

Attributing Responsibility to Female Victims After Exposure to Sexually Violent Films¹

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We investigate the possibility that the degree to which female abuse victims are held accountable by other women who have been exposed to sexually violent mass media is primarily dependent upon 3 factors: situational relevance, personal similarity, and emotional arousal. Female subjects participated in an experiment. Factors were: film dose; film viewing/victim judgment time interval; victim-subject similarity; and situational relevance of the assault. The results showed less attribution of responsibility to similar victims and high attributions of responsibility to dissimilar victims in the personally relevant assault situation (rape). Women identified least with dissimilar rape victims and most with similar victims when they had not been desensitized. When subjects were desensitized, the defensive attribution effect failed to emerge. There was also a significant tendency among low film dose subjects to perceive more psychological injury and to attribute more distress to the victim than among high film dose subjects.

Past research on the effects of exposure to filmed violence with male subjects has shown that repeated exposure to sexualized violence against women results in a desensitization effect (Linz, Donnerstein, & Adams, 1989; Linz, Donnerstein, & Penrod, 1984, 1988). In these studies, men exposed to so-called slasher films containing violence against women became less anxious and reported fewer negative affective reactions with repeated film viewing; they later showed reductions in physiological reactivity to depictions of domestic violence, showed less sympathy for victims of sexual violence in more realistic contexts, and judged these same victims to be less injured compared to no-exposure control subjects.

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Few studies have been undertaken with female subjects. In the only study involving repeated exposure to slasher films, Krafka, Linz, Dunnerstein, and Penrod (1997) found similar emotional desensitization effects for women while they were watching the films, but when asked subsequently to make judgments about a rape victim, Krafka et al. found that desensitized females were much more inclined to place responsibility for the rape on the victim herself than were the men in the Linz et al. (1984, 1988) studies. The women in the Krafka et al. study impeached both the victim's resistance attempts and her credibility. These studies suggest that a separate and perhaps more complex psychological process is at work for women who become desensitized to violence and who are then asked to make judgments about a female victim of violence in another context, than for men. One possibility is that the emotional arousal from exposure to mass-media violence serves in some cases to *augment* attributions of victim responsibility and in other cases undermines the motivation to attribute responsibility to female victims of abuse.

In this article, we investigate the possibility that the degree to which female victims are held responsible for their own assault by other women is primarily dependent upon three factors. The first two factors, situational relevance and personal similarity, are those specified by Shaver (1975) as important motivated distortions (e.g., victim responsibility and defensive attributions) in the assignment of responsibility to actors. The third factor is emotional arousal. Past research shows that arousal may serve to mediate the defensive attribution of responsibility to a victim (Thornton, Hogate, Moirs, Pinette, & Presby, 1986). We propose that brief exposure to highly arousing graphic violence against women will strengthen the tendency to attribute responsibility to victims for certain types of assault. Long-term exposure to media violence, paradoxically, will result in a lowered tendency toward responsibility attributions to some types of victims, due to the emotional desensitization viewers experience with continued exposure.

Assigning Responsibility for Negative Events: Defensive Attributions and Emotional Arousal

Many authors have suggested that victims are held responsible irrationally for their misfortunes. Some theorists postulate that an observer's reaction to a victim may be influenced by the need to maintain a sense of personal security. The desire to maintain a belief in a just world is one such self-protective motivation (Lerner & Matthews, 1967). According to Lerner and his associates, rather than admit the possibility that negative occurrences could happen merely as a result of chance circumstance (a highly threatening possibility),

the perceiver chooses to believe that negative events that befall certain people are deserved either because of the victim's behavior or because of her moral character.

Situational Possibility and Personal Similarity

Shaver (1975) argues that the just-world hypothesis is limited in application because it fails to take into account a critical factor—*personal similarity*—between the observer and the victim of the unfortunate event. A person who sees herself as personally similar to the victim and thus a potential victim will attribute catastrophe to chance or some other factor, and not to the victim, because she could be in the victim's shoes someday. According to Shaver (1975), if you are faced with a threatening attributional situation in which threat can be reduced by attributing responsibility to the victim and denying personal similarity, you will do that. But if you cannot deny personal similarity, then you are more likely to attribute the negative outcome to other factors, such as chance. Women who identify closely with victims of violence, for example, may feel traumatized but are probably less inclined to attribute responsibility to victims similar to themselves, as compared with dissimilar victims.

Shaver (1975) also notes that for any degree of threat to be aroused in the first place, there must be situational possibility; the perceiver must think that it is possible that she might find herself in circumstances similar to those surrounding the stimulus person. Several studies have verified the importance of personal similarity and situational possibility on observer inferences about actor responsibility. These studies confirm the tendency to hold personally dissimilar actors responsible for their misfortune under threatening circumstances and to attribute the misfortune suffered by similar actors to chance. This outcome has come to be known generally as the *defensive attribution effect* (Chaikin & Darley, 1973; Shaver, Turnbull, & Sterling, 1973).

Emotional Arousal

The defensive attribution model was originally formulated to explain attributions made to perpetrators of harm, but more recent empirical findings suggest that it applies equally well to attributions made to victims of harm (Thornton et al., 1986). Thornton et al. also demonstrated that emotional arousal mediates distortions in responsibility attribution to victims. In the first of two investigations, it was found that female observers' sympathetic autonomic arousal in response to another's apparent sexual victimization was positively associated with their subsequent attribution of responsibility to the

victim. In the second study, subjects were given the opportunity to misattribute unpleasant emotions to an unrelated source. Highly aroused subjects attributed less responsibility to victims than did subjects whose arousal level was not misattributed.

In summary, a model emphasizing these three factors (i.e., situational relevance, personal similarity, and emotional arousal) enables us to specify those conditions under which we might expect the greatest tendency toward victim responsibility attributions among college-age female subjects. Women who are emotionally aroused and who are asked to judge the female victim of an event that is situationally relevant would be most likely to defensively attribute responsibility to a victim who is dissimilar to themselves. More concretely, for purposes of this study, emotionally aroused female subjects asked to judge a rape victim (relatively high situational relevance) who is unlike herself will be more likely to hold that victim responsible. Personally similar victims of rape, or dissimilar victims of assaults not deemed situationally relevant (e.g., wife battering), will not be held responsible for their own plight.

Mass-Media-Induced Emotional Arousal

As noted earlier, research with men and women has shown that repeated exposure to sexualized violence against women (e.g., slasher films) results in a dampening of emotional reactions to these depictions over time (Krafka et al., 1997; Linz et al., 1988). Upon first viewing these films, subjects become anxious and emotionally upset, but this anxiety dissipates after several viewings. Additional research shows that subjects exposed to slasher films who are then asked to evaluate an assault victim in another context are less physiologically aroused in the presence of that victim than are control subjects exposed to other equally exciting, nonviolent films (Linz et al., 1989).

Other researchers report that the excitement or emotional arousal associated with viewing films is often transferred from one situation to the next (Zillmann & Johnson, 1973; Zillmann, Katcher, & Milavsky, 1972). Zillmann and Bryant (1984), for example, found that subjects who first watched neutral films and then were exposed to a short, arousing sex film showed significantly elevated heart and systolic blood pressure rates and were more inclined to aggression in the laboratory than were subjects who had been previously exposed to massive amounts of the same type of sexually arousing material several weeks before. The authors reasoned that for long-term exposure subjects, the short sex film, similar in content to that to which subjects had been massively exposed, had lost most of its excitatory capacity.

Considered together, the findings of Linz et al. (1984, 1988) and Zillmann and his associates (1982, 1984) strongly suggest that repeated exposure to

exciting mass-media depictions results in a desensitization effect and that persons exposed only to small amounts of exciting stimuli will be more emotionally aroused in subsequent situations than will subjects who have been repeatedly exposed to these depictions.

Drawing upon the finding that emotional arousal brought to the victim attribution situation will heighten the tendency toward motivated distortions in victim responsibility (Thornton et al., 1986), we would expect that women exposed to short episodes of arousing violence might come to attribute more responsibility to certain victims than women who are not emotionally aroused. We would also predict that repeated exposure to media violence, if it results in desensitization, will in some situations result in *less* attributed victim responsibility rather than more.

Specific Hypotheses/Planned Contrasts

Attenuating or Heightening Attributed Victim Responsibility

We predict an interaction between victim similarity, situational relevance, and exposure to sexual violence, with the greatest attribution of responsibility for dissimilar victims under conditions of high threat after short-term exposure to sexual violence. Attributions of responsibility for similar victims in a high-threat situation should be lowest after short-term exposure. In other words, we expect the greatest and least responsibility to be attributed to dissimilar and similar rape victims, respectively (the defensive attribution effect), only when subjects have not been desensitized. Where desensitization has been induced and emotional arousal is lowered, the defensive attribution effect should be less likely to emerge; that is, we should find no differential responsibility attributed to similar versus dissimilar rape victims.

Testing Other Assumptions About the Effects of Exposure to Sexual Violence

Three additional, nonorthogonal contrasts of theoretical interest will be performed: (a) a contrast which embodies the defensive attribution effect only; (b) a media dosage contrast which incorporates a recovery from media exposure effects for subjects who viewed films but returned after 3 days to complete the dependent measures portion of the study (Note: we are interested in determining if a time delay between viewing and rendering judgments leads to recovery from desensitization, heightened arousal, and, ultimately, a rejuvenation of the defensive attribution effect); and (c) a combined *media*

paradox (short-term exposure to sexual violence will lead to more attributed victim responsibility than will long-term exposure) and defensive attribution model.

In the combined model, we expect the defensive attribution effect under conditions of high situational relevance (e.g., evaluating a rape victim), but we expect that this effect will be attenuated by the reductions in arousal produced by varying levels of media dosage and delay between viewing and victim evaluation. The prediction is that similar victims will always be held less responsible than dissimilar victims (the defensive attribution effect), but that this will be most pronounced under conditions of low film dosage and short delay between film exposure and victim evaluation (those conditions of highest arousal). Relatively long delays between film viewing and victim judgments for both low film dose and high film dose subjects are predicted to reduce or even eliminate the defensive attribution effect because they result in lower levels of arousal. For wife-battering victims, the model specifies differences in responsibility attributions as a function of similarity, but no differences as a function of media dosage because battering cases are not situationally relevant to college-age women.

Additional Dependent Variables

Although actor responsibility has usually been the focal point of the defensive attribution literature, other dependent variables have been examined as well. Lerner and Simmons (1966), in a summary of the just-world and defensive attribution research, point out that the victim's responsibility for her fate is often confounded with the desirability of her personal attributes. These authors observe that perceived irresponsibility is often accompanied by other unfavorable personal attributes, such as unattractiveness, lack of intelligence, unworthiness, and inability to avoid the misfortune. In the present study, we examine the effects of personal similarity, situational relevance, and mass-media-induced emotional arousal on subject judgments about personal attributes of the victim, as well as responsibility judgments.

Method

Design

The design was a $3 \times 2 \times 2 \times 2$ between-subjects factorial. Factors were (a) film dose (high, low, no film); (b) film viewing/victim judgment time interval (immediate, 3-day delay); (c) victim-subject similarity (similar, dissimilar); and (d) situational relevance of the assault (rape, wife battering).

Subject Recruitment

Film Subjects

Subjects were 91 females drawn from the Introductory Psychology subject pool. Potential subjects were contacted by a female research assistant by telephone and were asked to participate in two separate experiments: the first, a film evaluation study ostensibly conducted by the Communication Arts Department as part of a pilot project for later research, and the second, a study of victims, ostensibly conducted by the Department of Social Work. Relying on a telephone script, the assistant first explained the time commitment (a maximum of 9-1/2 hr) and then the payment for participation (\$5 per session and a \$10 bonus for completing the study).

No-Exposure Control Subjects

Thirty-two females comprised the no-exposure control group. Recruiting methods for control subjects were identical to experimental subject recruitment (with the exception that control subjects were offered \$7 for participation). The control subjects took part only in the social work (victim evaluations) part of the study.

Stimulus Materials

Slasher Films

The films included were: *Maniac*, *Toolbox Murders*, *Friday the 13th—Part 2*, and *Nightmare*. All four full-length feature films are representative of the slasher genre. A standard device used by directors of this film genre is to lull the audience into a deceptively soothing, slightly sensual mood before abruptly moving to depictions of exploding carnage. Mutilation of bodies (mostly nude females) often follows a sexually suggestive scene.

Victim Accounts

Female associates of the local Rape Crisis Center, because of personal interest in issues concerning domestic abuse and rape victims, volunteered to recount their actual rape and battering experiences. These accounts were videotaped for presentation to subjects during the victim evaluation phase (ostensibly conducted by the Department of Social Work) of the experiment. Simulated on videotape was a typical face-to-face psychologist/client session

with the client responding to questions regarding not only the details of the rape or battering, but her thoughts, emotions, and concerns about the incident as well. The interview was approximately 15 min long.

Independent Variables

Film Exposure

Subjects in the high-dose condition were exposed to one full-length, feature film per day for 4 consecutive days. On the fourth and final day, the low-dose subjects joined the high-dose groups for the final film viewing. The control group saw no films and provided baseline judgments that reflect the defensive attribution effect, unaffected by exposure to media violence.

Personal Similarity

Two separate procedures were used in order to guarantee an effective manipulation of subject-victim similarity. First, pretest subjects ($n = 80$) recruited from the undergraduate pool were asked to:

Describe in detail a rape and a battering situation that could likely happen to you, the thought of which makes you feel afraid. Characterize, if you would, the victim as someone very similar or dissimilar to yourself. It is essential that your descriptions be detailed and complete. Please be explicit about the victim's physical and personality attributes.

Our assumption was that subjects themselves could best tell us with whom they would and would not identify. Subject-generated scenarios were content analyzed, and frequency distributions were derived. Details that occurred most often constituted a descriptive core around which the real victims built their stories.

Second, subjects participating in the experiment were presented with a personality "sketch" of a woman who was either very similar to or very different from the average University of Wisconsin female student. Using combinations of several dimensions on which individuals are likely to base similarities and differences (i.e., age, home region, political orientation, aspirations, educational background, general interests, taste in music), pretesting for the effectiveness of similarity manipulations was done ($n = 79$). Based on the results of these pretests, participating women from the local Rape Crisis Center presented themselves as people with whom subjects could either strongly identify or not identify with at all.

Film Exposure/Victim Judgment Delay Period

On the fourth and final night of slasher film viewing, one half of the subjects were dismissed from the "film evaluation" study and asked to report, 3 days later, to the Department of Social Work for the "victim evaluation" study. The remaining one half of the subjects were sent directly to Social Work for the victim evaluation study.

Situational Relevance

The victim, presented for evaluation on videotape, provided a firsthand account of either a rape or battering experience. Subjects viewed one of four possible victim combinations: similar rape, dissimilar rape, similar battering, dissimilar battering.

*Dependent Measures**Affective Reactions to the Films*

Before and immediately after each film, subjects completed the Mood Affect Adjective Checklist (MAACL), a measure of transient stress that yields three mood state measures: hostility, anxiety, and depression (Zuckerman & Lubin, 1965; Zuckerman, Lubin, Vogel, & Valerius, 1964).

Attributions About the Victim and the Situation

After viewing the victim on videotape, subjects completed a 55-item questionnaire designed to measure attributions of victim responsibility, attractiveness, likability, similarity, empathy, injury, and personal threat, and to measure attributions about the assailant.

*Procedure**Film Viewing*

When subjects reported to the first film-viewing session, the research assistant explained that they would be viewing films that contained extreme forms of violence against women. Subjects then viewed a representative film clip. After viewing the clip, subjects were informed that they could discontinue participation at any time with no penalties. One subject elected to leave at this point.

Subjects viewed either four films (high dose) or one film (low dose). Films in the high-dose condition were shown on 4 consecutive days. Those subjects assigned to the low-dose film exposure condition joined the high-dose group on the 4th and final day of film viewing. Before and after each film, subjects completed the MAACL.

Victim Evaluation

After subjects had completed their final film viewing session, they were either (a) told to return in 3 days for Part 2 of the experiment or (b) directed immediately to the Department of Social Work. At Social Work, film-viewing subjects were joined by the no-film control subjects and read a character sketch describing the woman (portrayed as either a similar or dissimilar rape or battering victim) who would appear on videotape for their evaluation. After viewing, subjects completed the dependent measures. Finally, all subjects were debriefed.

Results

Affective Responses to Films

Effects of Initial Film Exposure

A mixed-model repeated-measures MANOVA was performed to determine how subjects' moods were affected by their first film exposure. The between-subjects factor was film order, and the within-subjects factors were mood dimensions (hostility, anxiety, depression) and time of measurement (before or after viewing the film). Comparison of the 1st day's pre- and post-film mood measure taken from all film-viewing subjects (both low and high dose) showed that the subjects' moods were strongly affected by film exposure, $t(79) = 13.00$, $p < .0001$. Hostility increased from a pre-film mean of 7.62 to a post-film mean of 14.54; anxiety increased from 7.09 to 13.60; and depression increased from 12.96 to 19.01. There was no main effect for film order, $t(79) = 2.17$, $p < .10$. The main effect for mood dimension was significant but merely reflects the fact that the overall means for the three mood measures differ. There were no interactions among film order, measures, and pre- to post-film viewing.

Affective response to repeated film exposure. Successful inducement of desensitization for high-dose subjects relative to heightened affect among low-dose subjects was crucial in order to test the effect of emotional arousal on defensive attributions. To test for desensitization among high-dose subjects, a mixed-model repeated-measures MANOVA on the hostility, anxiety, and depression scores from the MAACL was conducted. The between-subjects

factor was film order. The repeated measures were hostility, anxiety, and depression measured after subjects' viewing of their first and fourth films. Comparisons between first and last day post-film MAACL scores (across all three mood dimensions) indicates that desensitization had been successfully induced, $t(78) = 3.27, p < .003$. There was no main effect for film order, $t(27) = 0.24, p < .90$, and the interaction between film order and day was also not significant, $t(27) = -1.09, p < .30$. The high-dose group was left in a significantly lower state of arousal on the last day of exposure than they were on the first day of exposure to slasher films. Hostility declined from a post-film mean high of 14.00 on Day 1 to 12.14 on Day 4 of the study, anxiety declined from a mean high of 12.93 on Day 1 to 10.89 on Day 4, and depression dropped from a mean high of 18.75 to 16.21.

Film dose and desensitization. It was also essential that the low-dose viewers remain in a heightened affective state while desensitization was induced in the high-dose subjects. To test for this effect, we conducted a repeated-measure MANOVA including film order and dose as between-subjects variables. There was a highly significant difference in affective state between low- and high-dose subjects, $t(68) = 6.7, p < .001$. For low-dose (1-day) viewers, post-film means were consistently and significantly higher on the three mood dimensions (M s for hostility = 12.14 and 14.93; for anxiety = 10.89 and 13.50; for depression = 16.21 and 18.96 for high and low dose, respectively). There was no main effect for film order and no interactions among the dose, film order, and mood measures.

Indexes of Attribution

For purposes of data reduction and in order to establish the underlying structure of responses on the dependent variables, all 55 attribution measures were subjected to a principal axis factor analysis with varimax rotation. This analysis yielded 13 factors with eigenvalues exceeding 1.0, all of which were readily interpretable and were therefore retained as dependent variables. The total variance explained by the factor solution was 40%. Factor scores were generated for each of the factors for use as dependent variables. Table 1 lists the factors, our labels for the factors, computations of reliabilities based on the mean factor score weighted correlations, and factor scores (over .44) for the primary items contained in each.

Manipulation Checks: Victim Similarity, Situational Relevance

As expected, there was a very large effect for similarity on the identification with victim dependent variable; that is, there was greater identification with

Table 1

Results of Factor Analysis of Attribution Statements

Index label (Reliability/ mean weighted <i>r</i>)	Item	Factor loading
Identification with victim (.97/.39)	Could you be in victim's shoes?	.85
	Do you identify with victim?	.85
	Are your beliefs and values similar?	.82
	Could this crime happen to you?	.80
	Is the victim intelligent?	.69
	Would she fit in with your friends?	.68
	How intelligently did victim behave?	.64
	Is your opinion of her positive?	.62
	Did the crime happen by chance?	.60
	How respectable is the victim?	.59
	Could she have fought him off?	.57
	How likable is the victim?	.52
	Did she do her best to resist?	.50
	Is the victim a kind person?	-.46
Psychological injury (.96/.31)	Does she need psychological help?	-.87
	Was there psychological injury?	-.82
	Will psychological injury last long?	-.69
	How severe was the crime?	-.60
	Could public agencies help?	-.58
	Do you pity the victim?	-.55
	Do you sympathize with her?	-.51
Victim responsibility (.96/.29)	Should she have behaved differently?	.73
	Was the crime due to her actions?	.70
	Was the victim to blame?	.56
	Could she have foreseen the crime?	.50
	Was the crime due to character flaw?	.50
Attractiveness (.96/.30)	How physically attractive is she?	.80
	How personally attractive is she?	.80
Personality (.87/.11)	Was the assailant's character flawed?	-.77

Table 1 (*continued*)

Index label (Reliability/ mean weighted <i>r</i>)	Item	Factor loading
Crime severity (.95/.25)	Should the assailant go to prison?	-.76
	Should he be arrested?	-.75
	Should she hire an attorney?	.62
	Can she overcome psychological injury?	-.54
	How severe was the physical harm?	-.53
	Should the victim call the police?	.48
Victim deserved abuse (.97/.33)	Was the abuse a ploy for sympathy?	-.79
	Does she get pleasure from abuse?	-.79
	Did the victim deserve the abuse?	-.67
	Does the victim seek revenge?	-.62
	How unjust was the abuse?	.44
Distress (.97/.37)	How angry is the victim?	-.78
	Is she upset?	-.72
	Is she afraid?	-.71
	Is she sad?	-.56
Avoidance (.95/.26)	Could she have avoided the violence?	.80
	Could she have done otherwise?	.71
	Would screaming have helped?	.53
Victim beg assailant? (.87/.11)	Would begging him help?	-.87
Assailant blame (.94/.22)	How much was the assailant to blame?	.67
	Is he excused for his behavior?	-.58
	How threatened are you by the crime?	.55
Counseling (.93/.20)	Did the victim exaggerate?	-.79
	Should she be counseled?	-.70
	Does she need a support group?	-.58
Assailant's behavior (.89/.12)	Could he have changed his behavior?	.84

Table 2

Experimental Cells Used in Contrast Analyses

Film exposure	Abuse type	Victim type			
		Similar		Dissimilar	
		Rape	Battery	Rape	Battery
High dose	Immediate	1	2	3	4
	Delayed	5	6	7	8
Low dose	Immediate	9	10	11	12
	Delayed	13	14	15	16
No dose		17	18	19	20

similar than dissimilar victims, $F(1, 102) = 115.79, p < .001$ ($M_s = 0.64$ and -0.70 , respectively) indicating that the similarity manipulation was effective. There was also a strong effect for abuse type on the crime severity variable, $F(1, 102) = 18.43, p < .001$ ($M_s = 0.27$ and -0.34 , respectively)—rape was judged to be more severe than battering—indicating that manipulation of the situational threat variable was also successful.

Attribution Effects

To assist the reader, the results have been organized around three dependent variable clusters: (a) victim responsibility (i.e., identification, victim blame, fabrication, avoidance); (b) consequences to the victim (i.e., psychological injury, crime severity, distress); (c) victim attractiveness; and (d) assailant-related variables.

Factor scores on the 13 dependent variable factors were analyzed using four-way ANOVA (Film Dose $\times$ Similarity $\times$ Delay $\times$ Abuse Type). Control subjects were combined with the low-dose/3-day delay subjects, with a focus on the main effects and on the interaction between similarity and abuse type. This portion of the design is illustrated in Table 2.

Given the very large number of dependent variables, numerous main effects and interactions were tested with a standard ANOVA reflecting the $3 \times 2 \times 2 \times 2$

design. It should be noted that among the interactions not reported here, only 4 of 65 two-ways, 2 of 42 three-ways, and 1 (marginal) of 13 four-ways attained conventional levels of significance, not appreciably more than one would expect by chance alone.³

In reporting the results, we have focused only on main effects for dose, similarity, delay, and abuse type, and the two interactions of theoretical interest—the Similarity $\times$ Abuse Type interaction because it captures the defensive attribution effect, and the Similarity $\times$ Abuse Type $\times$ Dose interaction, which captures the effect of media desensitization on defensive attributions.

To complement these analyses, three additional, nonorthogonal contrasts of theoretical interest were performed within each dependent variable cluster: (a) a defensive attribution contrast that focuses only on judgments about rape victims for whom the defensive attribution effects are most strongly predicted (note that this contrast is similar to a simple effects test on the rape cells within the Similarity $\times$ Abuse Type interaction); (b) a media dosage contrast with five levels which tests a *recovery* from media exposure effects for subjects who viewed films, but returned after 3 days to complete the dependent measures portion of the study; and (c) a combined media paradox and defensive attribution model.

In the combined model, we expected the defensive attribution effect (for rape victims) to be the source of the major effects, but some of these effects will be attenuated by the reductions in arousal produced by varying levels of media dosage. Common wisdom holds that greater exposure to violence against women is related to greater victim derogation. Paradoxically, we maintain that since greater exposure to violence desensitizes viewers reducing levels of arousal and that arousal mediates attributional distortions, greater exposure to media violence should produce less attributed victim responsibility in some cases.

This planned contrast specifically predicts that while, in general, dissimilar victims will be held responsible more than similar victims (the defensive attribution effect), low dosages and short delays (because they produce the highest levels of arousal) will produce the defensive attribution effect (that similar rape victims will be held responsible less than dissimilar victims). Delays following single as well as multiple film viewing were predicted to reduce and even eliminate the defensive attribution effects because of lower levels of arousal. For dissimilar (battering) victims, the model specifies differences in responsibility attributions as a function of similarity, but no differences as a function of media dosage because battering cases are less situationally relevant. The coefficients for these contrasts can be found in Table 3.

³Copies of the full results are available from the authors upon request.

Table 3

Coefficients for Contrast Analyses

	Design cells																			
Hypothesis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Media																				
recovery	2	2	2	2	1	1	1	1	0	0	0	0	-1	-1	-1	-1	-2	-2	-2	-2
Classic																				
defensive																				
attribution	-1	0	1	0	-1	0	1	0	-1	0	1	0	-1	0	1	0	-1	0	1	0
Combined																				
media para-																				
dox and																				
attribution																				
model	-1	-1	0	0	-1	-1	0	0	-3	-1	3	1	-2	-1	2	1	-2	-1	2	1

*Victim Responsibility**Full-Factorial Analyses*

Victim responsibility. Significant main effects for delay were found on the victim responsibility-related dependent variables: There was greater identification with the victim where victim evaluation was delayed, $F(1, 102) = 4.4$, $p < .03$ ($M_s = -0.14$, immediate, and 0.06 , delayed), and greater victim beg assailant recommended by subjects whose victim evaluations did not immediately follow film viewing, $F(1, 102) = 5.09$, $p < .03$ ($M_s = -0.31$, immediate, and 0.13 , delayed). Significant effects for similarity included greater attributed victim responsibility for dissimilar victims, $F(1, 102) = 4.73$, $p < .03$ ($M_s = 0.19$, similar, and -0.16 , dissimilar); and greater avoidance for dissimilar victims, $F(1, 102) = 9.27$, $p < .003$ ($M = -0.27$, similar, and 0.25 , dissimilar) and greater victim beg assailant for similar victims, $F(1, 102) = 6.28$, $p < .01$ ($M_s = 0.22$, similar, and -0.21 , dissimilar). Abuse type had fairly robust effects on a number of the victim responsibility-related factors. There was greater identification with rape victims, $F(1, 102) = 21.89$, $p < .001$ ($M_s = 0.33$, rape, and -0.28 , battering); greater victim responsibility for rape victims, $F(1, 102) = 14.63$, $p < .001$ ($M_s = 0.35$, rape, and -0.30 , battering); greater attractiveness for battering

Table 4

Mean Victim Identification, Responsibility, and Crime Severity Factor Scores (Film Dose $\times$ Victim Similarity $\times$ Abuse Type)

	High				Low			
	Similar		Dissimilar		Similar		Dissimilar	
	Rape	Battery	Rape	Battery	Rape	Battery	Rape	Battery
Identify	0.52	0.66	0.67	0.25	-0.53	0.44	-0.05	-0.41
Victim re-								
sponsible	0.24	-0.34	0.18	0.14	-0.03	-0.34	-0.87	-0.37
Severity	-1.14	0.75	-1.14	-0.55	-0.83	0.69	0.11	-0.07

victims, $F(1, 102) = 5.51, p < .02$ ($M_s = -0.22$, rape, and 0.20 , battering); greater counseling for rape victims, $F(1, 102) = 8.94, p < .003$ ($M_s = 0.26$, rape, and -0.27 , battering); and greater avoidance for battering victims, $F(1, 102) = 6.38, p < .01$ ($M_s = 0.19$, rape, and -0.22 , battering). Two significant three-way interactions (Dose $\times$ Similarity $\times$ Abuse Type) were found, including least identification with dissimilar rape victims where subjects had been exposed to the lowest film dose and thus had not been desensitized, $F(1, 102) = 4.99, p < .02$, and the defensive attribution effect for victim responsibility such that the greatest and least responsibility are attributed to dissimilar and similar rape victims, respectively, only where subjects had not been desensitized, $F(1, 102) = 3.81, p < .05$. Where desensitization was induced, there was no differential responsibility attributed to similar and dissimilar rape victims (Table 4).

Defensive attribution. The defensive attribution hypothesis predicts low attribution of responsibility to similar victims and high attribution of responsibility to dissimilar victims in personally relevant situations such as rape. There were significant effects in the predicted directions for four of five victim responsibility dependent variables: identification, $t(98) = 4.67, p < .001$; blame, $t(98) = 2.06, p < .04$; avoidance, $t(98) = -3.39, p < .001$; and beg assailant, $t(98) = 2.33, p < .02$.

Media recovery. This contrast was designed to answer the question: Is there a media dosage effect such that the amount of film exposure leads to differential victim judgments, but is attenuated by delay? This is a test of the hypothesis that high film dosage leads to the greatest victim derogation, attenuated somewhat by a delay period that would allow for recovery from the media effects. The

Table 5

Mean Factor Scores on Psychological Injury, Crime Severity, and Distress Variables as a Function of Similarity × Abuse Type

	Similar		Dissimilar	
	Rape (1,5,9, 13,16) ^a	Battering (2,6,10, 14,18) ^a	Rape (3,2,11, 15,19) ^a	Battering (4,8,12, 16,20) ^a
Psychological injury	-.32	.50	.09	-.26
Crime severity	-.89	.71	.32	-.18
Distress	-.03	-.53	-.07	.65

^aCell numbers in Table 3.

no-film-exposure control subjects were expected to hold victims least responsible, and low-dose/delay subjects were expected to derogate slightly more than no-exposure controls but less than the low-dose/immediate subjects. No effects were found on this cluster of dependent variables for this contrast.

Combined media paradox and defensive attribution model. This contrast combines the effects of media dosage, delay, and defensive attribution on judgments. Significant effects in the predicted direction were found on four of the five victim responsibility dependent variables, including identification, $t(98) = -9.01, p < .001$; victim blame, $t(98) = 3.00, p < .003$; avoidance, $t(98) = -2.79, p < .006$; and beg assailant, $t(98) = 2.93, p < .004$.

Victim Consequences

Full-Factorial Analyses

With the exception of a main effect for exposure on psychological injury, $F(1, 102) = 8.34, p < .005$ ($M_s = 0.53$, low dose, and -0.15 , high dose) such that low-dose subjects perceived greater psychological injury to the victim, there were no main effects for film exposure on any of the victim-related cluster of dependent variables. Significant effects for similarity and for abuse type included greater distress for similar victims, $F(1, 102) = 15.46, p < .001$ ($M_s = 0.32$, similar, and -0.29 , dissimilar) and greater crime severity for rape victims, $F(1, 102) = 18.43, p < .001$ ($M_s = 0.27$, rape, and -0.34 , battering). There was a Similarity × Abuse Type

interaction on all three of the consequences to the victim dependent variables. Subjects attributed greater psychological injury to similar rape victims, $F(1, 102) = 10.94, p < .001$; greater distress to similar battering victims, $F(1, 102) = 13.98, p < .001$; and judged the crime to be most severe for similar rape victims, $F(1, 102) = 54.29, p < .001$. The three-way interaction (Dose $\times$ Similarity $\times$ Abuse Type) on crime severity was also significant such that rape of a dissimilar victim is perceived by desensitized subjects as least severe, $F(1, 102) = 6.16, p < .01$ (Table 5).

Defensive attributions. An effect in the predicted direction was found for crime severity only, $t(98) = 5.89, p < .001$.

Media recovery. We found significant effects on two of the three consequences to the victim-related dependent variables such that there was more perceived psychological injury among low-dose subjects, $t(98) = 3.46, p < .001$, and more distress among low-dose subjects, $t(98) = 2.01, p < .05$.

Combined media paradox and defensive attribution model. A significant effect in the predicted direction was found for crime severity only, $t(98) = 2.20, p < .034$.

Victim Attractiveness

There was a significant main effect found for abuse type such that battering victims were rated as more attractive than rape victims, $F(1, 102) = 5.51, p < .02$ ($M_s = -0.22$, rape, and 0.20 , battering). There were no other significant effects found for victim attractiveness.

Assailant-Related Variables

On only one of the three assailant-related factors (personality) did we find any significant effects and, as with the victim-related factors, the most potent effects were for abuse type, $F(1, 102) = 11.88, p < .001$ ($M_s = 0.31$, rape, and -0.27 , battering), indicating that greater responsibility was attributed to personality characteristics in battering assailants. There was also a significant Similarity $\times$ Abuse Type interaction, indicating greater responsibility attributed to the assailant's personality characteristics where the crime is battering and the victims are dissimilar, $F(1, 102) = 5.21, p < .02$.

Discussion

Summary of Findings

The hypotheses encompassed in the planned contrasts representing the defensive attribution effect only (disregarding the film exposure effects) were strongly

supported for the victim responsibility cluster of dependent variables. Consistent with other theorists, we had predicted low attributions of responsibility to similar victims and high attributions of responsibility to dissimilar victims in personally relevant situations such as rape. Our results supported this prediction. We had made a similar prediction for the victim consequences dependent variables; however, only on the crime severity variable was the effect detected.

Our predictions concerning the effects of media-induced arousal on defensive attributions were also supported, overall. We found that women identified least with dissimilar rape victims and most with similar rape victims when they had *not* been desensitized. When subjects were desensitized, the defensive attribution effect failed to emerge.

We were also interested in determining if film exposure dose and a time delay between viewing and victim evaluation interact. We tested the hypothesis that high film dosage leads to greatest victim derogation when attenuated by a delay period that would allow for a recovery from the media effects. These effects were not found for the victim responsibility dependent variables, but some effects for dose were found for the victim consequences variables. There was a significant tendency among low-dose subjects to perceive more psychological injury and to attribute more distress to the victim than high-dose subjects. A combined *media paradox* (short-term exposure to sexual violence will make victim responsibility attributions more likely than long-term exposure) and defensive attribution model was also tested. We expected the defensive attribution effect under conditions of high situational relevance (i.e., evaluating a rape victim), but we postulated that this effect would be attenuated by the reductions in arousal produced by varying levels of media dosage and delay between viewing and victim evaluation. Significant effects were found for this model on the victim responsibility variables.

We also examined the effects of personal similarity, situational relevance, and mass-media-induced emotional arousal on subject judgments about personal attributes. No effects were found. Likewise, no effects were found for the assailant-related variables.

Implications for Mass-Media and Victim-Evaluation Research

These findings extend those obtained by others on the effects of emotional arousal on victim responsibility attributions. The study can be viewed as a conceptual replication of the results obtained by Thornton et al. (1986), who showed that emotional arousal plays an important role in motivated distortions of responsibility.

The desensitization effects found on the victim consequences variables, such that women exposed to a low dose of sexual violence perceived more

psychological injury and attributed more distress to the victim than women exposed to larger doses, are similar to past findings for males. Linz et al. (1984, 1988) found that male subjects who were exposed to slasher films for relatively long periods of time were less empathic toward rape victims in general, and found the victim of a rape presented in a videotaped trial to be less injured than control subjects who had not viewed a number of these films. As in the Linz et al. studies, in the present study we found few effects on victim and assailant variables not directly related to victim distress or injury. Evaluations of victim attractiveness and evaluations of the assailant remained unchanged after film exposure. Considered together, these studies suggest that desensitization effects after exposure to sexual violence are relatively robust, but that the spillover to other judgments may be limited. Judgments about perpetrators or other aspects of the victimization situation appear to be unaffected.

The implications for scientific research on the relationship between desensitization to violence after mass-media exposure and victim derogation are, perhaps, more subtle. The findings presented here point to a relatively complex relationship between emotional desensitization and victim judgments following exposure to violence. Under some conditions, we obtain the classic defensive attribution—the tendency to hold personally dissimilar actors responsible for their misfortune under threatening circumstances and to attribute the misfortune suffered by similar actors to chance. But this effect emerges only when subjects are highly aroused, a state that is most easily evoked with *fewer* rather than *more* sexually violent media exposures.

This is one of at least two effects that are consistent with social psychological theory but are somewhat paradoxical in light of commonsense notions about the results of prolonged exposure to mass-media violence. The other is the finding by Zillmann and Bryant (1982, 1984) that long-term exposure to sexually degrading material leads to less aggressive behavior in the laboratory than does short-term exposure to the same materials, presumably because of the psychological process of excitation transfer. The findings of the present study stand as an additional example of what may be a general phenomenon; namely, that more exposure to arousing mass media results in fewer effects than less exposure because of heightened or dampened physiological/emotional arousal augmenting or attenuating responses toward a victim. The present study suggests that what appears to hold true for violent behavior following long-term exposure to violence also holds true for more cognitive responses such as attributing responsibility to victims in some circumstances.

The effects of emotional arousal following exposure to violence in conjunction with personal similarity and situational relevance on female subject responses to female victims should be kept in mind in future research on desensitization. They may be useful in explaining why negative effects such as

attributing responsibility to victims are observed in some studies (Krafka et al., 1997), but not others (Linz et al., 1984, 1988).

Finally, this paradoxical effect also complicates the usual assumptions made by policy makers and concerned citizens about the effects of prolonged exposure to sexual violence in the mass media. Many policy makers (e.g., Attorney General's Commission on Pornography, 1986) have postulated that media violence leads to tolerance of sexual violence. Social psychological research has been used to substantiate these claims (*American Booksellers Association v. Hudnut*, 1984). Policy makers and researchers are often left in a quandary as to why some studies of exposure to violence produce socially undesirable effects and others do not. Our study suggests that variables such as emotional arousal stemming directly from the level of exposure to violence and the timing of exposure and judgments about or behavior toward certain victims must be considered as mediating variables for certain antisocial effects.

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