Perceptions of an Aggressive Encounter as a Function of the Victim's Salience and the Perceiver's Arousal

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Two studies were conducted to investigate the effects of a victim's physical salience and perceivers' arousal on perceptions of a verbally aggressive interaction. Based upon evidence that there is a tendency to attribute causality to salient stimulus persons and to form more evaluatively extreme impressions of such persons, it was predicted that an aggressor's behavior would be attributed more to causes in a physically salient than a nonsalient victim and that the behavior of a salient victim would be evaluated more extremely than that of a nonsalient victim. Based upon Easterbrook's hypothesis that arousal narrows the focus of attention to the most salient cues in the situation, it was further predicted that aroused perceivers would manifest both a stronger tendency to attribute causality to a physically salient victim of aggression and more extreme ratings of the stimulus persons than would nonaroused perceivers. The results supported all of the experimental hypotheses except one: The tendency to attribute the aggressor's behavior more to a physically salient than a nonsalient victim was not greater for aroused than for nonaroused perceivers.

Recent research has revealed a surprisingly strong tendency for our social perceptions to be influenced by the relative salience of people and their environments. One finding is that salient stimuli tend to be perceived as causing the events in a social situation. This effect has been documented in a number of studies employing salience manipulations derived from Gestalt laws of "figural emphasis," which hold that certain stimuli tend to be seen as figural or to stand out from their surroundings. For example, Arkin and Duval (1975) found that an actor's art work choices were attributed more to situational causes when the situation was figural or salient by virtue of a moving slide show than when it contained still photographs. McArthur and Post (1977) conducted a series of studies that generalized this effect to interpersonal interactions in which the salient situational stimuli were other people. When an actor conversed with someone who was salient by virtue of being brightly lit, moving, wearing a patterned shirt, or forming a physically similar unit with others present, then the actor's behavior was attributed more to situational causes than when he or she conversed with someone whose physical attributes were less salient.

The impact of salient physical attributes on social perceptions has been documented in the realm of impression formation as well as causal attributions. In particular, there is some evidence that impressions of physically salient persons are more evaluatively extreme than those of less salient persons, a finding that is consistent with the Gestalt principle that "feelings are attached to figures and not
PERCEPTIONS OF AN AGGRESSIVE ENCOUNTER

Generalizability of Salience Effects

While the documentation of salience effects is quite extensive, the supporting evidence has not been obtained in very significant social situations. In particular, Taylor and Fiske (1978) have noted that most of the effects have been demonstrated in the context of commonplace, redundant, and boring getting-acquainted conversations (e.g., McArthur & Post, 1977; Storms, 1973; Taylor & Fiske, 1975), and they have suggested that the salience effects may conceivably be limited to such situations. One purpose of the present study was to test the generalizability of salience effects to a more interesting, unusual, and informationally complex social situation. (See also Taylor, Crocker, Fiske, Sprinzen, & Winkler, in press). More specifically, the present study tested the generalizability of these effects to an aggressive social interaction—a heated discussion about the outcome of a bridge hand between two partners, one of whom emerged as an aggressor and the other as a victim. In this situation, the tendency to attribute causality to salient stimulus persons should yield a greater tendency to blame a salient than a nonsalient victim. Such an effect would have important social implications. For example, eyewitness accounts of the liability of accident victims and victims of assault may vary with the victim's salience. In addition to increasing the "experimental realism" (Carlsmith, Ellsworth, & Aronson, 1976) of the social situation facing perceivers in the present research, the salience manipulations had broader implications for perceptions of physically distinctive individuals than those employed in previous studies. Based upon the fact that isolated stimuli are figural and that novel stimuli draw attention (e.g., Berlyne, 1970; Langer, Taylor, Fiske, & Chanowitz, 1976), some stimulus persons in earlier research have been rendered salient by virtue of their novelty within the immediate context, for example, a female in a group of males (Taylor, Fiske, Etcoff, & Ruderman, 1978). In the present study, on the other hand, the stimulus persons' novelty derived from being physically different from the majority of persons in the population at large and did not depend upon being different from a group of persons appearing with them. In the control condition, subjects watched a black and white videotape in which the two discussants were equivalent in visual salience. In the "brace-salient" condition, the victim was rendered more visually salient by virtue of a leg brace, a relatively novel physical attribute. Of course, a leg brace carries connotations about the wearer, and one could argue that it is these connotations, rather than salience per se, that cause the perceivers' impressions and causal attributions to differ when the victim wears a brace. For this reason, an additional salience manipulation was employed, one that would not carry the same connotations as the leg brace but that should also cause the victim to stand out more than in the control condition. This was the "hair-salient" condition, in which the black and white control videotape was shown in color, revealing the victim's red hair, which, like a leg brace, is a relatively novel physical attribute.

Perceiver's Arousal

In addition to employing more meaningful social interactions and manipulations of salience than past research, the present study introduced a variable that would seem to have importance for generalizing to salience effects in the natural environment. This is the arousal level of the perceivers. It has been proposed (Easterbrook, 1959) that emotional arousal narrows the focus of attention to the most "relevant" or "salient" cues in the situation. Research employing a variety of arousal manipulations has provided support for Easterbrook's hypothesis within the realm of non-social stimuli (e.g., Bruner, Matter, & Papa- nek, 1955; Bruning, Capage, Kozoh, Young, & Young, 1968; Cornsweet, 1969; Hockey, 1970). All of these studies reveal a focusing of attention under high arousal that is manifested in less awareness of nonsalient stimuli. Generalizing to the realm of social stimuli, one might expect a focusing of attention under high arousal that is manifested in less awareness of nonsalient people and, within a given
stimulus person, less awareness of nonsalient behaviors.

The particular salience manipulations employed in the present research, coupled with the aggressive nature of the social interaction and variations in the arousal level of perceivers, allow us to answer the following questions:

1. Will the tendency to attribute causality to salient stimuli yield more blaming of a physically novel than of a non-novel victim of verbal aggression?
2. Will the tendency for feelings to be attached to salient stimuli yield more extreme evaluative ratings of a physically novel than of a non-novel victim?
3. Will the tendency for arousal to narrow attention to the most salient persons within a situation increase the tendency to blame a physically novel victim?
4. Will the tendency for arousal to narrow attention to the most salient behaviors within a stimulus person increase the extremity of evaluative ratings?

Study 1

Method

Subjects

Fifty-three male and 51 female undergraduates from the introductory psychology course at Brandeis University volunteered to participate in the study for experimental credit. Of these subjects, 3 females and 2 males were eliminated from the data analyses because they knew one of the videotape actors. An additional group of 3 male subjects who saw the videotape depicting someone with a leg brace was also discarded; because a subject wearing a leg brace was present in this group, it was felt that the brace-salience manipulation would be unduly salient. The 96 subjects who comprised the final sample were randomly assigned to one of three salience conditions (control, hair, or brace), one of two arousal conditions (noise present, noise absent), and one of two rating orders (aggressor rated first, aggressor rated last).

Materials

Videotapes. Three videotapes were prepared that depicted two young women, an “aggressor” and a “victim,” discussing the outcome of a bridge hand. The discussion of the bridge hand was approximately 4½ minutes long and had been memorized from a script. During the discussion, the aggressor repeatedly criticized the victim's performance and was sometimes downright insulting. Although the criticisms were strong and loudly voiced, they were delivered in a convincing fashion, and all subjects believed that the discussion had really occurred. The victim’s friendly and passive behavior stood in marked contrast to the aggressor.

The setting for the videotapes consisted of a bridge table with the partners seated opposite each other on the left (the victim) and on the right (the aggressor) of the screen. A standing ashtray was positioned in front of the victim's chair. Both the victim and the aggressor were similarly dressed in dark-colored skirts and blouses. The background was a blue curtain, the only backdrop available in the studio. The only difference among the tapes was the physical salience of the victim, which was varied in two ways. First, the scene was simultaneously taped by two cameras at slightly different angles. Although the discrepancy in camera angles was so slight that the subjects’ view of the actors’ faces and bodies did not differ appreciably, one videotape revealed the victim's leg brace (brace-salient tape), while in the other, the brace was obscured from view by the standing ashtray. When this latter tape was shown in color, it revealed the victim's red hair (hair-salient tape). When it was shown in black and white, as the brace tape was, it served as the control tape.

Noise. Earlier research that had revealed that loud noise focuses attention on the most salient stimuli in object perception tasks (e.g., Hockey, 1970), together with the fact that noise is often a concomitant of person perception in urban environments, led to the choice of noise as the arousal manipulation in Study 1. For half of the subjects, a cassette recording of noises made by an electric hand drill was played during the videotape. The noise was approximately 90-95 dB(A), and the lengths of the blasts and intervals between blasts were varied so as to appear random. Actually, they were carefully synchronized with the videotapes so that only redundant or irrelevant material was obscured.

Procedure

Upon arriving at the experimental room, all subjects were greeted by a female experimenter; they were seated in front of a videotape monitor and given the following instructions:

We are interested in determining what types of problem-solving behavior are most effective and hence most likely to improve future performance on a given task. So, we have videotaped some discussions in which teams of bridge players discussed the game they just played with their partners. We wanted to encourage the players to engage in the most productive discussions possible, so we offered a $20 reward to the team which showed the most improvement. We also gave them 15 minutes to think about what they wanted to say, write
notes for themselves, or whatever before we asked their permission to tape the sessions.

I'm going to show you one of these discussions today, and after you watch it, I'm going to ask you to rate the people you saw on a questionnaire. It makes no difference whether you are familiar with bridge or not—so don't worry about that.

Following these instructions, the experimenter went into an adjoining room, where she turned on the video recorder and remained until the videotape had ended. She then returned and distributed the dependent measure questionnaire, after which she went back into the adjoining room.

Noise arousal condition. In the noise arousal condition, previously recorded sounds of intermittent drilling began in the adjoining room as the experimenter gave her initial instructions to subjects. To prevent subjects from becoming suspicious, the noise persisted not only throughout the videotape but also during the time that the experimenter distributed the dependent measure questionnaires and gave instructions for filling them out. Shortly after the experimenter left the room, two males could be heard deciding to leave their work and get a cup of coffee. After this, the noise ended.

Dependent Variables

Following the procedure that had been employed in earlier research (e.g., McArthur & Post, 1977; Storms, 1973), subjects rated how constructive, friendly, domineering, insightful, receptive, emotional, and patient each actor's problem-solving behavior was. For each of these behaviors, subjects rated the extent to which the behavior was caused by the actor's personality disposition, by the situation, and by her partner. Dispositional causes were defined for subjects as "the actor's traits, character, personal style, attitudes, abilities, etc." Situational causes were defined as "being videotaped, being in an experiment, competing for a $20 reward, etc." Partner causes were described as "the other person's personality, tone of voice, comments, mannerisms, etc." All ratings were made on 9-point scales.¹

Results

The dependent measures were subjected to an analysis of variance utilizing salience (3), arousal (2), sex of subject (2), and order of rating the stimulus persons (2) as between-subjects factors. Since each subject rated both the aggressor and the victim, stimulus person was employed as a repeated measure. Planned comparisons, utilizing the appropriate error term from the overall analysis of variance, were employed to test the specific experimental hypotheses.

Causal Attributions

The extent to which the various behaviors (e.g., receptivity, friendliness, etc.) were seen as caused by the actor's disposition, situation, and partner were summed to form a composite index for each type of attribution. These composite measures were employed, as had been done in previous research, because the hypothesis concerned the relative strength of partner attributions and made no distinction among the behavioral dimensions.

Salience effects. Planned comparisons were performed to test the prediction that making the victim salient would increase the tendency to attribute the aggressor's behavior to her. Consistent with predictions, the effect of the victim's salience on partner attributions for the aggressor's behavior was significant, \( F(2, 72) = 3.86, p < .05 \), whereas partner attributions for the victim's behavior did not vary with her salience (\( F < 1 \)). The aggressor's behavior was attributed more to the victim when she had red hair or when she wore a leg brace than when she was not salient, although only the former effect approached significance, \( t(62) = 1.88 \) and 1.43, \( ps < .07 \) and < .20, respectively. Since the weakness of these effects seemed largely attributable to the extremely high error variance for the partner attribution measure (2.5 times that of the dispositional attribution measure), nonparametric analysis of the partner attribution data was performed to further substantiate these findings. More specifically, arc sine transformations were performed on the proportion of subjects within each condition whose partner attributions were above the median for all subjects, and these transformed scores were subjected to an analysis of variance utilizing salience (3) and arousal (2) as between-subjects factors and stimulus person (2) as a within-subjects factor (see Langer & Abelson, 1972, for a discussion of the arc sine transformation in this con-

¹ Subjects also provided open-ended descriptions of both stimulus persons. However, since these data reflect how many subjects spontaneously mentioned that a stimulus person was incompetent, friendly, and so forth, rather than reflecting the extremity of incompetence and friendliness attributed to her, they will not be formally reported except to note that all of the significant effects paralleled findings on the closed-question ratings.
text). Planned comparisons, utilizing the error term from this overall analysis, yielded strong support for the experimental hypothesis. As predicted, the effect of the victim's salience on partner attributions for the aggressor's behavior was highly significant, $F(2, \infty) = 7.16, p < .01$. A higher proportion of subjects were above the median in attribution of the aggressor's behavior to the victim when she was salient by virtue of red hair (.56) or a leg brace (.47) than when she was not salient (.25). $ts(\infty) = 2.60$ and 1.85, $ps < .01$ and < .08, respectively. On the other hand, the proportion of subjects above the median in attributions of the victim's behavior to her partner were equivalent when the victim had red hair (.56) or a leg brace (.53) or no salient attribute (.62) ($F < 1$).

Arousal effects. Contrary to expectation, the tendency to attribute an aggressor's behavior more to a salient than a nonsalient partner was no stronger in the noise arousal condition than in the no-noise condition ($F < 1$).

Behavior Ratings

Because ratings of the constructiveness and insightfulness of a stimulus person's comments were highly correlated, these were summed to create a "competence" index. Similarly, ratings of the patience and nonemotionality were summed to create an "irritability" index. Thus, ratings of the domineeringness, receptivity, friendliness, competence, and irritability of the aggressor and the victim were examined (see Table 1).

Manipulation checks. Ratings of the two stimulus persons revealed that the videotapes had created an aggressor and a victim, as intended. The aggressor was rated as extremely domineering, unreceptive, and unfriendly, and as moderately irritable. The victim, on the other hand, was rated as extremely acquiescent and as moderately receptive, friendly, and nonirritable. The ratings of the aggressor and the victim on all of these dimensions were significantly different and, in addition, the aggressor was rated as more competent than the victim (all $ps < .01$).

Salience effects: Ratings of the victim. The effects of the victim's salience on ratings of her domineeringness, friendliness, and competence were significant, $Fs(2, 72) = 8.50, 3.54$, and $3.89, ps < .01, < .05$, and < .05, respectively, whereas the effects on ratings of her receptivity and irritability were not, $Fs(2, 72) = 3.04$ and < $1$, respectively; both $ps > .05$. As predicted, ratings of the victim's competence and acquiescence tended to be more extreme when she wore a leg brace than in the control condition, $ts(62) = 1.81$ and 1.67, respectively; both $ps < .10$. However, the tendency to rate the victim as receptive, friendly, and nonirritable was not more extreme when the leg brace was visible (all $ts < 1$). Making the victim salient by virtue of her hair color did not yield the predicted increase in the tendency to rate her behavior more extremely on any of the dependent measures. What is more, contrary to prediction, ratings of victim's friendliness tended to be less extreme in the hair-salient than in the control condition, $t(62) = 1.88, p < .07$.

It should be noted that the influence of arousal and salience on behavior ratings is convergent: Both are expected to increase the extremity of ratings of the victim. For this reason, the effects of each variable may be more apparent in the absence of the other. That is, arousal may increase extremity ratings so much that the effects of salience on these ratings may be weak or absent among aroused perceivers. Similarly, salience may increase extremity ratings so much that the effects of arousal may be weak or absent among perceivers exposed to the salient victim. In view of this possibility, the effects of salience on behavior ratings were examined separately for nonaroused perceivers. How-

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2 Although it might be expected that attributions of the victim's behavior to her own disposition would increase as she became more salient, such effects have been weak or nonexistent in earlier research and were similarly absent in both of the present studies. Although past research has found that making one partner physically salient in a two-person interaction increased situational attributions for the behavior of the nonsalient partner, the more specific and appropriate partner attribution measure seems to have usurped these effects in the present studies: No significant effects of victim salience on situation attribution were obtained either in the original analyses or in the nonparametric analyses.
Table 1
Behavior Ratings of the Victim and Aggressor in the Control, Brace, and Hair Conditions in Study 1

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<thead>
<tr>
<th>Behavior</th>
<th>Victim</th>
<th>Aggressor</th>
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<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Brace</td>
</tr>
<tr>
<td></td>
<td>1.84&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.59&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Domineering</td>
<td>6.15&lt;sub&gt;a&lt;/sub&gt;</td>
<td>6.19&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Receptive</td>
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<td>6.28&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Friendly</td>
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<td>7.65&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Competent</td>
<td>4.85&lt;sub&gt;b&lt;/sub&gt;</td>
<td>4.72&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Irritable</td>
<td>8.50&lt;sub&gt;a&lt;/sub&gt;</td>
<td>8.59&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
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<td>14.38&lt;sub&gt;a&lt;/sub&gt;</td>
<td>14.72&lt;sub&gt;a&lt;/sub&gt;</td>
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Note. Ratings of domineering, receptive, and friendly could range from 1 to 9, and ratings of competent and irritable could range from 2 to 18. For each behavior, the ratings for a given stimulus person that differed at the <i>p</i> < .10 level or better are indicated by differing subscripts. <i>n</i> = 32 in each cell.

Discussion

One clear finding emerges from the present study: Perceivers' causal attributions for the behavior of individuals engaged in a two-person interaction will vary with the salience of those individuals even when the interaction is meaningful and affectively toned. The behavior of an aggressor who was rated as extremely domineering, unreceptive, unfriendly, and irritable was attributed more to causes in the victim when the victim was physically salient than when she was not. What is more, this effect held true for two very different sources of salience—a leg brace and red hair.

Although the effects of the victim's salience on causal attributions confirmed predictions, the effects of her salience on behavior ratings did not. Only the brace-salience manipulation produced the predicted increase in extremity of ratings of the victim. Since these effects could conceivably be explained in terms of stereotypes about handicapped people, they do not provide unequivocal support for the hypothesis that a person's salience per se influences the extremity of evaluations. Parallel effects in the hair-salient condition are necessary to confirm such a hypothesis. Not only were parallel effects not obtained, but moreover, the victim's friendliness was rated less, rather than more, extremely in the hair-salient than in the control condition. One possible explanation for this reversal is that it represents a distraction effect. If the hair-salient videotape somehow distracted subjects from the interaction between the aggressor and the victim, one might expect less extreme ratings of

ever, no additional salience effects emerged either for ratings of the victim or for ratings of the aggressor.

Salience effects: Ratings of the aggressor. Although no clear-cut predictions could be made regarding the influence of the victim's salience on ratings of the aggressor's behavior, these ratings were examined. Significant salience effects were obtained for ratings of the aggressor's receptiveness, friendliness, competence, and irritability, <i>F</i>(2, 72) = 5.01, 5.00, 9.22, and 4.95, (all <i>p</i> < .01) respectively, but not for ratings of her domineeringness (<i>F</i> < 1). Ratings of the aggressor's competence were more extreme when the victim wore a leg brace, <i>t</i>(62) = 3.17, <i>p</i> < .01, whereas other ratings of the aggressor did not differ in the brace and control conditions (all <i>p</i> > .20). Ratings of the aggressor, like those of the victim, were not affected in the same manner by the victim's hair color as they were by the brace. Ratings of the aggressor's receptivity and friendliness tended to be less extreme when the victim had red hair, <i>t</i>(62) = 1.96 and 1.97, respectively (both <i>p</i> < .06), whereas ratings of the aggressor's competence and irritability did not vary with the victim's hair color (both <i>p</i> > .10).

Arousal effects. The prediction that aroused perceivers would make more extreme ratings of both the victim and the aggressor was not confirmed for any of the dependent measures. Even among control subjects, for whom arousal effects should be most pronounced for the reasons advanced above, the prediction was not supported.
them. Although one would not ordinarily expect hair color to provide more of a distraction than a leg brace, an unintended aspect of the hair videotape supports this possibility. The backdrop used in the videotapes was a blue curtain. While this curtain was unobtrusive in the black and white control and brace videotapes, its vibrant blue color was probably even more salient than the victim's hair in the hair videotape. Thus, although the victim may have stood out more relative to the aggressor in the hair-salient than in the control condition (hence the causal attribution effects), the distraction of the curtain may have prevented accentuation of the salient victim's attributes. Consistent with this argument was the finding that subjects in the hair-salient condition showed significantly less recall of the videotaped discussion than those in the brace-salient condition, \( t(126) = 2.64, p < .01 \).

Study 2

A second study was conducted to determine whether the failure of the hair-salience manipulation to produce the predicted extremity effects was indeed due to the distraction of the bright blue curtain. The same videotapes were employed in this study, but the hue, color, and brightness control knobs on the television set were adjusted to tone down the blue to a dull slate color. This could be accomplished without losing the red hair color, although the red was not quite so vibrant as it had been in Study 1.

The second study also provided another test of the hypothesis that arousal will increase the extremity of perceiver's impressions, since problems with the noise arousal manipulation may have accounted for the negative findings in Study 1. Although the noise tapes had been carefully synchronized with the videotape so as not to obscure any of the meaningful dialogue, subjects in the noise arousal condition often reported that they could not hear the videotape. One certainly would not expect ratings to become more extreme when subjects felt that they had not grasped the discussion. And indeed, the noise manipulation did interfere with recall of the dialogue. Consistent with their subjective reports, subjects in the noise arousal condition showed significantly less recall than those in the no-noise condition, \( F(1, 72) = 24.29, p < .001 \). In view of these data, it seemed worthwhile to provide another test of the arousal hypothesis. In Study 2, half of the subjects were themselves videotaped while they watched the experimental videotape. This manipulation of self-consciousness was chosen as the arousal manipulation both because earlier research had revealed that being observed focuses attention on the most salient stimuli in object perception tasks (e.g., Bruning et al., 1968) and because such feelings of self-consciousness are often a concomitant of person perception in natural social situations.

Method

Subjects

Fifty-five male and 51 female undergraduates from the introductory psychology course at Brandeis University volunteered to participate in a study of person perception for experimental credit. Of these subjects, 3 females and 5 males were eliminated from the data analysis because they knew one of the videotape actors. A sixth male was eliminated because he had been a subject in Study 1, and a seventh was eliminated for failure to complete the experimental questionnaire. The 96 subjects who comprised the final sample were randomly assigned to one of three salience conditions (control, hair, or brace), one of two arousal conditions (videotaping present or absent), and one of two rating orders (aggressor rated first or last). Subjects were run in groups of four.

Procedure

The procedure in Study 2 was essentially identical to that employed for nonaroused subjects in Study 1, with the following modifications:

Videotape arousal manipulation. Following instructions regarding the purpose of the experiment, subjects in the videotape arousal condition were told the following:

There's one more thing I'd like to tell you about before we start. One of the graduate students is doing a study of people's facial expressions. Since I've got all this video equipment, I've been asked to make videotapes of people's faces and facial expressions. I will be filming each of you as you watch this problem-solving discussion. Only some of the tapes that I make will be used in that experiment, and let me assure you that you will each have an opportunity to see the videotape of yourself and it will not be shown to anyone without
your written consent. OK, let me make sure the camera is focused properly before we start.

Following these instructions, the experimenter panned each subject with the video camera for approximately 5 sec. The zoom lens on the video camera was fixed so as to provide a close-up of the subjects' faces, and they could see themselves on a large black and white television monitor. After subjects had seen themselves, the experimenter turned the television monitor around, saying, "I'm going to turn this TV around so that you won't be distracted."

Dependent measures. Since control subjects' ratings of the aggressor's domineeringness had been so extreme in Study 1 as to preclude the possibility of becoming more extreme with an arousal manipulation (8.81 on a 9-point scale), this measure was deleted in Study 2. It was replaced with a rating of "How active was the problem-solving behavior of the two stimulus persons?" Ratings of the constructiveness of the participants' problem-solving behavior were replaced with ratings of the competence of their behavior, since several subjects had complained that they did not know what we meant by "constructiveness." Also, another ability rating was added: Subjects were asked to indicate how much they thought the problem-solving behavior of each stimulus person would improve the team's performance on the next task. Thus, the competence index in Study 2 consisted of ratings of competence, insightfulness, and contribution to improved performance. A rating of the stimulus persons' courtesy was also added in Study 2, and a friendliness index was constructed from ratings of friendliness and courtesy, which were highly correlated. Since ratings of the stimulus persons' irritability had yielded no significant salience effects in Study 1, the component patience and emotionality ratings, together with causal attributions for these behaviors, were deleted in Study 2.

Manipulation checks. As a check on the arousal manipulation, subjects were asked how relaxed and self-conscious they felt during the experiment.

Results and Discussion

The data analyses in Study 2 paralleled those employed in Study 1.

Causal Attributions

As in Study 1, the composite partner attribution ratings had extremely high variance (more than 3.5 times that of the dispositional attributions) and yielded no significant effects. Nonparametric analyses of the attribution data like those conducted in Study 1 were therefore performed to provide a more sensitive test of the hypotheses.

Salience effects. As predicted, the effect of the victim's salience on partner attributions for the aggressor's behavior was highly significant, $F(2, \infty) = 8.45, p < .01$: A higher proportion of subjects were above the median in attribution of the aggressor's behavior to the victim when the victim was salient by virtue of red hair (.56) or a leg brace (.41) than when she was not salient (.22), $t(s(\infty) = 2.90$ and 1.62, $p < .01$ and < .11, respectively. One the other hand, the proportion of subjects above the median in attribution of the victim's behavior to her partner were equivalent when the victim had red hair (.66) or a leg brace (.53) or no salient attribute (.56), $F(2, \infty) = 1.31, p > .25$.

Arousal effects. As in Study 1, the prediction that arousal would increase the tendency to attribute an aggressor's behavior more to a salient than a nonsalient victim was not confirmed ($F < 1$).

Behavior Ratings

Manipulation checks. As in Study 1, ratings of the stimulus persons revealed that the videotapes had successfully created an aggressor and a victim. The aggressor was rated as extremely active, unreceptive, and unfriendly, whereas the victim was rated as extremely passive and friendly and moderately receptive. The ratings of the aggressor and the victim on all of these dimensions were significantly different and, in addition, the aggressor was rated as more competent than the victim (all $p < .01$; see Table 2).

Salience effects: Ratings of the victim. The effects of the victim's salience on ratings of her activity and friendliness were significant, $F(2, 72) = 9.43$ and 9.69, respectively (both $p < .01$), whereas the effects on ratings of her receptivity and competence were not, $F(2, 72) = 1.24$ and 2.24, respectively, both $p > .10$. Whereas only the brace manipulation in Study 1 had provided support for the hypothesis that the behavior of a physically salient victim would be rated more extremely than that of a nonsalient victim, both the brace and hair salience manipulations supported this hypothesis in Study 2 (see Table 2). In keeping with ratings on the domineering-acquiescence measure in Study 1, the tendency to rate the victim as passive was...
Table 2
Behavior Ratings of the Victim and Aggressor in the Control, Brace, and Hair Conditions in Study 2

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<tr>
<th>Behavior</th>
<th>Victim</th>
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<th>Aggressor</th>
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<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Brace</td>
<td>Hair</td>
<td>Control</td>
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<td>Active</td>
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<td>3.16b</td>
<td>2.97a</td>
<td>7.00a</td>
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<tr>
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<td>6.50b</td>
<td>5.94a</td>
<td>4.00a</td>
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<tr>
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<td>15.31b</td>
<td>14.50b</td>
<td>5.97a</td>
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<tr>
<td>Competent</td>
<td>12.88a</td>
<td>12.12a</td>
<td>11.00a</td>
<td>15.62a</td>
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</tbody>
</table>

Note. Ratings of active and receptive could range from 1 to 9, ratings of friendly could range from 2 to 18, and ratings of competent could range from 3 to 27. For each behavior, the ratings for a given stimulus person that differed at the $p < .10$ level or better are indicated by differing subscripts. $n = 32$ in each cell.

more extreme in the brace-salient condition and in the hair-salient condition than in the control condition, $t_s(62) = 2.39$ and 2.86, $p_s < .02$ and < .01, respectively. The tendency to rate the victim as friendly was also more extreme in the brace- and hair-salience conditions, $t_s(62) = 3.10$ and 1.76, $p_s < .01$ and < .10, respectively. However, ratings of the victim's incompetence and receptiveness were not more extreme in either salience condition than in the control condition. Following the argument that arousal may increase rating extremity so much that salience effects are weak or absent (see p. 1282), the effects of salience on behavior ratings were examined among nonaroused perceivers. For these subjects, as for all subjects in Study 1, ratings of the victim's competence were affected by her salience, $F(2, 72) = 5.11$, $p < .01$. The victim was rated as more incompetent in the brace- and hair-salience conditions than in the control condition, $t_s(30) = 1.88$ and 2.02, $p_s < .08$ and .06, respectively. However, even for nonaroused subjects, the tendency to rate the victim as receptive did not become more extreme when she was salient, $F(2, 72) = 2.69$, $p > .05$.

The results of Study 2 reveal that increasing the salience of the victim per se, without regard to the physical attribute that is salient, yields more extreme ratings of her behavior. Since the only change in the hair-salience manipulation from Study 1 to Study 2 was toning down the vibrancy of the blue background curtain, it appears that the distracting effects of the curtain were indeed responsible for the less extreme ratings of the victim in the hair-salient condition in Study 1. In keeping with this argument, recall of the videotaped discussion was not significantly worse in the hair- than brace-salience conditions in Study 2, $t(126) = 1.28$, $p > .20$, though it had been in Study 1.

Salience effects: Ratings of the aggressor. The effects of the victim's salience on ratings of the aggressor's activity, receptivity, and friendliness were all significant, $F_s(2, 72) = 5.28$, 10.54, and 25.48, respectively (all $p_s < .01$), whereas the effect on ratings of her competence were not ($F < 1$). Whereas Study 1 had provided no consistent trends in ratings of the aggressor when the victim was salient, Study 2 yielded consistent contrast effects (see Table 2). The tendency to rate the aggressor as unfriendly and unreceptive became more extreme when the victim had red hair, $t_s(62) = 3.68$ and 3.06, respectively (both $p_s < .01$) or wore a leg brace, $t_s(62) = 4.83$ and 2.47, $p_s < .001$ and .02, respectively, than when she did not. The tendency to rate the aggressor as active also became more extreme when the victim had red hair, $t(62) = 2.27$, $p < .05$, or a leg brace, although the latter effect was significant only for nonaroused subjects, $t(30) = 3.63$, $p < .01$. Ratings of the aggressor's competence did not become more extreme when the victim was salient in Study 2, either for all subjects or for nonaroused subjects (all $t_s < 1$).

The ratings of the aggressor indicate that the behavior of someone who is interacting with a physically salient person will, at least under certain circumstances, also be rated more extremely. While this effect was not ex-
<table>
<thead>
<tr>
<th>Behavior</th>
<th>Victim</th>
<th>Aggressor</th>
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</thead>
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<tr>
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<td>Aroused</td>
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<td>All subjects*</td>
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<td>Controls</td>
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<tr>
<td>All subjects</td>
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<td>11.52</td>
</tr>
<tr>
<td>Controls</td>
<td>14.81</td>
<td>10.94</td>
</tr>
</tbody>
</table>

Note. Ratings of active and receptive could range from 1 to 9, ratings of friendly could range from 2 to 18, and ratings of competent could range from 3 to 27.

* n = 48 in each cell.
* n = 16 in each cell.
* p < .10.
** p < .05.
*** p < .01.

Explicitly predicted, it is consistent with the literary ploy of introducing a character who serves as a foil to enhance, by contrast, the attributes of the hero, as well as with research on contrast effects in impression formation (e.g., Simpson & Ostrom, 1976). Making salient the friendly and passive behavior of the victim makes the aggressor seem even more aggressive than she does in the control condition, where the victim's contrasting behavior is less prominent.

Arousal effects. The prediction that ratings of the victim and aggressor would be more extreme for aroused than nonaroused perceivers received marginal support in Arousal × Stimulus Person interactions for ratings of competence, $F(1, 72) = 3.75, p < .06$, and friendliness, $F(1, 72) = 3.16, p < .10$. There was also a slight trend in the predicted direction for ratings of activity, $F(1, 72) = 2.16, p < .20$, but not for receptiveness ($F < 1$). Following the argument that salience may increase rating extremity so much that arousal effects are weak or absent, the effects of arousal on behavior ratings were examined among control subjects for whom the victim was not salient. For these subjects, the Arousal × Stimulus Person interaction was highly significant for ratings of competence, $F(1, 72) = 9.97, p < .01$; friendliness, $F(1, 72) = 7.87, p < .01$; and activity, $F(1, 72) = 8.97, p < .01$, but not for receptivity ($F < 1$). For each of the first three measures, ratings of both the aggressor and the victim were significantly more extreme among aroused than nonaroused control subjects (see Table 3).

Unlike the noise arousal manipulation in Study 1, the self-consciousness arousal manipulation in Study 2 does not seem to have been distracting, since it did not significantly decrease subjects' recall of the videotaped discussion, $F(1, 72) = 2.58, p > .10$. Yet, it did yield feelings of arousal. Compared with nonaroused subjects, subjects in the arousal condition reported themselves as less relaxed and more self-conscious, $F(1, 72) = 3.49$ and $13.37, ps < .08$ and < .001, respectively.

General Discussion

An important conclusion to be drawn from the present research is that the tendency to
attribute causality to salient stimulus persons generalizes to perceptions of a heated argument, yielding a blaming-the-victim effect when a salient person is the target of verbal aggression. Moreover, the tendency to attribute causality to salient persons has been shown to generalize to people who are salient by virtue of a statistically novel physical attribute, and this effect holds true for two very different sources of novelty—a leg brace and red hair. Not only were people with these novel attributes more apt to be seen as causing an aggressor's behavior, but in addition, their own behaviors were rated more extremely. These latter effects provide stronger support than previous research for Taylor & Fiske's (1978) hypothesis that "attributes are evaluated more extremely in either a positive or a negative direction when one overattends to a stimulus" (p. 264). Whereas earlier studies revealed that some stimulus persons became more positively evaluated on a variety of dimensions when they were salient, while others became more negatively evaluated, the present research has yielded more convincing evidence of an increase in the extremity of evaluations than is provided by these positive and negative halo effects: Those behaviors of a particular stimulus person that were rated positively became even more positively evaluated when she was salient, and those behaviors that were rated negatively became even more negatively evaluated when she was salient.

It is important to note that the more extreme ratings of the physically novel victims and the tendency to perceive them as causing the aggressor's behavior cannot be explained in terms of stereotypes of crippled people and redheads. For one thing, it requires quite a stretch of the imagination to generate overlapping stereotypes of these two groups. What is more, the stereotypes must be consistent both with the tendency to rate hypothetical crippled people more positively than normals on a variety of dimensions (Mussen & Barker, 1944) and with ratings of the salient victims obtained in the present study. There are obvious contradictions between stereotypes of crippled people as persistent and mentally alert (Mussen & Barker, 1944) and the tendency to rate the crippled victim in the present research as more passive and incompetent. Even if one could argue that there exist stereotypes of redheads and crippled people that explain the tendency to rate the salient victims as more acquiescent, friendly, and incompetent, only the latter stereotype could conceivably account for the tendency to blame the salient victim more for the aggressor's behavior. However, it should be recalled that the tendency to perceive the salient victim as less competent was not significant for the red-haired victim in Study 1 or for either victim in Study 2 when aroused subjects were included in the analysis. Yet the attribution effects were significant in both of these instances. More importantly, in neither study were ratings of the victim's competence, or her other behaviors, significantly correlated with the tendency to attribute the aggressor's behavior to her.

That the impact of a novel physical appearance upon impression formation and causal attributions was demonstrated for an attribute as inconsequential as red hair suggests that such effects may be very widespread. Research conducted by McGuire and his associates (McGuire, McGuire, Child, & Fujloka, 1978; McGuire & Padawer-Singer, 1976) has demonstrated the salience of a variety of novel (i.e., nonmodal) physical attributes, including hair color, eye color, age, weight, sex, and ethnicity. While McGuire's research has focused on the salience of novel versus commonplace attributes in self-perceptions, it seems reasonable to argue that analogous effects would hold true for perceptions of others. Indeed, the present study demonstrates this for novel hair color. Together with McGuire's research, the present findings suggest that individuals whose physical appearance deviates from the norm on any one of a number of attributes will create more extreme impressions and be perceived as more responsible for the behavior of others than those whose appearance is more...
commonplace. Clearly, such effects may have profound social implications.

In addition to demonstrating that perceptions of others are strongly influenced by the novelty of their physical appearance, the present research has also revealed that these perceptions may be influenced by the perceiver's state of arousal. Although causal attributions did not vary with arousal level, perceivers who were aroused by a self-consciousness manipulation did develop more extreme impressions of the stimulus persons. This finding is consistent with Easterbrook's (1959) theory and with object perception research, which suggests that arousal should narrow the focus of attention to a stimulus person's most salient behaviors and decrease awareness of the less salient ones. According to Easterbrook, a wide variety of arousal states should have these effects. However, caution should be exercised in extrapolating to other arousal states, since the noise arousal manipulation in Study 1 did not have the expected effects on behavior ratings. Although this result was attributed to the fact that the noise interfered with processing the information about the stimulus people, one could argue that such an interference effect is intrinsic to any extreme arousal state. Thus, it may be that moderate levels of arousal increase the extremity of ratings, whereas extreme levels do not. Another possibility is that the obtained effects are limited to the particular arousal state of self-consciousness. Vallacher (1978) has argued that such a manipulation increases the perceiver's objective self-awareness (Duval & Wicklund, 1972), which in turn decreases attention to other people and results in diminished sensitivity to the nuances of their behavior.

Conclusions

While further research on the effects of the perceiver's arousal state on impression formation and causal attribution is needed, the results of the present studies clearly reveal that (a) a physically novel victim of verbal aggression is more apt to be seen as causing the behavior directed toward her than a victim whose appearance is more ordinary; (b) a physically novel victim is evaluated more extremely than a non-novel victim; and (c) self-conscious perceivers form more evaluatively extreme impressions of an aggressor and a victim than do non-self-conscious perceivers.

Reference Note


References


Rubin, E. [Figure and ground] In D. C. Beardslee & M. Wertheimer (Eds. and trans.), *Readings in perception*. Princeton: Van Nostrand, 1958. (Reprinted and abridged from *Visuell Wahrgenomme Figuren*, originally published, 1915.)


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