

Explanations: What Factors Enhance Their Perceived Adequacy?*

By: DEBRA L. SHAPIRO, E. HOLLY BUTTNER, AND BRUCE BARRY

Shapiro, D., [Buttner, E. H.](#), and Barry, B. (1994). "Explanations: What Factors Enhance Their Perceived Adequacy?" Organizational Behavior and Human Decision Processes, 58(3), 346-368.

Made available courtesy of **ELSEVIER**:

http://www.elsevier.com/wps/find/journaldescription.cws_home/622929/description#description

*****Note: Figures may be missing from this format of the document**

Abstract:

Factors that enhance the perceived adequacy of explanations for bad news were examined in three studies: two cross-sectional surveys and a simulation experiment. All studies found that the specificity of the explanation's substance accounted for more variance in judgments of explanation adequacy than did the interpersonal sensitivity of the explanation's delivery. Moderators of the relationship between explanation features and perceptions of explanation adequacy were found as well: These explanation features enhanced the perceived adequacy of explanations more when outcomes of greater, rather than lesser, severity were being explained, and when the explanation was delivered verbally instead of in writing. Theoretical and practical implications are discussed.

Article:

By giving workers explanations, managers can enhance the likelihood that employees will perceive the procedures or reasons underlying their decisions as fair (Bies & Shapiro, 1987, 1988; Bies, Shapiro, & Cummings, 1988). In addition to amplifying this perception of justice, explanations have been found to reduce the chance that employees who are negatively affected by managerial decisions will complain (Bies et al., 1988), have high rates of absenteeism or turnover (Brockner, DeWitt, Grover, & Reed, 1990), and steal from the company (Greenberg, 1990). Consequently, researchers have increasingly pointed to explanations as a critical conflict management technique.

The negative relationship between providing explanations and such reactions has been consistently qualified, however. In all of the studies just mentioned, only those explanations perceived to be "adequate" mitigated subordinates' negative reactions. Similar results have obtained in the laboratory, where researchers have found that the feelings of anger and resentment felt by subjects victimized by another's apparent impropriety (e.g., a late-arriving partner or a rule change in the middle of a competitive game) were mitigated only when adequate (good) excuses or explanations were presented (Folger, Rosenfield, & Robinson, 1983; Weiner, Folkes, Amirkhan, & Verette, 1987, Study 3). Thus, the consensus among researchers examining

* An abbreviated version of this paper received the 1991 Best Paper Award from the Conflict Management Division of the National Academy of Management. The authors gratefully acknowledge the helpful comments of Jeanne Brett and two anonymous reviewers.

the conflict management potential of explanations is that the critical factor driving the justice-enhancing effect of explanations is, not merely their provision but, their perceived adequacy.

Although researchers have theorized about what factors enhance explanations' perceived adequacy (cf. Bies, 1987), very little research has examined this issue (see Shapiro, 1991, for an exception). Absent knowing this, managers cannot use explanations effectively as a means of reducing workers' perceptions of injustice and subsequent "conflict-inducing" reactions (Baron, 1988), such as complaints, absenteeism, turnover, or employee theft. The purpose of the present investigation was to examine factors that enhance the perceived adequacy of explanations. In this paper, we report the results of three investigations—two cross-sectional surveys addressing actual rejection decisions and their accompanying explanations, and a simulation experiment—in an effort to examine the factors that enhance or diminish the perceived adequacy of explanations.

In the first study, we examine job candidates' adequacy judgments of explanations they received for firms' rejection decisions, as influenced by the explainer's perceived concern, the perceived reasonableness of the explanation's substance, and the severity of the rejection decision. In the second study, with another sample of job candidates we reexamine the issues explored in the first study with improved measures and additional predictor variables, namely, the influence of the "form" and timeliness of an explanation (i.e., whether the explanation is stated verbally or in writing, and stated in a timely manner, respectively). In the third study, we experimentally manipulate, via scenarios, factors found to influence judgments of explanations' adequacy in our first two studies, to ease our ability to test for interactions among our predictor variables, and to infer causal relationships.

WHAT DIFFERENTIATES ADEQUATE FROM INADEQUATE EXPLANATIONS?

The findings of recent investigations of explanations, taken together, suggest that two features of explanations influence their perceived adequacy: the style with which an explanation is delivered and aspects of an explanation's content. With respect to style, Bies et al. (1988) found that when employees perceived their boss's explanation for denying a resource request to be sincere rather than insincere, they tended to perceive the explanation as adequate. Left unexplained, however, was the relative importance of the explainer's perceived sincerity compared to other elements of the explanation in accounting for adequacy judgments. Such knowledge might have helped Bies et al. understand why, despite the boss's perceived sincerity, subordinates judged some explanations to be more adequate than others.

In a recent laboratory study, Greenberg (1993) created a situation where participants would feel inequity (i.e., due to a reduction in the amount of pay they had been promised) and examined the extent to which judgments of justice and theft reactions would be influenced by an explanation's content ("informational integrity") versus delivery ("interpersonal sensitivity"). As expected, both of these factors significantly affected these reactions, reducing subjects' tendency to perceive inequity and, when the experimenter was not looking, to pay oneself more than the experimenter instructed.

However, Greenberg did not measure the effect of these factors on recipients' judgments of the explanation's adequacy. Thus, a question yet to be answered is the relative importance of style and content in the formation of adequacy judgments; put differently, to what extent should

managers who must deliver unfavorable news show interpersonal sensitivity and/or provide thorough information? We explored this question in the studies reported here.

In addition, we examined how adequacy judgments are influenced by outcome severity, or the "badness" of the news being explained. Studies of explanation effects have considered situations that represent various levels of severity, including resource refusals (Bies & Shapiro, 1987, 1988; Bies et al., 1988), pay cuts (Greenberg, 1990), layoffs involving others (Brockner et al., 1990), and actual layoffs (Konovsky & Folger, 1991). In their sample of layoff victims—arguably among the most severe of work outcomes—Konovsky and Folger found that explanations failed to enhance perceptions of justice. Perceptions of explanation adequacy, however, have not been explored in connection with outcome severity. We build on prior work in the present investigation by considering not only how outcome severity may itself influence adequacy judgments, but how it may moderate the relationship between explanation features and perceived adequacy.

HYPOTHESES

Style and Content

First, we consider the role of interpersonal sensitivity in the delivery of explanations for bad news on judgments of adequacy. Bies and Moag (1986) found that job candidates judged the quality of communications they received during an interview to be greater when the interviewer seemed sincere rather than insincere. Also, Blumstein (1974) found that subjects, after reading a vignette describing an offensive interchange between two individuals, tended to judge the offender's explanation to be more satisfactory when s/he exhibited "repentance" rather than indifference about harming others through the offensive action. In Greenberg's (1993) laboratory study, the explainer's interpersonal sensitivity significantly reduced conflict-inducing reactions to a decrease in experimental pay. Thus,

H1. An explanation's perceived adequacy will be greater when receivers judge the explainer to be highly, rather than mildly, concerned about their welfare.

We also expect that the content of explanations influences adequacy judgments. Greenberg reported on the importance of informational integrity in reducing perceptions of inequity. Other researchers have suggested that bad news victims typically want to understand the causes, or reasons, behind a negative event (e.g., Louis, 1980; Wong & Weiner, 1981). Accordingly, we expect that the quality of explanations' substance will be positively related to explanations' perceived adequacy. Thus,

H2. An explanation's perceived adequacy will be greater when the substance of the explanation seems reasonable rather than unreasonable.

Note that our first two hypotheses predict that the explainer's perceived concern and the perceived reasonableness of the explanation's substance will both significantly enhance the explanation's perceived adequacy. There is no theoretical basis for predicting that one of these factors will be more important than the other in accounting for the perceived adequacy of explanations. We will, however, examine the relative importance of these factors, as well as test for their independent effects.

Outcome Severity

People typically direct more anger, blame, and punitiveness toward perpetrators of harmful rather than trivial outcomes (e.g., Fincham, 1982; Fincham & Hewstone, 1982; Langer, 1978), and these highly negative emotions make people less likely to honor the explanations offered by offenders (Blumstein, 1974). Thus,

H3. An explanation's perceived adequacy will be greater when the recipient is mildly, rather than severely, harmed by the decision being explained.

We further expected that outcome severity will moderate the (previously) predicted effects of style and content on judgments of adequacy. However, different theoretical perspectives argue for contrary predictions regarding this interaction; hence we offer competing hypotheses. On the one hand, states of anxiety tend to induce people to listen to and evaluate information less objectively or rationally (Janis & Mann, 1977, p. 45). Under such conditions, even reasonable criteria may fall upon deaf ears, and interpersonal sensitivity may go unnoticed; it follows that the adequacy-enhancing effect of an explainer's concern or an explanation's content would be observed only under conditions of relatively mild consequences. Consistent with this reasoning, when subjects in Johnson and Rule's (1986) study were highly rather than mildly upset by a partner's aggressive (i.e., insulting) action, explanations for the aggressor's provocation were less effective in mitigating the subjects' anger. Thus, we predict

H4a. The positive impact of an explainer's perceived concern and an explanation's reasonableness on judgments of adequacy (predicted by H 1 and H2, respectively) will be observed when the receiver is *mildly*, rather than severely, harmed by the decision being explained.

On the other hand, some pain or perceived violation is necessary in order to perceive a sense of injustice (Karniol & Miller, 1981). Accordingly, if the consequences of rejection are trivial, then victims of such decisions may be unlikely to "hurt" or care enough to evaluate critically the criteria or reasons used to reach that decision, or the interpersonal sensitivity of the communicator. As an illustration, Frank! (1969) noted people's tendency, after suffering a severe loss (e.g., the death of a family member), to search for meaning—an explanation for why they were victims. In a business context, Brockner et al. (1990) found that explanations for layoff decisions presented to layoff survivors were followed by higher levels of effort and commitment when the survivors attached greater significance to the implications of the layoff decision (e.g., when they believed additional layoffs were imminent or when they were emotionally close to layoff victims). Thus, a competing hypothesis is:

H4b. The positive impact of an explainer's perceived concern and an explanation's reasonableness on judgments of adequacy (predicted by H I and H2, respectively) will be observed when the receiver is *severely*, rather than mildly, harmed by the decision being explained.

STUDY 1

Method

General Procedure

One hundred and fifty second-year MBA students were mailed a packet which contained two questionnaires, each of which asked participants to recall a job-interviewing experience within

the last 6 months which ultimately resulted in their rejection as job candidates. To ensure their anonymity, job candidates were instructed not to place their name anywhere on the questionnaires. Students' participation was elicited by offering them a chance to win a lottery cash prize. Eighty-seven students returned their surveys, a response rate of 58%.

One of the questionnaires instructed participants to recall an interview with a company they strongly desired to join, and the other questionnaire instructed them to recall an interview with a company they did not really care much about, but had interviewed with "for purposes of learning their market value and/or practicing their interviewing and negotiating skills." Each questionnaire asked job candidates whether they had received an explanation for the firm's rejection decision and the extent to which they judged the explanation to be adequate. Since the questionnaires asked participants to recall interview experiences of both low and high outcome severity (i.e., rejections from firms job candidates had little versus much interest in, respectively), measures of outcome severity were not independent. To orthogonalize these recollections in order to test whether outcome severity moderates the effect of explanation-features, we randomly selected one recollection from each job candidate. Since the purpose of our investigation was to examine factors that influence judgments of an explanation's adequacy, we eliminated the responses of job candidates who had not received explanations, resulting in a sample size of 41 job candidates (21 representing the high severity manipulation and 20 representing the low severity manipulation).

Measures

The outcome severity of the rejection decision was treated as a dichotomous measure. Recollections of rejections that came from firms job candidates had little versus great interest in were coded "0" versus "1" to represent low versus high outcome severity, respectively.

The perceived concern of the interviewer was measured with two questions that asked job candidates to rate, on 7-point Likert scales, how concerned the interviewer seemed about the job candidate's particular circumstances and about helping the job candidate understand why s/he was rejected. The magnitude of the correlation between these two ques-

TABLE 1
STUDY 1: DESCRIPTIVE STATISTICS AND INTERCORRELATION MATRIX

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Perceived concern	8.0	3.1	1.000			
2. Explanation's perceived reasonableness	4.1	1.9	.61	1.000		
3. Outcome severity ^a	1.5	.51	.03	-.22	1.000	
4. Explanation's perceived adequacy	3.6	1.8	.49**	.75**	-.43**	1.000

Note. The sample size is 41.

^a Outcome severity was coded 0 = Low outcome severity and 1 = High outcome severity.

* $p < .01$.

tions was substantial ($r=.71$, $p < .001$), and therefore these items were summed to form a concern-index.

The perceived reasonableness of the explanation was measured by asking job candidates, on a 7-point scale, how reasonable the explanation was that they received from the job interviewer.

The perceived adequacy of the explanation was measured by asking subjects how satisfied they were with the recruiter's explanation.¹ Although we cannot assess the reliability of single-item indicators via traditional measures of internal consistency, the intercorrelation matrix in Table 1 shows that subjects' adequacy judgments and perceptions of the explanations' reasonableness are significantly correlated with other variables in the study (in the predicted direction), indicating a lack of substantial measurement error.

Results

Hypothesis—Tests

To test Hypotheses 1-3, we used simultaneous regression to examine whether each of our predictor variables explained a significant amount of variance in job candidates' adequacy judgments. With the explainer's perceived concern, the explanation's perceived reasonableness, and the decision's severity entered as independent variables in the regression model, a significant amount of variance in adequacy judgments was explained ($R^2 = .64$; $F(3, 37) = 22.16$, $p < .001$). Contrary to Hypothesis 1, the perceived concern of the explainer did not account for a significant amount of variance in job candidates' adequacy judgments ($B = .13$, $p < .30$). As predicted by Hypotheses 2 and 3, judgments of the explanation's adequacy were positively influenced by the perceived reasonableness of the explanation's substance ($B = .60$, $p < .001$), and negatively influenced by the severity of the rejection decision ($B = .30$, $p < .01$), respectively.

The failure of the explainer's perceived concern to significantly predict judgments of explanation adequacy could be due to its high correlation with the explanation's perceived reasonableness ($r = .61$). To examine the relative importance of these explanation features, we performed two hierarchical regression analyses, with judgments of explanation adequacy as the dependent variable. In the first model, the perceived concern of the explainer was entered on the first step, with the perceived reasonableness of the explanation's substance entered as a second step. In the second model, we repeated the process but reversed the order. In the first hierarchical model, perceptions of the explainer's concern accounted for 24% amount of variance in adequacy judgments ($F = 12.4$, $p < .001$), and the change in R^2 for the addition of reasonableness was large and significant (R^2 change = $.32$; F change = 27.67 ; $p < .001$). In the second model, there was virtually no change in R^2 with the addition of perceived concern (R^2 change = $.002$; F change = $.69$; n.s.). Thus, the perceived reasonableness of an explanation's substance accounted for more unique variance in adequacy judgments than did the explainer's perceived concern.

Given the high correlation between the explainer's perceived concern and the explanation's perceived reasonableness, we combined these explanation features into a single construct when examining whether their impact on adequacy judgments would be moderated (diminished or en-

¹ Some readers may suspect an increased threat of Type II error due to unreliability caused by our using single-item measures to operationalize an explanation's perceived reasonableness and adequacy. Classical psychometric theory (Spearman, 1910) on which this logic rests, however, does *not* state that single-item measures are necessarily unreliable, but only that when multiple items measuring the same construct and having uncorrelated errors are aggregated, their errors offset one another and create a total score that is no less reliable than any of the individual items. Some constructs, because of their narrow band of operationalization, are not particularly suited for multiple measures. For example, how many *different* ways can one inquire about the reasonableness or adequacy of an explanation? For these reasons, we chose single items to measure how reasonable and satisfying subjects judged an explanation to be.

hanced) by decision severity, as predicted by Hypotheses 4a and 4b, respectively. Our regression model included three terms: the (combined) explanation features, decision severity, and an interaction term. The interaction of the explanation features and decision severity was significant ($B = -.72, p < .02$). To interpret the interaction, we performed median splits on each of the two variables (explanation features and decision severity) comprising the interaction term, and computed the mean for each of the four conditions created by crossing the median-split subsamples. These means appear in a 2 x 2 matrix in Table 2. Consistent with Hypothesis 4a, the positive effects of explanation features (logic and concern) on adequacy judgments were more pronounced under conditions of low decision severity.

TABLE 2
CELL MEANS FOR INTERACTION BETWEEN EXPLANATION FEATURES AND OUTCOME SEVERITY IN STUDY 1

	Explanation features (logic and concern)	
	High	Low
Decision severity		
High	3.56 (1.6)	2.25 (1.1)
Low	5.55 (1.3)	2.89 (1.4)

Note. Mean ratings of explanation adequacy are shown above with standard deviations in parentheses.

Discussion

As predicted, explanations' perceived adequacy was enhanced when their substance was perceived to be reasonable and attenuated when candidates perceived the rejection decision to have consequences of greater severity. Surprisingly, the level of concern attributed to the explainer did not significantly influence adequacy judgments. Thus, our results provide strong support for two (Hypotheses 2 and 3) of our three main effect hypotheses. Contrary to the adage "it's not what you say but how you say it," our results suggest that the substance of an explanation is more important than the manner in which it is delivered in influencing job candidates' judgments of adequacy.

The significant interaction between decision severity and explanation features suggests that characteristics of the situation (i.e., its severity) influence the extent that adequacy judgments will be influenced by features of an explanation, such as the explainer's perceived concern and the reasonableness of the substance. Apparently, the greater the severity of the circumstances, the more difficult it is to offer an explanation that will be judged to be adequate. Our findings suggest that variables relating to the message and situation—found to be influential in determining the persuasiveness of communications in general (Hovland, Janis, & Kelley, 1953; see Petty & Cacioppo, 1981, for a review)—are both independently and interactively influential in determining, more specifically, the adequacy of explanations.

Our inability to corroborate Bies et al.'s (1988) finding a significant relationship between communicator style and perceptions of adequacy may be due to subtle, but important, distinctions between dimensions of interpersonal sensitivity. Bies et al. examined perceptions of the communicator's sincerity, which they and others (Baron, 1988) have equated with the perceived truthfulness of one's communication, while our Study 1 focused on the level of concern the communicator projects about the job applicant's welfare. Perceptions of another's

concern, relative to sincerity, are more likely to be based on a summary interpretation of both another's truthfulness and sensitivity in communicating the truth. Thus, although both sincerity and concern are components of a communicator's interpersonal sensitivity, their subtle differences may cause them to influence adequacy judgments differentially.

The second study was designed to re-examine the hypotheses of Study 1 under circumstances where measurements of the predictor variables were improved. In the second study we measured perceptions of the explainer's interpersonal sensitivity with questions that included perceptions of the explainer's sincerity as well as concern. Multiple, and continuous, measures of outcome severity were made in Study 2 as well.

Rather than measuring the global judgment of an explanation's "reasonableness," in Study 2 we measured a more specific aspect of the explanation's content, namely, the perceived specificity of its substance. Research on performance appraisals demonstrates that when specific, rather than vague or unsubstantiated, explanations are offered for one's performance ratings, higher levels of performance and satisfaction with the performance appraisal process are achieved (Hamner & Hamner, 1976; Henderson, 1984; Rice, 1987). Accordingly, in Study 2 we expected that the explanation for a rejection decision would be judged to be more adequate when the reasons, or criteria, for reaching this decision were specific rather than vague and specifically tailored to the recipient's individual circumstances.

In addition to reexamining our previous hypotheses, in Study 2 we explored the extent to which structural factors may influence the perceived adequacy of explanations. Previous research that has explored the conflict management potential of explanations has generally neglected structural influences on their perceived adequacy and effectiveness (see Bies & Moag, 1986, for an exception).

One of the structural variables explored in Study 2 is the form of communication used to convey the explanation (i.e., whether it was delivered orally or in writing). In particular, explanations delivered orally, rather than in writing, have the potential to supplement the verbal message itself with nonverbal and other paralinguistic cues. People often rely on verbal and facial cues to assess others' degree of concern and sincerity (De- Paulo, Stone & Lassiter, 1985). The presence of these cues, we argue, exaggerates the perceived depth of explanation as well (cf. Langer, 1978). Thus, explanations that may be regarded as sincerely delivered or reasonable in content may become even more so when delivered orally rather than in writing. Building on our first two hypotheses, then, we predicted:

H5 The positive impact of an explainer's perceived concern and an explanation's specificity on judgments of adequacy (predicted by H1 and H2, respectively) will be amplified when the explanation is communicated orally instead of in writing.

The other structural variable explored in Study 2 is the timeliness of the explanation for a piece of bad news. Just as more severe outcomes may be expected to diminish adequacy judgments, structural aspects of the bad-news event that are likely to provoke anger or frustration, such as an unreasonably lengthy delay, would be expected to divert attention from the style or content of the explanation itself. Thus,

H6 The positive impact of an explainer's perceived concern and an explanation's specificity on judgments of adequacy (predicted by H1 and H2, respectively) will be diminished when the explanation is communicated in an untimely, rather than timely, manner.

STUDY 2

Method

Sample and Procedure

Three hundred MBA students at a southeastern university received a questionnaire in the mail; 152 questionnaires were returned, a response rate of 51%. The instrument asked respondents, who were seeking employment at the time, to recall a recent job rejection they had received from a firm for whom they had a strong desire to work. Participants responded to a number of survey items pertaining to this rejection.

Measures

Perceptions of interpersonal sensitivity were assessed by asking respondents to rate the extent to which the explainer communicated the rejection in a (1) sincere, (2) friendly, and (3) sensitive manner, and to which the explainer seemed (4) concerned about the respondent's understanding of why s/he was rejected, and (5) concerned about the respondent's feelings. Responses were recorded on 7-point agree/disagree scales; coefficient α for the 5-item scale was .91.

The explanation's specificity was assessed by asking job candidates to rate, on 7-point Likert scales, the extent to which: (1) the explanation seemed "canned," or generic to all rejected candidates (reverse scored); (2) the explainer gave specific reasons for not hiring them; (3) the explainer gave vague reasons for not hiring them that left them feeling in the dark about the actual reason for rejection (reverse scored); and (4) the explainer gave reasons that were unique to the candidate. Coefficient α for this 4-item scale was .87.

The outcome severity of the rejection decision was assessed by asking job candidates to rate, on seven-point Likert scales, the extent to which

TABLE 3
MEANS, STANDARD DEVIATIONS, AND INTERCORRELATIONS FOR STUDY 2

	Mean	SD	1	2	3	4	5
1. Interpersonal sensitivity	16.3	7.4					
2. Explanation specificity	10.2	6.5	.65**				
3. Outcome severity	12.3	4.7	-.06	-.15			
4. Communication form ^a	.73	.44	.49**	.36**	-.05		
5. Explanation timeliness	3.0	1.9	-.09	-.03	-.11	.16*	
6. Explanation adequacy	2.9	1.7	.47**	.56**	-.23**	-.20*	-.04

^a Communication form was coded so that explanations received verbally were "1" and explanations received in writing were "0".

* $p < .05$.

** $p < .01$.

they felt upset, despair, and anger at being denied the opportunity to work for the firm rejecting them. Coefficient α for this 3-item scale was .80.²

² This operationalization measures people's emotionality, which we assume reflects outcome severity.

The communication form of the explanation was assessed by asking job candidates whether the rejection and explanation was communicated to them by letter, on the phone, or in person. Since our interest was in the presence or absence of orally delivered explanations, we treated communication form as a dichotomous measure, with rejection in writing coded as 0, and rejection by phone or in person coded as 1.

The timeliness of the explanation was assessed by asking job candidates to report how many weeks had passed after the interview when they learned of the firm's rejection.

The perceived adequacy of the explanation proffered for the rejection—our key dependent measure—was assessed by asking candidates to rate, on a 7-point scale, the extent to which they believed the interviewer provided "an adequate explanation for not hiring you" (where 1 = extremely disagree and 7 = extremely agree).³

Results

Means, standard deviations, and bivariate correlations for all Study 2 variables are provided in Table 3. To examine our main effect hypotheses (1-3), we used simultaneous regression to explore the extent to which explainers' interpersonal sensitivity, explanations' specificity, and decision severity accounted for the variance in job candidates' judgments of explanations' adequacy. The results of our main-effect regression analyses appear in Table 4.

As can be seen in Table 4, the regression coefficients and their associated significance tests indicate support for Hypotheses 1, 2, and 3. Adequacy judgments were positively related to explanation specificity, positively related to interpersonal sensitivity, and negatively related to outcome severity.

As in Study 1, we examined the relative importance of providing specificity versus interpersonal sensitivity by fitting two hierarchical regression models, again with explanation adequacy as the dependent variable. In the first model, the interpersonal sensitivity variable was entered on the first step, with specificity entered as a second step. In the second model, we repeated the process but reversed the order. In the first hierarchical model, the change in R^2 for the addition of specificity was large and significant (R^2 change = .11; F change = 24.23; $p < .0001$). In the second model, the change in R^2 for the addition of sensitivity was much less pronounced (R^2 change = .02; F change = 4.10; $p < .045$). Thus, we again find that the specificity of explanation content accounts for more unique variance in adequacy judgments than does the explainer's interpersonal sensitivity.

Interaction terms were required to evaluate Hypotheses 4, 5, and 6. Due to the high correlation between explanation specificity and interpersonal sensitivity ($r = .65$), as in Study 1, we combined these into a single construct when examining whether their effect on adequacy judgments would be moderated by decision severity, the form of communication, and the timeliness of the communication, all factors predicted by H4, H5, and H6, respectively. The regression model used to test these hypotheses, and its results, are shown in Table 5.

³ Note that this measure of adequacy is more direct than that used in Study 1, where subjects were asked to indicate how "satisfied" they were with the explanation.

As can be seen in Table 5, there was a significant interaction between the form of communication and the explanation features (i.e., the explanation's specificity and the explainer's interpersonal sensitivity) on job candidates' adequacy judgments. To interpret the interaction, we performed a median split on the explanation-features variable and crossed it with the dichotomous measure of communication form to create four

TABLE 4
MAIN EFFECT REGRESSION RESULTS FOR STUDY 2

	β	SE	t	p
Interpersonal sensitivity	.19	.02	2.18	.03
Explanation specificity	.41	.02	4.58	.001
Outcome severity	-.16	.03	-2.28	.02

Note. Model $F(3, 140) = 26.215, p < .0001$. Adjusted $R^2 = .346$.

TABLE 5
INTERACTION REGRESSION RESULTS FOR STUDY 2

	β	SE	t	p
Explanation features (specificity and sensitivity)	.37	.04	1.42	.16
Outcome severity	-.08	.06	-.47	.64
Communication form	-.56	.74	-2.93	.01
Communication timeliness	-.15	.16	-.85	.40
Explanation features * outcome severity	-.12	.04	-.50	.62
Explanation features * communication form	.62	.02	2.65	.01
Explanation features * timeliness	.20	.01	1.0	.32

Note. Model $F(7, 134) = 12.07, p < .0001$. Adjusted $R^2 = .35$.

conditions. Computed means for each condition appear in a 2 x 2 matrix in Table 6. Consistent with Hypothesis 5, the positive effects of explanation features (logic and concern) on adequacy judgments were more pronounced when the explanation was communicated orally rather than in writing.

No other interaction terms were significant. Thus, of our interaction hypotheses (4-6), only Hypothesis 5 was supported.

Our data demonstrate that the structural form of an explanation is a critical determinant of adequacy judgments. Table 5 also shows that when the form of the communication and its interaction with the explanation features were entered into the regression equation, variance in adequacy judgments previously accounted for by the main effects of explanation features and outcome severity disappeared. This effect highlights the possibility, suggested earlier as the basis for our hypothesis about communication form, that presenting explanations verbally rather than in writing

TABLE 6
CELL MEANS FOR INTERACTION BETWEEN EXPLANATION FEATURES AND
COMMUNICATION FORM IN STUDY 2

Explanation's form	Explanation features (specificity and sincerity)	
	High	Low
Written	3.42 (1.5)	2.33 (1.5)
Oral	4.07 (1.9)	1.75 (.89)

Note. Mean ratings of explanation adequacy are shown above with standard deviations in parentheses.

enhances the degree to which one seems to be projecting concern and substance. Additional evidence for this effect can be gleaned from the bivariate correlations in Table 3, which demonstrate positive associations between communication form and each of the explanation features ($r = .49$ and $.36$ for the explainer's sensitivity and specificity, respectively). Conversely, an explanation that objectively is highly specific and/or highly sincere will be perceived as less specific and less sincere, and hence less adequate, when it is written rather than verbalized.

Discussion

In general, the results of Study 2 add to our understanding of the conditions under which explanations are judged to be adequate in two ways. First, in the course of reconfirming that both the interpersonal style and the content of explanations are important (cf. Greenberg, 1993), we presented evidence, once again, that content is the more important predictor, especially when content is thought of in terms of the degree to which an explanation is tailored to the bad news recipient. Second, we found evidence that the medium through which explanations are delivered moderates the influence of the explanation's content and style. Specifically, our findings showed that explanations that are communicated verbally rather than in writing tend to enhance the relationship between the explainer's perceived sensitivity and specificity and the perceived adequacy of the explanation.

The cross-sectional nature of Studies 1 and 2, with predictor variables measured as perceptions, limits the power of our findings in two important ways. First, we naturally cannot draw causal inferences about the effects of predictors on the formation of adequacy judgments. Second, while there is evidence in the results of both studies that some interactions among content, style, and severity are important, the use of correlated perceptual predictors and a regression approach makes these interactions difficult to isolate. Moreover, since participants were asked to recall only job rejections that mattered highly to them, Study 2 may have provided an overly conservative test of the interaction between explanation features and outcome severity. We sought to corroborate and extend our findings, while solving these methodological issues, via a return to the laboratory in Study 3.

STUDY 3

Method

In the interest of disentangling the independent, and interactive, effects of some of the predictor variables explored in the first two studies, we conducted a third study under more controlled circumstances. Using a scenario-based experiment we manipulated perceptions of an explainer's interpersonal sensitivity (or "sincerity"), an explanation's specificity, and the severity of the

decision being explained. To heighten students' involvement in the scenario, we used a context that we expected they would find relevant and interesting: a grade-related event.

Sample and Procedure

The sample consisted of 158 upper-level undergraduate business students at a southeastern university who responded to a grade-related scenario as a class assignment. Eight different versions of the scenario were randomly distributed across the sample. These scenarios reflected high and low degrees of an explainer's sincerity, an explanation's specificity, and a decision's severity, resulting in a 2 x 2 x 2 factorial design. All students were instructed to imagine that the events described in the scenario actually happened to them.

Each student read that s/he, an undergraduate student planning to graduate at the end of the current school year, had just opened mail that included grades for the fall semester and found that s/he had failed a course in which the student had had difficulty. The scenario went on to say that upon calling the school to discuss this grade with the professor, the professor's secretary said the professor was on sabbatical and provided the professor's address. The scenario then stated that the student wrote the professor to ask for an explanation of the course grade, and that a week later the professor wrote back. Subjects were provided with a verbatim copy of that response, different versions of which operationalized the independent variables.

Manipulations and Measures

The explainer's sincerity. Subjects in the High Sincerity Condition received a letter from the professor which: (1) addressed the student personally, (2) was signed by the professor's first name, and (3) started and concluded with expressions of concern, understanding, and an offer of help to the student.

Subjects in the Low Sincerity Condition received a memo from the professor which: (1) addressed the student by a social security number, (2) used the professor's formal title and last name at the top of the memo, and (3) excluded expressions of concern, understanding, and an offer of help to the student.

The explanation's specificity. Subjects in the High Specificity Condition received specific and personalized information regarding how the final grade was computed, including a brief discussion of how their individual attendance, class participation, and final exam score led to the failing grade. Subjects in the Low Specificity Condition received information which said only that department rules do not permit a passing grade given their performance.

Outcome severity. Subjects in the High Outcome Severity Condition were told that the failing grade came in a required course that would keep the student from graduating on time. In addition, this course was said to be offered only in the fall semester, requiring the student to wait another year before graduating. Subjects in the Low Outcome Severity Condition were told, instead, that the failing grade came in an elective course that would not deter the student from graduating on time.

Dependent variable: Adequacy. The explanation's adequacy was assessed by asking students to rate, on a 7-point scale, the extent to which they believed the professor provided an adequate explanation for failing you" (where 1 = extremely disagree and 7 = extremely agree).

Results

Manipulation Checks

We measured the explainer's sincerity, the explanations' specificity, and the decision's severity with the same questions used to measure these constructs in Study 2; coefficient as were .90, .90, and .78, respectively.

As expected, subjects in the High, rather than Low, Specificity Condition perceived the explanation to have greater specificity (k 's = 20.9 and 10.1, respectively; $F(1, 156) = 171.29, p < .001, R^2 = .52$). Subjects in the High, rather than Low, Sincerity Condition perceived the explainer to be more sincere (X s = 12.8 and 7.1, respectively; $F(1, 156) = 80.1, p < .001, R^2 = .34$). Subjects in the High, rather than Low, Severity Condition perceived the event of receiving a failing grade to be more severe = 18.6 and 16.8, respectively; $F(1, 156) = 12.17, p < .001, R^2 = .08$).

We also tested whether perceptions that did not correspond with the independent variables were significant on the manipulation check measures. We found that severity was unaffected by the manipulation of specificity and sincerity. Perceptions of specificity were influenced by the sincerity effect ($F(1, 156) = 6.19, p < .01, R^2 = .04$); and perceptions of sincerity were influenced by the specificity effect ($F(1, 156) = 13.30, p < .001, R^2 = .08$). The magnitudes of these unintended effects were substantially smaller than the intended effects of the manipulations. On balance, then, we were satisfied that all manipulations were successful.

Hypothesis—Tests

We used three-factor analysis of variance, with sincerity, specificity, and outcome severity as independent variables, to test our hypotheses. The ANOVA results, presented in Table 7, showed main effects for interpersonal sensitivity and specificity, thus supporting our first two hy-

TABLE 7
ANALYSIS OF VARIANCE RESULTS FOR STUDY 3

Source of variation	Sum of squares	df	Mean square	F
Main effects				
Sincerity	33.756	1	33.756	13.45**
Specificity	164.381	1	164.381	65.49**
Outcome severity	.262	1	.262	.11
2-Way interactions				
Sincerity × Specificity	14.756	1	14.756	5.88*
Sincerity × Severity	2.691	1	2.691	1.07
Specificity × Severity	1.048	1	1.048	.42
3-Way interactions				
Sincerity × Specificity × Severity	10.301	1	10.301	4.10*

* $p < .05$.

** $p < .01$.

potheses, respectively. Contrary to Hypothesis 3, there was no main effect of outcome severity.

As in the first two studies, we estimated two hierarchical regression models to test the relative importance of the explainer's sincerity and the explanation's specificity in influencing adequacy judgments. In the first model, we entered the manipulation-check measure of sincerity initially and the manipulation check measure of specificity next; in the second model, this order was reversed. The change in R^2 for the addition for specificity was large and significant (R^2 change = .28; F change = 92.36, $p < .001$), whereas the change in R^2 for the addition of sincerity was much less pronounced (R^2 change = .04; F change = 13.25, $p < .001$). Thus, while both of these explanation features significantly influenced adequacy judgments, there is evidence here, as in the previous studies, that these judgments were influenced more by the specificity of the explanation's content than by the sensitivity of its delivery.

Unexpectedly, there was a two-way interaction involving the two explanation features—sincerity and specificity—suggesting that these factors have a multiplicative impact on judgments of explanation adequacy. Specifically, adequacy judgments were greatest when the explanation that students received for the failing grade was highly specific and sincere ($C_s = 5.41$), and lowest when the explanation lacked both specificity and sincerity ($X_s = 2.23$). When the explanation for students' grade had specificity but lacked sincerity, the perceived adequacy of the explanation was higher ($X_s = 5.00$) than when the explanation had sincerity but lacked specificity ($C_s = 3.90$). The nature of this interaction provides further support for our conclusion that the substance rather than the delivery of an explanation has greater influence on perceptions of an explanation's adequacy.

Additionally, we found a three-way interaction among sincerity, specificity, and outcome severity, which is illustrated in Fig. 1.

As can be seen in Fig. 1, the impact of explanation features on adequacy judgments is additive under conditions of low outcome severity, and multiplicative under conditions of high outcome severity. A simple effects test bears this out: sincerity and specificity exerted an interactive influence on adequacy judgments under circumstances of high ($F(1, 150) = 9.93$, $p < .01$), but not low ($F(1, 150) .06$, n.s.), outcome severity. Thus, there is evidence that the manner in which specificity and sincerity influence adequacy judgments depends on the severity of the decision being explained.

With respect to Hypotheses 4a and 4b (our competing predictions regarding the moderating effect of outcome severity), we interpret the three-way interaction to be an extension of our finding in Study 1. In Study 1, there was evidence that explanation features mattered more when outcomes were relatively less severe. In Study 3, there is evidence that explanation features matter differently when outcomes are more versus less severe. As reported above, explanation features combined additively when severity was low, but interactively when severity was high. This leads us to speculate that the additive relationship between explanation content and style found in Greenberg's (1993) laboratory study

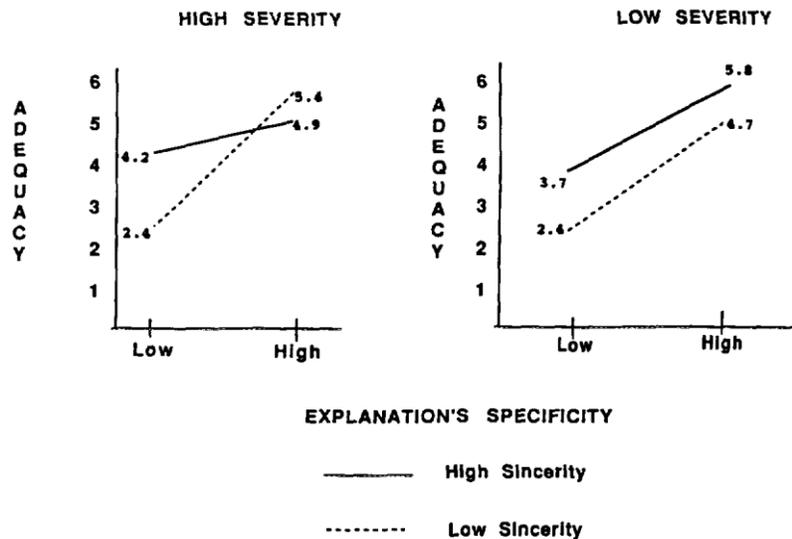


FIG. 1. Three-way interaction in Study 3.

may hold only in situations where outcome severity is relatively low. Thus, the relationship between explanation features and outcome severity is more complex than we originally conceived.

GENERAL DISCUSSION

Recently, Greenberg (1990) referred to explanations as a relatively inexpensive human resource management tool. Many who have written of explanations' conflict-mitigating potential have qualified it by saying that this potential exists only if the explanations are judged adequate (cf. Bies et al., 1988). The purpose of the present investigation was to determine what factors influence such a judgment, since absent this understanding, explanations cannot function, predictably, as a conflict management tool.

This investigation is the first we know of to explore systematically the antecedents of adequacy judgments and to consider whether predicted antecedents influence such judgments in an interactive manner. Taken together, our findings suggest several conclusions. First, explanations' perceived adequacy is influenced by, both, the specificity of the substance and the sincerity of its delivery. Second, although both of these explanation features are important, adequacy judgments are influenced more by the explanation's specificity rather than sincerity. Last, providing explanations with specific content and/or interpersonal sensitivity boosts adequacy judgments directly and independently when outcome severity is low, but results in a more complex (interactive) set of effects when outcomes are highly severe.

Interestingly, the high correlation found in our first two studies among naturally occurring perceptions of explanation specificity and explainer concern suggests that by offering an explanation whose substance is specific and uniquely tailored to the recipient, one will simultaneously enhance the perception that s/he is being sensitive, or sincere. Further evidence for this association between explanation specificity and explainer concern was provided in Study 3, where the manipulation of these factors had a significant, albeit smaller, effect on each other in addition to significant effects on the intended perceptions. The high correlation among these

explanation features and the form of the communication, found in Study 2, suggests that the perception of explainer sincerity can be enhanced, too, simply by offering an explanation verbally (in person or via telephone) rather than in writing (e.g., via a memo or letter).

The pattern of the three-way interaction between explanation specificity, sincerity, and decision severity found in Study 3 corroborates and extends theorizing about explanation-effects. First, consistent with our finding in Study 1, adequacy judgments were greatest when both explanation features (sincerity and specificity) were present, and a decision of low (rather than high) severity was explained. Second, this pattern showed that when a decision of low severity was explained, sincerity and specificity enhanced explanations' perceived adequacy in an additive fashion, similar to Greenberg (1993) who examined the effect of these features on perceptions of justice.

Our three-way interaction extends our understanding of explanation- effects by illustrating that, when decisions of higher severity are explained, explanation features influence adequacy judgments in a multiplicative, instead of an additive, fashion. Under high outcome severity, sincerity elevated adequacy judgments only when a specific explanation was absent; in the presence of a specific explanation, sincerity diminished adequacy judgments. Thus, when one provides a specific explanation and shows additional interpersonal sensitivity beyond that, the "extra" attempts to be sincere may create the perception that "He doth protest too much" (cf. Bies, 1987). One reason for this may be that mindlessness is less likely under circumstances of high rather than low outcome severity (Langer, 1978). Langer found that people were much more alert to explanation features when the explanations concerned requests that carried relatively more severe implications.

More research on perceptions of explanations' adequacy, explanation features, and outcome severity is needed for us to better understand this apparently complex relationship. While research examining explanation effects has looked at reactions to outcomes of varying severity, individual investigations (including the three studies reported here) have looked at only one type of outcome (e.g., Bies et al., 1988; Brockner et al., 1990; Greenberg, 1990, 1993; Konovsky & Folger, 1991), and therefore may be addressing a somewhat restricted range of severity. A fuller understanding of the severity-adequacy connection may require comparative research on people's reactions to identical explanations offered for different types of outcomes, such as comparing the responses of layoff survivors with those of layoff victims to management's explanation for workforce reductions.

During times of resource scarcity, organizational decline, and economic recession, communications of varying severity, such as hiring freezes, pay freezes, pay cuts, layoffs, and terminations are often heard in the workplace (Dumaine, 1990; Perry, 1986). Managers have more control over the features (specificity and sincerity) of the explanation they give to employees, and the communication channel (oral or written) they use to deliver the explanation, than they do over the severity of the news they need to explain. Understanding the impact, and interaction effects, of explanation features and news severity is critically needed if managers wish to take advantage of the relatively inexpensive conflict management resource that explanations, when judged adequate, can offer.

REFERENCES

- Baron, R. (1988). Attributions and organizational conflict: The mediating role of apparent sincerity. *Organizational Behavior and Human Decision Processes*, 41, 111-127.
- Bies, R. J. (1987). The predicament of injustice: The management of moral outrage. In L. L. Cummings and B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 9, pp. 289-319). Greenwich, CT: JAI Press.
- Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiation in organizations* (Vol. 1, pp. 43-55). Greenwich, CT: JAI Press.
- Bies, R. J., & Shapiro, D. L. (1987). Interactional fairness judgments: The influence of causal accounts. *Social Justice Research*, 1, 199-218.
- Bies, R. J., & Shapiro, D. L. (1988). Voice and justification: Their influence on procedural fairness judgments. *Academy of Management Journal*, 31(3), 676-685.
- Bies, R. J., Shapiro, D. L., & Cummings, L. L. (1988). Causal accounts and managing organizational conflict: Is it enough to say it's not my fault? *Communication Research*, 15(4), 381-399.
- Blumstein, P. W. (1974). The honoring of accounts. *American Sociological Review*, 39, 551-566.
- Brockner, J., DeWitt, R., Grover, S., & Reed, T. (1990). When it is especially important to explain why: Factors affecting the relationship between managers' explanations of a layoff and survivors' reactions to the layoff. *Journal of Experimental Social Psychology*, 26(5), 389-407.
- DePaulo, B., Stone, J., & Lassiter, D. (1985). Telling ingratiating lies: Effects of target sex and target attractiveness on verbal and nonverbal deceptive success. *Journal of Personality and Social Psychology*, 48, 1191-1203.
- Dumaine, B. (1990, November 5). How to manage in a recession. *Fortune*, Vol. 122, No. 12, pp. 58-72.
- Fincham, F. (1982). Moral judgment and the development of causal schema. *European Journal of Social Psychology*, 12, 47-61.
- Fincham, F., & Hewstone, M. (1982). Social categorization and personal similarity as determinants of attribution bias: A test of defensive attribution. *British Journal of Social Psychology*, 21, 51-56.
- Folger, R., Rosenfield, D., & Robinson, T. (1983). Relative deprivation and procedural justifications. *Journal of Personality and Social Psychology*, 45(2), 268-273.
- Frankl, V. E. (1969). *The will to meaning*. New York: New American Library.
- Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, 54, 81-103.
- Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: The hidden cost of paycuts. *Journal of Applied Psychology*, 75(5), 561-568.
- Hamner, C., & Hamner, E. (1976, Spring). Behavior modification on the bottom line. *Organizational Dynamics*, pp. 3-10.
- Henderson, R. (1984). *Performance appraisal*. Reston, VA: Reston Publishing.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion*. New Haven: Yale University Press.
- Janis, I. L., & Mann, L. (1977). *Decision making: A psychological analysis of conflict, choice, and commitment*. New York: The Free Press.
- Johnson, T. E., & Rule, B. G. (1986). Mitigating circumstance information, censure, and aggression. *Journal of Personality and Social Psychology*, 50, 537-542.
- Karniol, R., & Miller, D. T. (1981). Morality and the development of conceptions of justice.

- In M. J. Lerner & S. C. Miller (Eds.), *The justice motive in social behavior*. New York: Plenum Press.
- Konovsky, M. A., & Folger, R. (1991). The effects of procedures, social accounts, and benefits-level on victims' layoff reactions. *Journal of Applied Social Psychology*, 21, 630-650.
- Langer, E. (1978). Rethinking the role of thought in social interaction. In J. H. Harvey, W. J. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 2, pp. 35-58. Hillsdale, NJ: Erlbaum.
- Louis, M. (1980). Surprise and sensemaking: What newcomers experience in entering unfamiliar organizational settings. *Administrative Science Quarterly*, 25, 226-251.
- Perry, L. T. (1986, Spring). Least-cost alternatives to layoffs in declining industries. *Organizational Dynamics*, Vol. 14, pp. 48-61.
- Petty, R. E., & Cacioppo, J. T. (1981). *Attitudes and persuasion: Classic and contemporary approaches*. Dubuque, IA: W. C. Brown.
- Rice, B. (1987). Performance review: The job nobody likes. In D. Organ (Ed.), *The applied psychology of work behavior (3rd edition)*. Plano, TX: BPI.
- Shapiro, D. L. (1991). The effects of explanations on negative reactions to deceit. *Administrative Science Quarterly*, 36, 614-630.
- Spearman, C. (1910). Correlation calculated from faulty data. *British Journal of Psychology*, 3, 271-295.
- Weiner, B., Folkes, V., Amirkhan, J., & Verette, J. (1987). An attributional analysis of excuse giving: Studies of a naive theory of emotion. *Journal of Personality and Social Psychology*, 52, 316-324.
- Wong, C., & Weiner, B. (1981). When people ask why questions. *Journal of Personality and Social Psychology*, 40, 650-663.
- RECEIVED: August 11, 1989