

Evidence from various sources suggests that, under safe conditions of exposure, people may show preference for potentially fear-inducing events. To test for the existence of this phenomenon, general attendance at a film depicting cold-blooded murder and at a control film were compared on the two days following the occurrence of a murder and on the same two days one week prior to the murder. Only attendance at the murder movie rose (89%) two days after the murder when compared with the same day a week before. Also, girls in the victim's dormitory showed a greater preference for the murder movie one week after the crime, whereas girls in a control dorm showed no preference. Theoretical interpretations were proposed to account for these findings.

FILM PREFERENCES FOLLOWING A MURDER

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by definition, phobic behavior involves avoidance of situations or part situations (e.g., objects, perceptions, feelings, or sensations) which stimulate anxiety in the organism. This basic avoidance response notwithstanding, it has been observed that, under certain conditions, people may show a preference for highly fear-arousing situations. Various examples of such behavior can be cited. Klausner (1966) found that parachutists reported high levels of fear during the jump

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sequence, especially when decisions had to be made (e.g., in flight during the approach to the jump zone) yet performed the activity and experienced increasing levels of positive affect (enthusiasm or thrill) from the point of decision to the time of the chute's opening.

Similarly, movies have been shown to affect viewers' emotions. Berkowitz (1970) showed that viewing violent films could result in heightened interpersonal aggression. Also, Tannenbaum and Gaer (1965) found that subjects who identified with the movie protagonist reported that stress levels were differentially affected by the type of ending viewed (happy or tragic). As Weiss (1969) has pointed out, however, though movies may provide various types of gratification, little experimentation has been directed toward isolating determinants of preference for different types. In fact, it is possible that a movie selected for one particular gratification might have effects quite different from the same movie selected for a different purpose. Here again, individuals are sometimes attracted to stimulus situations which arouse fear. The measure of a good horror film, for instance, is its ability to instill terror in its audience and produce "thrills" in the objectively secure environment of the movie theatre. Anecdotally, it has been observed that such movies must depict dangers relevant to the audience. Thus, horror films portraying monsters emerging from the sea are popular with the Japanese, whereas the British focus on gothic stories on the fogbound moors, and, as neither of these is particularly relevant to the United States, popular American horror films often dwell on the terrors of encountering psychotic maniacs.

Fenichel (1939) would identify both parachute jumping and attendance at horror movies as manifestations of the "counterphobic attitude." He hypothesizes that the individual, by exposure to the fearful situation and through his mastery of it, experiences a "functional pleasure." Similarly, he cites the example of the child who, by recreating in play the situation he fears in reality, learns to overcome his fear. This analysis applied to the horror moviegoer suggests that, in the safe fantasy world

of the movies, he seeks out stimulus events he would find too fearful to approach in real life. In a related vein, Klausner (1966) proposes that the transformation of a state of arousal from fear to enthusiasm occurs as a function of "acting in the face of fear"—i.e., voluntary exposure to the fear-arousing situation.

From these theoretical considerations, we may derive the general hypothesis that, given safe conditions of exposure, individuals in a state of heightened fear will show preference for a stimulus situation containing an event or object representative of the real source of their fear. It follows that attendance at or relative preference for a film will increase to the extent that the film depicts objects or events which originally had aroused the fear. For methodological reasons, such a hypothesis is difficult to test. Phobic subjects are inappropriate because their specific fear is not readily accessible to experimental manipulation. On the other hand, a laboratory situation using randomly selected subjects is not ideal because of the difficulties both in arousing fear and in providing exposure options in a credible format. A naturalistic situation in which one can be more certain fear has been genuinely aroused and in which exposure options are part of the environment is preferable, but unlikely to occur. Unexpectedly, such a research opportunity presented itself under tragic circumstances.

THE SETTING

On an early Sunday morning, May 26, 1968, a freshman woman at the University of Wisconsin was murdered. The murder occurred at the center of campus. The victim was stabbed several times, and her clothing was torn, indicating considerable struggle. The body was thrown behind bushes next to the main entrance to the classroom building, where it was not discovered until late in the afternoon.

The victim was described in the news reports that followed as a quiet, friendly sort of person who frequently took solitary,

early morning walks. She had no apparent enemies, and was well liked. In the weeks that followed, police conducted an extensive and well-publicized search for the murder weapon, although none was found and no suspects were arrested. For some time following the murder, night-time behavior patterns on campus were markedly altered. In sharp contrast to normal patterns, women no longer walked alone on or near the campus in the evening or after dark. A state of tension and fear pervaded the town, a fact widely documented in the news media and in conversation with students at the university. In addition, there was considerable speculation concerning a connection between the murder and those which had recently occurred at the University of Michigan in Ann Arbor.

The week before the murder, two films had begun showing at theatres in the university business area. The two theatres were directly across the street from one another, and both films had begun showing the same day. The films were "In Cold Blood," based on Truman Capote's account of two psychopathic murders, and "The Fox," based on D. H. Lawrence's portrayal of a lesbian relationship. Both films had received considerable national and local advertising, and both source novels were on course syllabi at the university.

The environment thus fortuitously provided

(1) an event closely related to the content of one of the films, "In Cold Blood"; (2) a second film approximately equal in amount of prior advertising and the controversial nature of its subject; (3) films at theatres exactly comparable in distance from subjects (they were across the street from each other); and (4) films that had been running for an identical length of time.

In addition, it was possible to identify a discrete subject population to whom the event was most highly relevant and involving: girls who lived in the same dormitory as the murder victim. Finally, by the simple procedure of offering subjects a choice of free tickets to either of the films (which we actually supplied), we could obtain unequivocal data on exposure

preference, in that this measure was a real choice with consequences for action.

Following the general hypothesis, it was predicted that attendance at "In Cold Blood" in the two days following the murder would show a significant increase when compared with the same two days of the previous week. By contrast, comparison of attendance on these days at "The Fox" would show no significant increase or possibly some sign of the decrease which normally occurs during a movie's stay.

A second hypothesis involved "identification with the victim"—defined here by high social and physical proximity. Since Tannenbaum and Gaer (1965) found that high identification with the victims in "The Oxbow Incident" resulted in high reported stress levels, it is plausible that, in the present study, individuals who identified most closely with the murdered coed would experience the most fear. Thus, if fear arousal and preference for the fear-inducing stimulus were related, individuals who identify most closely with the victim should show a greater preference for "In Cold Blood" than individuals who identify less.

To test these hypotheses, random samples of coeds from the same dormitory as the murder victim and from a second dormitory of similar size, organization, and social class were solicited by telephone during the two days immediately following the murder and in the same two days one week later. The caller represented herself as conducting a survey on student movie habits and offered each subject one ticket to either movie. Occupants of the murder victim's dorm were defined as identifying more closely with the victim than coeds in the other dorm.

Preference for "In Cold Blood" by a significantly greater proportion of victim's dorm subjects solicited during contact immediately following the murder would provide support for the second hypothesis. Greater preference for "In Cold Blood" by victim's dorm subjects solicited during contact the following week would suggest a more complex relationship exists among fear identification and counterphobic behavior. No greater

preference for "In Cold Blood" or "The Fox" by victim's dorm subjects during either contact would suggest identification with the victim was not a relevant factor in movie preference.

The specific time interval chosen was somewhat arbitrary; preference was assessed at two intervals to check on the possibility that preference might be systematically related to level of fear, which presumably would decline over time or with the apprehension of a suspect (which did not occur).

In addition, we obtained attendance figures for the two films (with considerable difficulty) for the two days immediately following the murder and, for comparison purposes, for the same two days of the previous week. To our knowledge, no such data are available elsewhere in the literature.

METHOD

SUBJECTS

Subjects were 94 women enrolled at the University of Wisconsin. About half the sample (44) lived in the same dormitory as the murder victim; the other half lived in a similar dormitory on the other side of campus (50 subjects). Both dormitories were privately owned and shared a similar reputation for the "type" who lived there.

PROCEDURE

A female E was hired, and lists of the residents of the two dorms were obtained. Ss from these lists were randomly assigned to one of two conditions, as follows:

- (a) Immediate contact. These subjects were telephoned on the Monday and Tuesday evenings immediately following the murder and offered a choice of a free ticket to one of the two films (see below).
- (b) Delay contact. These subjects were telephoned on the Monday and Tuesday of the following week and offered the film choice.

Accordingly, E then telephoned subjects on the lists. When a subject answered the phone, E gave the following pitch:

Hello, I'm _____, calling on behalf of the Student Consumer Research Survey. We're interested in the kinds of movies students attend. Would you be willing to answer a few questions? [If the subject agreed (only one refused), E continued.] Have you seen any movies in the last week?

At this point, E ascertained whether the subject had seen either of the two films: if she had, the conversation was terminated. Twenty-six victim's dorm subjects were thus excluded, and seventeen control dorm subjects. These were evenly distributed over film and time of contact. If the subject had not seen either film, E made the following statement.

We're giving away tickets to either "The Fox"—D.H. Lawrence's symbolic love story—or "In Cold Blood"—Truman Capote's story of two psychopathic murderers. Would you like to choose to go to see one? [No subject refused.] Fine, would you please fill out the short questionnaire when the ticket is sent to you? Thank you very much.

E then recorded the subject's choice and continued to the next subject on the list. Following the delayed phone solicitation session, ticket money and questionnaires were sent out.

Data, then, consisted of the choice of film classified by the time of the choice—immediately after the murder or a week later—and by place of residence—the same dorm as the victim or a different dorm.

In addition, general attendance figures for the two films were obtained for the Monday and Tuesday of the week before the murder, and for the Monday and Tuesday immediately following the murder. Unfortunately, the theatres regarded actual attendance as private business information, and refused to divulge raw attendance figures. Instead, they were finally persuaded to give us attendance figures multiplied by a constant. Attendance figures for the two films were multiplied by different constants. Actual counts of attendance were made during the two evening showings of the films on the Tuesday immediately following the murder. Further, comparable attendance data were not available as the films were moved to neighborhood theatres, but of comparable distance from the dorms.

RESULTS

Results for the phone solicitation are given in Table 1. Three planned comparisons were performed using chi-square, which indicated a significant increase in preference for "In Cold Blood" occurred within the victim's dorm across the immediate-delayed classification. No significant difference was found within the control dorm across time. Immediately after the murder, 41% of subjects in the victim's dormitory chose "In Cold Blood"; one week later this increased to 72% ($X^2 = 4.56$, $p < .05$) while preference for "In Cold Blood" in the control dorm dropped slightly from 58% to 48%. A test for this interaction yielded $X^2 = 3.55$ ($p < .059$).

Transformed general attendance figures are given in Table 2. Examination of the table indicates that attendance declined at both films (approximately 25%) one day after the murder, when compared with the previous week. But on the Tuesday after the murder (two days after), attendance at "In Cold Blood" was up 63% from the day before and up 89% from the previous Tuesday. Attendance at "The Fox" remained relatively

TABLE 1
FILM CHOICE

	Victim's Dorm		Control Dorm	
	Immediate	Delay	Immediate	Delay
"The Fox"	13	7	10	13
"In Cold Blood"	9	18	12	12

TABLE 2
FILM ATTENDANCE—TRANSFORMED FIGURES^a

	"In Cold Blood"			"The Fox"		
	Before	After	% Change	Before	After	% Change
Mondays	387	287	-25.8	6,028 (603)	4,598 (460)	-23.9
Tuesdays	248	469	+89.1	5,786 (579)	5,214 (521)	-9.9
Monday to Tuesday:						
Before the Murder			-35.9			-4.0
After the Murder			+63.4			+13.4

a. Each theatre applied one transformation to its data; a different transformation was used for each film. Figures adjusted for purposes of chi-square analysis are in parentheses.

constant over the same period. Due to the sensitivity of the chi-square statistic to differences in n , such analysis of these data is of questionable validity. Nonetheless, in order to obtain a rough idea of the meaningfulness of the relationship in the data, chi-square analyses were performed separately on attendance figures for the two films, after the following approximate adjustment. The adjustment was based on the actual counts of attendance made at the two evening showings of the films on the Tuesday immediately after the murder—516 for "In Cold Blood" and 381 for "The Fox." While these figures are only partial, in that the films were shown continuously during the afternoon and evening, they do yield information on the approximate magnitude of the real attendance figures.¹

Results of this analysis indicate there was a highly significant change in attendance frequency for "In Cold Blood" ($X^2 = 50.8, p < .001$); this was not the case for "The Fox."

DISCUSSION

From the analysis of general attendance data, we may conclude that attendance at the violent movie increased markedly following the murder, whereas attendance at the "control" movie showed a slight decrease from the previous week. To the extent that a state of heightened fear existed in the community, this finding supports the general hypothesis that, given safe conditions of exposure, individuals will show a preference for a stimulus situation containing an event or object representative of the real-life source of their fear. It should be noted, however, that indices of the "state of heightened fear" were largely impressionistic, though extremely dramatic, being gleaned from interviews with citizens by the media (TV, newspaper) and observation of altered behavior after nightfall on the part of the community within the "danger zone." Ideally, self-reports of fear levels would have been obtained from persons attending the two movies we compared, but, since the data were of a retrieved or archival nature, this was not possible. As a result, the data are open to alternative interpre-

tation. Berkowitz (1970), for example, suggests that exposure to a little bit of aggression whets one's appetite for more, and so attendance figures in the present study may reflect this consummatory behavior.

Regarding relative identification with the victim—defined in the present study by proximity—it is clear that a preference for the violent movie emerged on the part of "high-identifiers" only when the crime was temporally one week remote. Although self-report measures of fear and excitement were mailed to these subjects to be filled out before and after viewing the movies they chose, unfortunately the number of returns was inadequate for analysis.

It is possible that high identification with the victim leads to increased feelings of personal vulnerability to the danger. Leventhal (1970) has recently proposed a model of fear which identifies cognition of danger and cognition of fear arousal as separate variables which may lead to different behavioral outcomes. Thus, if high identification leads to feelings of increased vulnerability or danger, Leventhal would predict that attention would first be focused on the task of coping with the personal threat and that counterphobic behavior, a fear-reducing or fear-controlling response, would be postponed until these feelings of imminent threat were attenuated.

Application of this formulation accounts for the finding that subjects from the victim's dormitory showed no preference for "In Cold Blood" immediately after the murder when, presumably, feelings of personal vulnerability were highest, but manifested a preference for the same movie one week later, when feelings of vulnerability abated. The lack of preference over time for either movie on the part of control dorm subjects is puzzling, but may suggest that, at this lesser level of identification with the victim, subjects may not have felt the same need to cope with feelings of vulnerability or fear, thus showing no initial avoidance nor eventual increase in preference for "In Cold Blood."

Pertaining to fear control, in a recent study, Boyanowsky (1970) found that female subjects given accurate information concerning fear symptoms produced by a correctly identified

fear source (anticipated shock) manifested significantly less avoidance behavior than subjects misinformed about the symptoms to expect. This finding implies that increased knowledge of the fear source may be fear-reducing and may be one motivation for self-exposure to movies or other harmless displays of fear-inducing stimuli.

Furthermore, Wilkins (1971), after a thorough analysis of the desensitization literature, concludes that the only necessary condition for obtaining fear reduction "appears to be imagination of fear-relevant scenes not necessarily arranged into a hierarchy," a function which movie-viewing is extremely well equipped to simulate. Wilkins observes that informational feedback about one's performance is in itself therapeutic, so that a subject who endures the imagination of a scene concludes that he is more comfortable and less anxious than if he were to terminate the imagining. This counterphobic fantasy behavior could serve a purpose which accounts for our results and underlies the basis of some fear-inducing movies' popularity. The present study is of methodological interest because it makes use of situationally produced actual arousal in a community and identifies a dependent variable which large changes in the data indicate is sensitive to such events. The results demonstrate that violent crime leads to an increase in popularity of violent movies even when a general atmosphere of fear prevails. The specific emotional arousal experienced by the actors concerned remains to be determined by more controlled laboratory experimentation, as does the specific function performed by viewing the movie (e.g., information-seeking, fear-reduction, expression of aggressive tendencies, and the like).

Nevertheless, by first demonstrating the phenomenon in the so-called "real world," the distance between such laboratory studies and analysis of natural events is narrowed.

NOTE

1. Accordingly, the analysis was performed on the data from "In Cold Blood" as they were reported to us, and the data from "The Fox" were reduced by a factor of ten. Justification for this procedure is as follows: the power of the chi-square statistic is highly dependent on the total number of subjects (Siegel, 1956: 179); the actual count data indicate that the transformed figures for "In Cold Blood" are less than

actual attendance, making an analysis based on them a conservative (i.e., less-powerful) test of the true relationship in the data, while the reverse is true for the data from "The Fox," even when reduced to a roughly appropriate magnitude. Since we are predicting attendance differences for "In Cold Blood" and no differences for "The Fox," biases in the data by this method of approximation, to the extent that they exist, should run counter to our hypotheses.

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