaluations the subject received was determined randomly prior to his arrival.

The evaluations consisted of ratings on three bipolar scales, followed by additional comments. In the Insult Condition, the subject was rated as stupid, lazy, and dull, and the comments continued, "Seems really pathetic. He must be pretty stupid--that kind of puzzle is really easy. I've seen his kind before, you know those mindless fraternity creeps--seems like the kind of person that can't follow anything through. I wouldn't want to work with him on anything."

In the No Insult Condition, the subject received ratings as intelligent, hard-working, and personable. In addition, the following comments were included: "He seems a regular sort of person. I thought he did pretty well on the blocks--he probably is pretty intelligent--that kind of puzzle always looks a lot easier than it really is. Seems like a nice guy. I wouldn't mind working with him on something at all."

At this point, the subject was given the six mood continua. Upon their completion, the second experimental manipulation was introduced. Subjects were asked to help a second experimenter with some work on films. Three different explanations were given for this request (one-third of the subjects were given each explanation). These explanations produced three different expectancies of future aggression opportunities.

In the Retaliation Condition, subjects were told that the roles in the experiment were to be reversed, so that they would

act as evaluator for the person who evaluated them. They were then requested to help another experimenter while the first experimenter was setting up the next part of the experiment.

In the No Retaliation Condition, subjects were told that they would act as evaluator to a new subject, who had just arrived. The request to help the second experimenter was then made.

In the No Opportunity Condition, subjects were told that their part in the experiment was essentially over, but that the next pair of subjects had arrived. They were then requested to aid the second experimenter, and assured that the experimenter would have time to debrief them upon their return.

All subjects were told that the second experimenter would need about ten minutes of their time. No subjects refused the request. The second experimenter was blind as to the experimental condition. This second experimenter explained that he was collecting standardization data for some films. He asked the subject to read four film descriptions and to rate them on the four none-point scales described above. Subjects were told that they would see their most preferred choice.

Subjects were then led to a third experimenter who assessed suspicion and explained the study. All subjects claimed to understand fully the manipulations and need for deception.

Design and Analysis

Scores for the two violent films were summed, as were the acores for the two nonviolent films. Data were then analyzed as a 2 x 3 x 2 mixed factional analysis of variance design. Between

subjects factors were Evaluation (Insult vs. No Insult), Evaluation Opportunity (Retaliation vs. No Retaliation vs. No Opportunity). The within-subjects factor was Film Content (Violent vs. Nonviolent).

Results

Results from the subjective mood continua confirm that insulted subjects were significantly more angry than non-insulted subjects ($F=27.38$, $df=1/76$, $p < .01$). Analysis of variance of film preferences (Table One) indicated a significant effect of Film Content ($p < .01$) and a Film Content x Evaluation Condition interaction ($p < .05$). Means for this interaction are presented in Table Two.

INSERT TABLES ONE & TWO HERE

Subsequent means tests indicate that the effect consists of a convergence of preference for violent and nonviolent film content in the Insult Condition. That is, significantly greater preference for the nonviolent films in the No Insult Condition ($t=4.92$, $df=72$, $p < .001$) is attenuated in the Insult Condition ($t=1.91$, $df=72$, $p < .20$). This effect seems due to a simultaneous tendency for increased preference for violent film content from the No Insult to the Insult condition ($t=1.21$, $df=72$, $p < .25$), and a tendency for preference for nonviolent film content to decrease from the No Insult to the Insult condition ($t=1.80$, $df=72$, $p < .10$) though neither change was significant in and of itself in the present instance. Difference scores (the sum of

ratings for violent films minus the sum of ratings for non-violent films) were computed to more clearly demonstrate the coverging preferences in the Insult Condition. Means for these difference scores were -1.64 and -4.13 for insulted and non-insulted subjects, respectively ($F=4.09$, $df=1/72$, $p < .05$.)

In the No Insult Condition, violent film content was ranked first by 34.6% of the subjects compared to 41% in the Insult condition. This difference, however, failed to reach acceptable levels of significance ($\chi^2=2.47$, $df=1$, $p < .25$).

No significant effect of aggression opportunity was observed. Data were analyzed within the Insult condition across levels of aggression opportunity, as a check on the possibility that variance in the No Insult condition, where the evaluation procedure is not likely to be seen as an "aggression" opportunity, might have obscured differences. No significant differences were observed, however ($F=.34$, $df=1/36$).

Discussion

An absolute approach tendency for violence as a function of anger is not easily supported. Mean preferences for violent films were not significantly higher in the Insult condition than in the No Insult condition, nor was there a significant difference across levels of Film Content within the Insult condition. Nonetheless, inspection of means does suggest that violence is more likely to be selected for viewing relative to nonviolence by an angry person than a nonangry person.

One possible explanation for the lack of differences between violent and nonviolent film content in the Insult condition becomes apparent when one considers the initial (pre-insult) preferences for violent and nonviolent films. In order to properly evaluate selective exposure as a function of anger or anything else, deviations from a baseline measure of preference must be determined (Freedman and Sears, 1965). In order to insure that subjects perceived the aggressive films as indeed being violent in nature, other information potentially relevant to making a decision of the sort demanded by this experiment was excluded. As a result, the only thing each subject knew about these films was that they were violent. Grossman and Choy's (1971) findings suggest that purely violent films would be less preferred than would films depicting violence in a context other than pure aggression. Thus, it could hardly be expected that, described as they were, a measure of perference taken prior to the arousal of anger would show the violent films as more prefered; and in fact, the reverse was true. As is evidenced by the No Insult condition preference means, the nonviolent alternatives were strongly preferred to the violent ones (t=3.48, df=72, $p < .01$). Pilot data confirm that the violent films were described so as to depict them as unattractive alternatives. These data were obtained for the four film descriptions which comprised the dependent variable in the actual experiment, by asking 30 unangered people to simply rank order their preferences. Of these, seventy percent rated one of the

two nonviolent films as their most preferred choice. Seventy three percent chose one of the same two films as their second choice. Clearly then, the aggressive films began at much lower levels of preference than did nonaggressive films.

It may be, then, that the simultaneous tendency for violence to become more preferred, and nonviolence to become less preferred subsequent to anger arousal, served to equalize or at least attenuate what began as a strong preference for nonviolence prior to anger arousal. Had the two alternatives started out as essentially equally preferable these simultaneous changes, though neither significant in and of themselves, might have induced a statistically evident difference in the Insult condition across levels of Film Content.

The latter situation is seemingly more representative of the natural environment. It is reasonable to assume that advertisements, critical reviews, context, and the presence of attractive movie stars offer to people information that might offset the initial difference in preference found with the measures used in this study.

While this explanation demands consideration, it is viable only in so far as a lack of discrimination interpretation is not. That is, anger may have merely served to reduce discrimination among the alternative items. This would suggest that the observed simultaneous changes in preference for both violent and nonviolent films are artifacts of insulted subjects' preoccupation with their anger. That arousal may restrict the range of cues among which attention may be divided, disrupting control of

selective attention, is well documented (Easterbrook, 1959; Kahneman, 1973). Such effects have been demonstrated, it should be noted, even on tasks demanding less than full attentional capacity. Consistent with this interpretation, all observed changes in preference ratings were toward the scale midpoint.

Moreover, within the No Insult condition, preferences were more differentiated than in the Insult condition when each film choice was analyzed as a separate item.

INSERT TABLE THREE ABOUT HERE

As can be seen in Table Three, in the No Insult condition, preference was ordered as follows: Teenage fight film < Boxing film < Track film = Travelogue. T-values for these comparisons (df=216) were, 4.36 ($p < .01$), 3.42 ($p < .01$) and 0.44 respectively. In the Insult condition, by comparison, the boxing, track and travel films were all about equally preferable, whereas the teenage film was significantly less preferred than the others. T-values for the comparison of the teenage film with the boxing, track and travel films within the Insult condition were, respectively, 4.99, 5.04, and 4.41 (df=216, $p < .05$).

However, results are not completely consistent with a lack of discrimination interpretation. The teenage fight film, the most extreme item prior to anger arousal showed the least movement of all the films toward the scale midpoint (see Table Three).

The lack of an overall main effect of the Insult manipulation indicated no overall change in preference for viewing films,

ruling out interpretation in those terms.

Admittedly, evidence presently available does not strongly confirm nor refute explanation of the observed effect in terms of anger induced lack of discrimination. What is explicit however, is that anger does not function so as to make violence increasingly aversive. Both a lack of discrimination hypothesis and a simultanteous change in preference for violent and nonviolent films are compatible with the observed finding of no difference within the Insult condition across levels of Film Content, given the initial disparity in preference in favor of nonviolent films in the present instance.

With regard to the practical implications of the observed effect, which explanation is actually operative is of considerable importance. If discrimination is reduced by anger, then exposure to violence would be independent of the probability of elicitation of aggression by violent media. Hence, reducing the quantity of violence available in the media would correspondingly reduce exposure to violence by those most prone to its aggression facilitating effects. On the other hand, should the observed preference ratings be truly indicative of change in at least relative preference for violent and nonviolent films then probability of exposure to violence and the probability of elicitation would be nonindependent. Thus, reducing the amount of violence available for viewing would not necessarily have the desired effect of reducing the amount of film elicited aggression in the society at large.

Should further research judge against the reduced discrimination explanation one other link in the exposure process

would need to be investigated. As Weiss (1969) points out, audience dispositions may not only determine exposure, but also may modualte the effects of that exposure. It remains to be demonstrated that the effects of violent films on subsequent aggression are the same when the film is chosen, as in the natural communications environment, as when persons have no choice to the kind of film they wish to see, as in laboratory studies of aggression to date.

Table 1

Analysis of Variance of Film Preference

by Evaluation, Evaluation Opportunity, and Film Content

Source	df	MS	F
Evaluation (A)	1	2.56	.17
Evaluation Opportunity (B)	2	9.93	.67
AB	2	15.24	1.02
S (AB)	72	14.91	
Film Content (C)	1	339.10	23.20**
AC	1	66.69	4.56*
BC	2	19.05	1.30
ABC	2	5.79	.40
S (ABC)	72	14.62	

* $p < .05$
** $p < .01$

Table 2

Mean Preference Rating

by Film Content and Evaluation

	Film Content	
	Violent	Nonviolent
Evaluation		
Insult	9.15^{ab}	10.80^{ac}
No Insult	8.10^{b}	12.36^{c}

Note: Scale is from 2 to 18; higher score indicates greater preference. Means with different subscripts differ $p < .05$.

Table 3

Mean Preference Ratings by

"Film Description" and Evaluation Condition

Condition	Film Description			
	Teenage	Boxing	Track	Travel
Insult	3.67_b	5.49_a	5.51_a	5.28_a
No Insult	3.26_c	4.85_d	6.10_e	6.26_e

Note: Means within Evaluation Conditions with different subscripts differ $p < .05$.

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