

## Effects of Content of Verbal Aggression on Future Verbal Aggression: A Field Experiment<sup>1</sup>

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A field experiment was conducted to determine the effects of expression of verbal aggression on subsequent verbal aggression of angered and nonangered subjects. Subjects who were being laid off their jobs (angry subjects), and subjects who were leaving their jobs for "other reasons" (nonangry subjects), were induced to aggress verbally against the company, their supervisor, themselves, or to discuss neutral topics. In a factorial design, the subjects then filled out one of three "aggression" questionnaires: one concerned the company; another, their supervisors; and the third, themselves. The results indicated that when angered subjects directed verbal aggression at a specific target, their subsequent verbal aggression increased only when it was directed at the same target. However, self-criticism by angered subjects decreased subsequent self-derogation.

A large number of studies have examined the interactive effects of anger and subsequent nonverbal aggression (usually, but not always, electric shock) on the amount of future aggression that people display (cf. (Bandura, 1973)). However, very few experiments have been primarily designed to investigate the effects that anger and verbal aggression have on subsequent verbal hostility. If one accepts the drive reduction or catharsis hypothesis proposed by Dollard, Doob, Miller, Mowrer, and Sears (1939), then this issue should seem like a minor problem since the form of the aggressive responses was presumed to be unimportant in the original model. However, several investigators (e.g., Bandura (1973); Doob (1970); Feshbach (1955, 1964)) have recently suggested that the form of the "cathartic" aggressive response may play an important role in the results that are obtained. Therefore, the present experiment was designed to explore systematically the effects of verbal

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aggression on future verbal aggression in both angered and nonangered subjects.

More specifically, three separate questions guided the present research. The first was brought to the fore by what appear to be inconsistent results in the literature. Several studies have found that for angered subjects the opportunity to aggress (nonverbally) against their tormentors decreases future nonverbal aggression (Doob, 1970; Doob and Wood, 1972; Konečni and Doob, 1972; Konečni, 1973). On the other hand, angered subjects who are allowed to aggress *verbally* seem to increase the amount of later verbal aggression (DeCharms and Wilkins, 1963; Kahn, 1966). Unfortunately, the latter studies lacked crucial nonangered control groups and therefore these results are difficult to interpret. Even so, there are several reasons to believe that interpolated verbal and nonverbal aggression may differ in their effects on future aggression. Hostile verbal responses are more likely to be tolerated by others than physical aggression and therefore the probability of counteraggression may be much lower in the former than in the latter case. Furthermore, as Buss (1961) and Bandura (1973) have argued, arousal and aggression may be enhanced by ruminating about annoying situations. If verbal hostility is the overt component of such covert cognitions, it might enhance aggressive feelings directly. In addition, Kahn (1966) has argued that a drive toward cognitive consistency might motivate a maintenance of a high level of verbal aggression. Finally, in studies showing that nonverbal aggression toward an annoyer reduces the amount of subsequent (nonverbal) aggression toward this person, the annoyer is still derogated and highly disliked at the end of the experiment (Konečni, 1973; Konečni and Doob, 1972). These considerations suggested the first question to be investigated in the present research: how would anger arousal and verbal aggression interact to determine future verbal aggression directed at one's tormentor?

The second question was concerned with displacement. Konečni and Doob (1972) found that nonverbal aggression directed at a scapegoat reduced future nonverbal aggression directed at one's tormentor, provided the subjects were initially angered. Since the present authors knew of no research designed to investigate the same question with verbal aggression, appropriate groups were included in an attempt to provide such information. If verbal aggression directed at one's tormentor enhances subsequent verbal aggression, would aggression directed at a scapegoat also enhance future verbal aggression directed at the tormentor? If verbal hostility does serve the same function as covert rumination about one's plight, then generalization from scapegoat to tormentor might well be expected to occur. On the other hand, if verbal aggression towards a scapegoat has an aggression-reducing function,

then such aggression should decrease future verbal aggression directed at one's tormentor.

The third question the present research was designed to answer concerned self-censure. If a person is angered and is then given the opportunity to chastise himself verbally, how will such self-punishment affect his later verbal aggression directed at the tormentor and at himself? Self-punishment might serve to change the subject's attribution of the cause of the original frustration. The subject may feel that he deserved the initial anger-producing experience and therefore counteraggress less. Alternatively, self-punishment may arouse the subject even further, causing an enhancement in future verbal aggression directed at the tormentor. It is also unclear how self-punishment following an annoying experience will affect future self-derogation. Will such an interpolated activity enhance or decrease one's self-esteem? If Kahn's (1966) cognitive consistency explanation for his enhancement results is correct, future self-derogation should be increased.

The final purpose of this research concerned the issue of generality. Most experiments examining the effects of expression of aggression on future aggression have been laboratory studies in which anger arousal was produced by the behavior of confederates. By conducting the present research in a naturalistic setting, by using an authentic anger-generating event, and by employing dependent measures of aggression with potential real-life consequences for the subjects, it was hoped that one of the first tests of the generality of previous research on expression of aggression would be provided.

## METHOD

### *Setting*

The setting for this research was the personnel office of a large aerospace/defense firm located in Southern California. After a gradual decline in employment, beginning in 1971, approximately 1900 men were still employed at the end of 1972. However, in early 1973, the firm was awarded a multimillion-dollar contract. Consistent with contract requirements and company policy, several hundred new engineers and technicians were recruited in addition to callbacks from previous layoffs. After nearly a year of successful work on the new program, it was abruptly cancelled by the Department of Defense. Consequently, after having been promised a minimum of 3 years of work, approximately 200 disgruntled engineers and technicians were given layoff notices. Of these people, nearly 80% had been laid off at least once before, many by the same company.

Several other events made this layoff even more annoying to the employees. The newspapers had carried stories of the contract cancellation before the company notified the employees. Thus, the employees were reading about the impending doom before knowing exactly how they were to be affected. Second, prior to obtaining the contract, employee sentiment towards the company had been running low due to stringent salary administration, downgrading of employee positions, and the high frequency of layoffs. In fact, the tension between management and the engineers was so high that the latter were attempting to unionize in late 1972.

### *Subjects*

One hundred and forty-eight engineers and technicians served as subjects. Of these, 100 were randomly selected from those 200 employees who were told that they were being laid off. The remaining 48 subjects were randomly selected from employees who were leaving the company for "other reasons" at the time of the layoffs. However, these two groups of subjects did not differ in terms of the mean number of prior layoffs, nor in terms of the average length of time that they were employed (the layoff group was employed for a mean of 29.65 months and the "other reasons" group for 26.80 months).

### *Procedure*

*Anger arousal.* Based upon pilot interviews with a small sample of employees who were being laid off, it was determined that these and similar employees were quite annoyed with the manner in which they were being treated by the company. "Exit interviews" with individuals in the personnel office often contained angry outbursts about the inconsiderate manner in which the company had treated the employee and there was much discontented discussion among employees during working hours. Based upon these observations, and the obvious fact that being laid off is an unpleasant and frustrating situation, it could safely be assumed that the employees who were being laid off were angry and annoyed.

On the other hand, it was assumed that the employees who were leaving for "other reasons" were considerably less angry and annoyed. The primary reasons these subjects gave for leaving were: transfers to other divisions of the company, academic leaves of absence, and retirements. Only three subjects were leaving to go to better-paying jobs in other companies.

*Expression-of-aggression sessions.* All employees who were leaving the company were required to go through an exit interview with the recruiting and placement section of the industrial relations office.<sup>3</sup> Each subject was therefore contacted individually through interdepartmental mail in the form of employee checkout instructions. This form included a request that the employee complete an exit interview at a prescheduled time. Upon arrival for the exit interview, a secretary requested that the subject have a seat while she brought the subject's employment file to a personnel representative (the experimenter). She also gave the subject a summary of his salary, classification history, and severance benefits to review while he waited. After the experimenter reviewed the subject's employment history, he requested that the subject enter his office. The structure of the resulting interview manipulated the type of expression-of-aggression condition to which the subjects were randomly assigned. One-fourth of the angered subjects were assigned to a No-Verbal-Aggression or neutral interview, one-fourth to an Aggression-Against-Company interview, one-fourth to an Aggression-Against-Supervisor interview, and one-fourth to an Aggression Against-Self interview. One-half of the nonangered subjects were assigned to the No-Verbal-Aggression interview and one-sixth to each of the remaining three interviews.

The first part of these interviews was the same for all subjects and consisted of what might be termed the "normal" exit interview. Insurance and retirement benefits were reviewed, as was the exact date when the employee would leave. Future plans of the employee were also noted. Following this brief initial contact, the remaining 20 minutes or so of the interview were carefully structured. In the No-Verbal-Aggression condition, the experimenter said that he had a few questions he would like to ask the subject and he

<sup>3</sup> Birt Duncan served as the interviewer and experimenter. He received full cooperation of the company in conducting this study. In fact, the Personnel Division felt its mission was to devise better methods of determining employee-company grievances without generating too much hostility by conducting research of the type reported here.

would appreciate it if the subject answered them carefully. The experimenter then asked the following questions, designed to keep the subject talking for the same length of time as in the other conditions but without becoming hostile: (a) What are your feelings about the insurance coverage and retirement plan? (b) Do you have any comments about the cafeteria? (c) What are some of the advantages and disadvantages of the location of the company? (d) Is the technical library open long enough to benefit all employees? What hours would you recommend? (e) What kind of assignments have you been given over the past few months? After each question the experimenter would probe the subject further on positive aspects of the subject's answer and in all ways attempt to direct the conversation away from hostile comments.<sup>4</sup>

In the Aggression-Against-Company interview, the experimenter began the second half of the session by saying that he had several questions to ask concerning the subject's attitudes and feelings toward the company. He further stated that he did not want the subject's answers to get personal but should instead be directed only at the company in general. No rationale was given for this restriction, on the assumption that the subjects could easily generate their own. The following types of questions were then asked: (a) What instances can you think of where the company has not been fair with you? (b) In what ways should the company share more in the responsibility for the layoffs that are presently being made? (c) Did the company exercise its available resources in helping you seek future employment? (d) Are there aspects of the company you don't like? (e) In what other ways have things about the company bothered you? As before, the experimenter attempted to probe the answers by asking additional questions designed to force the subject to say negative things about the company.

In the Aggression-Against-Supervisor interview, the experimenter asked questions designed to keep the subject's verbal comments directed at one person, his immediate supervisor: (a) What instances can you think of where your supervisor has not been fair with you? (b) Are there things about your supervisor which you don't like? (c) What action might your supervisor have taken to prevent you from being laid off? (d) Were you given consistent feedback regarding your performance by your supervisor? (e) Are there additional things about your supervisor which upset you? The subjects were told to keep their answers directed at the supervisor since vague generalities were of no interest to the experimenter.

The questions in the fourth type of interview were designed to direct the subject's hostility towards himself. Again the subjects were told that the experimenter did not want vague and impersonal generalities but instead he wanted to focus on the subject, his feelings about himself and his future career. The experimenter then asked the following questions: (a) Are there things about yourself that you can think of which led your supervisor not to give you a higher performance review? (b) In looking back over your performance, what things about you stand out the most in your mind that need to be improved? (c) Evaluating your skills and abilities within your department, what things about you may have made you more susceptible to layoff than others in your group? (d) Are there areas that you plan to improve or concentrate on in the future to stabilize your employment history? That is, what are your major job weaknesses? (e) How is your leaving going to affect you and your personal responsibilities?

*Dependent measures of verbal aggression.* Immediately following the interview, the experimenter told the subjects to return to the outer office and fill out several exit forms which the secretary would give them. Included among these forms was one of three dif-

<sup>4</sup> Four angered subjects assigned to this condition were discarded because they would not limit their conversation to these topics, even though the experimenter directly stated that hostile comments were not the purpose of the interview.

ferent questionnaires which the secretary, who was blind to the type of interview the subject received, randomly assigned to the subjects. These three questionnaires were designed to assess three different types of verbal aggression on the part of the subjects. One included questions primarily directed at the company, one contained questions about the subject's immediate supervisor, and the third asked the subject to evaluate himself. Consistent with the setting in which the experiment was conducted, and in an attempt to maintain the "mundane realism" of the dependent variables, the traditional like-dislike measure of verbal aggression (e.g., (Kahn, 1966)) was replaced with more meaningful questions which potentially had real consequences for the subjects' and supervisors' future employment history. With this in mind, four questions were contained on each form. The *company* questions were: (a) Would you recommend (name of company) for employment to a friend? (b) If (name of company) had a commercial product on the market, would you buy it? (c) If you were asked to work uncompensated overtime, would you do it? (d) Would you return to (name of company) if given the opportunity? The *supervisor* questions were: (a) Would you consider your supervisor to be a friend? (b) If your supervisor was in monetary difficulty, would you help him out? (c) If your supervisor invited you to a party at his home, would you go? (d) If your roles were reversed, and you were allowed to give your supervisor a performance review, how would you evaluate him? The *self* questions were: (a) Professionally, how do you evaluate yourself? (b) How much confidence do you feel your supervisor should have in you? (c) If you were making decisions regarding recent layoffs, based on ability, when would you lay yourself off? (d) What is the likelihood that you would be able to get a job with another company right away? Each of these questions was accompanied by a 10-cm line with only the end points labeled, e.g., absolutely yes—definitely not, or excellent—poor. Scores were obtained by measuring the distance in centimeters from the positive side of the scales. Thus, higher scores meant a more negative rating. The scores from each of the four questions of a similar type were then summed to form an overall index of verbal hostility toward the rated entity.

### *Design*

These manipulations formed a rather complex design. The angered subjects were assigned to one of 12 conditions in a  $4 \times 3$  factorial design. One factor was the type of interview or expression-of-aggression session, and the other, the type of verbal aggression measured. Because only a small number of employees were leaving for "other reasons," the entire comparable  $4 \times 3$  could not be run for the nonangered subjects. Instead, only six essential comparison groups were formed by randomly assigning eight subjects to each group. The No-Verbal-Aggression interview was conducted with subjects in three of these groups, one group for each type of aggression questionnaire. For the remaining three groups, the target of aggression was identical in the interview and in the questionnaire. For one group, the target was the company, for another it was the supervisor, and for the third it was the subject himself. In addition to containing the major results, Table 1 shows this design in summary form.

## RESULTS

The results of this experiment were analyzed in two different ways. The first set of analyses was primarily designed to determine the effects that the different expression-of-aggression sessions had upon the verbal aggression scores of the angered subjects. The second set compared the effects of anger arousal and each type of expression-of-aggression session on the appropriate verbal aggression score for both angered and nonangered subjects.

TABLE 1  
MEAN AGGRESSION SCORES

Type of questionnaire (dependent measure)	Type of interview (expression-of-aggression session)			
	No aggression	Against company	Against supervisor	Against self
Company	angered Ss: 16.13 nonangered Ss: 8.38	angered Ss: 26.63 nonangered Ss: 9.00	angered Ss: 16.13	angered Ss: 18.13
Supervisor	angered Ss: 15.00 nonangered Ss: 7.25	angered Ss: 13.63	angered Ss: 22.50 nonangered Ss: 8.10	angered Ss: 12.88
Self	angered Ss: 12.75 nonangered Ss: 6.00	angered Ss: 14.00	angered Ss: 15.25	angered Ss: 10.50 nonangered Ss: 9.80

Note.  $n = 8$  per cell for angered Ss;  $n$  is also 8 for nonangered Ss in the cells in which they appear. Higher scores indicate more aggression.

Table 1 presents the mean aggression scores for every condition in the experiment. Each row in this table presents the scores for one type of dependent measure. Examining the scores for the angered subjects only, the results in the first row of Table 1 suggest that future verbal aggression directed at one's tormentor (the company) was enhanced if the subjects first verbally aggressed against the company. A one-way analysis of variance of these means indicated that the type of interview did indeed have a significant effect on subsequent aggression directed at the company ( $F(3,28) = 14.64, p < .001$ ). The fact that this treatment effect was best accounted for by a contrast between the Aggression-Against-Company group and the remaining three groups ( $F(1,28) = 42.26, p < .001$ ; residual  $F < 1$ ) further demonstrated that verbal expression of aggression towards the supervisor or towards oneself had no effect, in comparison to a no-aggression control, on the subjects' subsequent aggression towards the company.

The results in the third row of Table 1 present the scores for aggression directed at the subjects' supervisors. Although a session in which angered subjects berated their company increased later hostility towards the company (first row in Table 1), the same type of interview session had no effect on hostility towards a supervisor. Self-censure compared to the control group also had no significant effect upon hostility towards the supervisor ( $F < 1$ ). However, future hostility directed at one's supervisor was enhanced by the subject's spending time telling a personnel manager what he disliked about his supervisor. A contrast comparing this condition with the others was significant ( $F(1,28) = 37.49, p < .001$ ; residual  $F < 1$ ). A one-way analysis of variance of these results yielded a highly significant treatment effect ( $F(3,28) = 13.03, p < .001$ ).

Comparing the results for the company and the supervisor questionnaires suggests that verbally expressing one's hostility toward a given

entity enhances subsequent verbal aggression towards the same entity but has no effect on aggression directed at other targets. Therefore, aggressing against a scapegoat (whether the scapegoat is considered to be the company or the supervisor) produced neither reduction nor enhancement of subsequent verbal aggression.

The analysis of the results for the angered subjects in the fifth, self-aggression row of Table 1 presents a different picture. While the content of the exit interviews had an overall effect on the amount of self-aggression ( $F(3,28) = 3.40$ ,  $p < .05$ ), the pattern of the effects was different from that for other measures. Specifically, angry subjects derogated themselves *less* after having chastised themselves in front of the personnel director than after chastising the company, the supervisor or no one ( $F(1,28) = 7.60$ ,  $p < .025$ ; residual  $F(2,28) = 1.32$ , *ns.*).

The above analyses were based upon data for the angry subjects only. In order to clarify these results, it is necessary to compare them to those for the nonangered subjects. However, such comparisons must be made with extreme care for several reasons. First, as is often the case in field research, subjects were not randomly assigned to the angered and nonangered conditions. Second, in studies examining the effects of expression of verbal aggression on subsequent aggression, it is very difficult to equate the amount and type of verbal statements that angered and nonangered subjects emit during the initial expression-of-aggression session. Nonangered subjects are likely to emit fewer and often less intense comments. In the present research, the number of nonrepetitive hostile verbal responses emitted by subjects during the expression-of-aggression sessions was recorded, as well as the duration of the interviews in an attempt to validate the manipulations. Comparing these measures for the angered and nonangered subjects substantiates the above point. In the case of the Aggression-Against-Company interview, the mean number of novel hostile verbal responses against the company was 9.13 and the average duration of the interview was 18.25 minutes for the angered subjects, whereas the nonangered subjects emitted an average of 5.38 hostile comments about the company and took an average of only 13.00 minutes to complete the interview. The Aggression-Against-Supervisor interview yielded similar results. The angered subjects emitted an average of 9.00 nonrepetitive hostile verbal responses against their supervisors and took a mean of 15.63 minutes to finish the interview, whereas the nonangered subjects emitted 4.75 hostile comments and were interviewed for 11.25 minutes. For the Aggression-Against-Self interview, the difference between angered and nonangered subjects was less dramatic but in the same direction. Angered subjects emitted a mean of 8.25 self-critical verbal comments in



15.88 minutes, while nonangered subjects emitted 6.38 such comments in 13.38 minutes. In the No-Verbal-Aggression interview, angered and nonangered subjects did not differ in the number of hostile verbal responses about the company, the supervisor, or themselves that they emitted (a mean of 1.52 in the former and 1.21 in the latter group). Although these data suggest that the expression of aggression interviews served different functions for angered and nonangered subjects in the present study, it is important to note that such problems may be a necessary concomitant of comparing angry with nonangry subjects in studies that manipulate expression of aggression. Even if nonangry subjects are required to emit an equal number of aggressive responses, as they have been in physical aggression studies (e.g., Doob and Wood, 1972; Konečni and Doob, 1972), the responses may mean different things to them than to the angry subjects. Therefore, it still seems reasonable to make the comparison between angered and nonangered subjects in the present study.

Three  $2 \times 2$  analyses of variance were conducted to compare the results from each type of questionnaire for angered and nonangered subjects. Table 2 presents these analyses of variance. As can be seen in Table 2, there was a significant effect of anger arousal on each type of aggression. Examination of the appropriate means in Table 1 shows that these effects were the result of much higher aggression scores for the angered than nonangered subjects, even in the case of self-punishment. Employees who were being laid off were more hostile towards the company, their supervisor, and themselves than employees who were leaving for "other reasons." These results suggest that subjects in the latter group were indeed leaving the company "on good terms" while those in the former group were not.

Both aggression against the company and against the supervisor were

TABLE 2  
TWO-WAY ANALYSES OF VARIANCE OF MEAN AGGRESSION SCORES  
FOR ANGERED AND NONANGERED SUBJECTS

Source	df	Type of questionnaire (dependent measure)					
		Company		Supervisor		Self	
		MS	F	MS	F	MS	F
Anger (A)	1	1287.80	104.02*	979.00	112.15*	108.80	12.26*
Expression-of-aggression (B)	1	247.50	19.99*	140.30	16.07*	5.30	<1
<i>A</i> × <i>B</i>	1	195.04	15.75*	87.80	10.06*	75.00	8.46*
Error	28	12.40		8.70		8.90	

\*  $p < .01$ .

significantly enhanced by the comparable interview session. As Table 1 shows, subjects were more hostile towards the company (their supervisor) after telling the personnel manager negative things about the company (their supervisor). However, this increase in hostility as a function of the interviews occurred only for the angered subjects. The small increase for the nonangered subjects was not significant in both cases ( $F < 1$ ). Thus, with regard to aggression directed at the company and the supervisor, there was a significant interaction between being angry and the type of interview that subjects experienced.

While there was also a significant interactive effect on self-aggression, the means in Table 1 indicate that the form of the interaction was different from that for the company and the supervisor. For nonangered subjects, an interview containing many self-critical comments increased subsequent self-derogation, whereas, for angered subjects, the same type of interview decreased later self-derogation.

## DISCUSSION

These results are of considerable importance for understanding the processes that may govern aggressive responding of angered subjects. Being given the opportunity to aggress verbally against one of the potential causes of one's anger does not decrease subsequent hostile verbal responses towards that person or entity. Instead, such an experience actually enhances hostile verbal responses even though, in some cases, they may have led to serious negative consequences (e.g., not being rehired). Furthermore, the enhancement that does occur is apparently not a result of an increase in generalized verbal hostility. The subjects did not become more hostile towards other potential "causes" of the frustration but only towards the specific one against whom they verbally aggressed during the interview. This suggests that verbal hostility not only leads to more subsequent verbal aggression but also directs it towards a specific person or entity.

One interpretation of these results is suggested by Bandura's (1973) hypothesis that ruminations about annoying incidents can increase subsequent arousal and aggression. The interviews may have been overt versions of such ruminations. In fact, informal, unobtrusive observations of the behavior of the subjects during the interviews support this notion. On several occasions, the angered subjects used common four-letter curse words to describe their feelings towards the company or their supervisor. Furthermore, the intensity of the subjects' comments seemed to increase as the interview progressed, as if talking kept reminding them of further aggravations.

An interpretation quite similar to the rumination idea can be derived from Buss's (1961) distinction between hostility and anger. Both con-

cepts describe feelings of dislike, but the latter includes physiological arousal while the former does not. If the subjects harbored hostile feelings toward their company and/or supervisor before the interviews, it is possible that the interviews served to add arousal to the already existing hostile feelings. It may have been this anger which then produced the subsequent increase in verbal aggression.

While either of these arousal hypotheses seems plausible, it should be noted that Hokanson and Burgess (1962) found that verbal aggression decreased physiological arousal in angered subjects to a level equal to that of nonangered subjects. One way of reconciling these results with either self-arousal hypothesis is based on the timing of the annoying experience in the present study and in the Hokanson and Burgess study. In the latter case, subjects were annoyed by a confederate and then immediately allowed to counteraggress, whereas, in the present study, the subjects had been living with the annoying knowledge that they were being laid off for as long as three weeks prior to participating in the experiment. It seems reasonable that in the present study the original arousal had dissipated by the time the subjects were interviewed. Under these conditions, the expression of verbal aggression may have *reinstated* the previous arousal. In the Hokanson and Burgess (1962) study, the reduction in arousal may have resulted because the subjects saw their responses as reducing the probability of future aggression (Stone and Hokanson, 1968) or because the task required of the subjects was actually distracting (Konečni, 1973).

The comparisons between angered and nonangered subjects tentatively suggest that a self-arousal interpretation is preferable to Kahn's (1966) cognitive consistency explanation and to an interpretation based on social acceptance of aggressive comments. The cognitive consistency model assumes that subjects who verbally aggress during the interview find such behavior inconsistent with previous beliefs about themselves and the target and attempt to reduce the inconsistency by subsequently performing in a manner which is consistent with their past behavior during the interview. The social acceptance notion proposes that the interviews set standards for appropriate levels of future verbal aggression in similar settings and against similar targets (Bandura, 1973). Evidence against these interpretations arises from the fact that *both* angered and nonangered subjects emitted many more hostile verbal comments during the interviews about the company and their supervisors than in the No-Verbal-Aggression interviews, but only the angered subjects were subsequently more aggressive. These results are inconsistent with the social acceptance and cognitive consistency explanations because both predict that nonangered as well as angered subjects would have been more aggressive after the Aggress-Against-Company and the Aggress-

Against-Supervisor interviews than after the No-Verbal-Aggression interview.

If the present results are compared with studies of nonverbal aggression (Doob, 1970; Doob and Wood, 1972; Konečni, 1973; Konečni and Doob, 1972), the comparison suggests that different processes may be involved in the two cases. Konečni and Doob (1972) found that carrying out nonverbal aggression decreases subsequent nonverbal aggression, whereas the results of this study and other studies (DeCharms and Wilkins, 1963; Kahn, 1966) imply that indulging in verbal aggression increases future verbal aggression. Furthermore, Konečni and Doob (1972) also found that nonverbal aggression directed at a scapegoat decreased later nonverbal aggression towards the original annoyer. On the other hand, no effects of verbal aggression against a scapegoat were found in the present study. Apparently, nonverbal aggression tends to reduce future nonverbal aggression, whereas verbal aggression tends to increase future verbal aggression. One explanation of these different effects is that physical aggression may be associated with threat removal in the life of most people, whereas verbal aggression may actually serve to enhance arousal and the probability of future aggression. A test of this notion would require that the effects of expression of physical and verbal aggression on *both* subsequent physical and subsequent verbal aggression be compared. It would also be important to examine the role that a delay between the annoyance and the expression of aggression (whether physical or verbal) plays in the outcome.

The results from this experiment also raise several questions about the role of self-criticism in determining aggressive responding. Why did self-censure in the presence of a sympathetic listener decrease later self-criticism in the angered subjects? An explanation of this effect must include the fact that self-censure had no effect on hostility toward the company or the supervisor. Thus, an explanation based upon arousal reduction or the effect of the instrumentality of self-punishment (Stone and Hokanson, 1969; Bandura, 1973) upon arousal reduction would not be adequate. Further research is required in this unexplored area before a full understanding of these results can be obtained. At the very least, it seems clear that self-censure does not have the same function in determining future verbal aggression as other-person criticism.

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