

## Employee Theft as a Reaction to Underpayment Inequity: The Hidden Cost of Pay Cuts

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Employee theft rates were measured in manufacturing plants during a period in which pay was temporarily reduced by 15%. Compared with pre- or postreduction pay periods (or with control groups whose pay was unchanged), groups whose pay was reduced had significantly higher theft rates. When the basis for the pay cuts was thoroughly and sensitively explained to employees, feelings of inequity were lessened, and the theft rate was reduced as well. The data support equity theory's predictions regarding likely responses to underpayment and extend recently accumulated evidence demonstrating the mitigating effects of adequate explanations on feelings of inequity.

Employee theft constitutes one of the most pervasive and serious problems in the field of human resource management. Although exact figures are difficult to come by, the American Management Association (1977) has estimated that employee theft cost American businesses from \$5 billion to \$10 billion in 1975, representing the single most expensive form of nonviolent crime against businesses.

Traditionally, social scientists have considered several plausible explanations for employee theft. Among the most popular are theories postulating that theft is the result of attempts to ease financial pressure (Merton, 1938), moral laxity among a younger workforce (Merriam, 1977), available opportunities (Astor, 1972), expressions of job dissatisfaction (Mangione & Quinn, 1975), and the existence of norms tolerating theft (Horning, 1970). More recently, Hollinger and Clark (1983) conducted a large-scale survey and interview study designed to explore these and other explanations of employee theft. Interestingly, they found that the best predictor was employee attitudes: "When employees felt exploited by the company . . . these workers were more involved in acts against the organizations as a mechanism to correct perceptions of inequity or injustice" (Hollinger & Clark, 1983, p. 142).

Hollinger and Clark's (1983) suggestion that employee theft is related to feelings of injustice is consistent with several schools of sociological and anthropological thought. For example, in studies of hotel dining room employees (Mars, 1973) and maritime dock workers (Mars, 1974), Mars found that employees viewed theft *not* as inappropriate but "as a morally justified addition to wages; indeed, as an entitlement due from exploiting employers" (Mars, 1974, p. 224). Similarly, Kemper (1966)

argued that employee theft may be the result of "reciprocal deviance," that is, employees' perceptions that their employers defaulted on their obligations to them, thereby encouraging them to respond with similar acts of deviance. Fisher and Baron (1982) made a similar argument in presenting their equity-control model of vandalism. They claimed that vandalism is a form of inequity reduction in that an individual vandal's breaking the rules regarding property rights follows from his or her feelings of mistreatment by authorities. Recent evidence in support of this idea is found in a study by DeMore, Fisher, and Baron (1988). In that study, university students claimed to engage in more vandalism the less fairly they felt they had been treated by their university and the less control they believed they had over such treatment.

Such conceptualizations are in keeping with current theoretical positions in the field of organizational justice (Greenberg, 1987). These formulations allow more precise hypotheses to be developed regarding when employee theft is likely to occur. For example, consider equity theory's (Adams, 1965) claim that workers who feel inequitably underpaid (i.e., those who believe that the rewards they are receiving relative to the contributions they are making are less than they should be) may respond by attempting to raise their outcomes (i.e., raise the level of rewards received). Although research has supported this claim (for a review, see Greenberg, 1982), studies have been limited to situations in which persons paid on a piece-work basis produce more goods of poorer quality to raise their outcomes without effectively raising their inputs. Given earlier conceptual claims and supporting evidence associating student vandalism with inequitable treatment (DeMore et al., 1988), it may be reasoned analogously that employee theft is a specific reaction to underpayment inequity and constitutes an attempt to bring outcomes into line with prevailing standards of fair pay.

Recent research in the area of procedural justice (Lind & Tyler, 1988) has shown that perceptions of fair treatment and outcomes depend not only on the relative level of one's outcomes but also on the explanations given for those outcomes (for a review, see Folger & Bies, 1989). For example, researchers have found that decision outcomes and procedures were better

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accepted when (a) people were assured that higher authorities were sensitive to their viewpoints (Tyler, 1988), (b) the decision was made without bias (Lind & Lissak, 1985), (c) the decision was applied consistently (Greenberg, 1986), (d) the decision was carefully justified on the basis of adequate information (Shapiro & Buttner, 1988), (e) the decisionmakers communicated their ideas honestly (Bies, 1986), and (f) persons influenced by the decision were treated in a courteous and civil manner (Bies & Moag, 1986). Such findings suggest that interpersonal treatment is an important determinant of reactions to potentially unfair situations (Tyler & Bies, 1990).

It is an interesting idea that perceptions of inequity (and corresponding attempts to redress inequities) may be reduced when explanations meeting the criteria presented in the preceding paragraph are offered to account for inequitable states. This notion was tested in the present study by capitalizing on a naturalistic manipulation—a temporary pay reduction for employees of selected manufacturing plants. Data were available for 30 consecutive weeks: 10 weeks before a pay reduction occurred, 10 weeks during the pay-reduction period, and 10 weeks after normal pay was reinstated. Following from equity theory, it was hypothesized that ratings of payment fairness would be lower during the pay-reduction period than during periods of normal payment (i.e., before and after the pay reduction). It was similarly hypothesized that rates of employee theft would be higher during the reduced-pay period than during periods of normal payment. Such actions would be consistent with equity theory's claim that one likely way of responding to underpayment inequity is by attempting to raise the level of rewards received. Although not previously studied in this connection, employee theft is a plausible mechanism for redressing states of inequity (Hollinger & Clark, 1983).

Additional hypotheses were derived from recent research (e.g., Cropanzano & Folger, 1989; Folger & Martin, 1986; Shapiro & Buttner, 1988; Weiner, Amirkham, Folkes, & Varette, 1987) showing that explanations for negative outcomes mitigate people's reactions to those outcomes (for a review, see Folger & Bies, 1989; Tyler & Bies, 1990). Generally speaking, in these studies the use of adequate explanations (i.e., ones that relied on complete, accurate information presented in a socially sensitive manner) tended to reduce the negative reactions that resulted from such outcomes and facilitated acceptance of the outcomes. From the perspective of Folger's (1986) referent cognitions theory, adequate explanations help victimized parties place their undercompensation in perspective by getting them to understand that things could have been worse. As such, adequate explanations were expected in the present study to lessen the feelings of inequity that accompanied the pay cut. Thus, it was reasoned that employees' feelings of payment inequity, and attempts to reduce that inequity (such as by pilfering), would be reduced when adequate explanations were given to account for the pay reduction. Specifically, it was hypothesized that the magnitude of the expressed inequity—and the rate of employee theft—would be lower when pay reductions were adequately explained than when they were inadequately explained.

## Method

### Participants

Participants in the study were nonunion employees working for 30 consecutive weeks in three manufacturing plants owned by the same

Table I  
*Distribution of Attrition and Turnover Across Conditions*

Condition	Starting <i>n</i>	Missing data	Resignations			Final <i>n</i>
			Before pay cut	During pay cut	After pay cut	
Adequate explanation (Plant A)	64	6	1	1	1	55
Inadequate explanation (Plant B)	53	8	1	12	2	30
Control (Plant C)	66	5	1	0	2	58

parent company. The plants were located in different sections of the midwestern United States and manufactured small mechanical parts mostly for the aerospace and automotive industries. The employees' average age ( $M = 28.5$  years), level of education ( $M = 11.2$  years), and tenure with the company ( $M = 3.2$  years) did not significantly differ among the three plants,  $F < 1.00$ , in all cases. The local unemployment rates in the communities surrounding the three plants were not significantly different from each other (overall  $M = 6.4\%$ ),  $F < 1.00$ . It is important to establish this equivalence of characteristics across research sites because the assignment of individuals to conditions was not random across sites, thereby precluding the assumption of equivalence afforded by random assignment (Cook & Campbell, 1976).

As the study began, Plant A employed 64 workers in the following jobs: 5 salaried low-level managerial employees (4 men, 1 woman); 47 hourly-wage semiskilled and unskilled production workers (38 men, 9 women); and 12 hourly-wage clerical workers (all women). Almost identical proportions with respect to job type (and sex of employees within job type) existed in Plant B ( $n = 53$ ) and Plant C ( $n = 66$ ). Because some employees failed to complete questionnaires during some weeks, and because some employees voluntarily left their jobs during the study period, complete sets of questionnaires were available from 55 employees of Plant A, 30 employees of Plant B, and 58 employees of Plant C. This constituted a total sample of 143 employees, distributed to conditions as summarized in Table I. The demographic characteristics of the 40 workers who were not included in the study did not differ significantly from the characteristics of the 143 who remained in the study (in all cases,  $F < 2.00$ ), minimizing the possibility that those who remained in the study were a select group.

### Procedure

Because of the loss of two large manufacturing contracts, the host company was forced to reduce its payroll by temporarily cutting wages by 15% across the board in two of its manufacturing plants (Plants A and B). This was done in lieu of laying off any employees. After this decision was made, I was asked to help assess the impact of the wage cuts in several key areas, including employee theft. Each of the payment-group manipulations was carried out in a separate plant. The assignment of Plant A to one experimental condition and Plant B to another experimental condition was determined at random. Assignment to the control group was determined by the host company's decision that pay cuts were not necessary in Plant C.<sup>1</sup>

<sup>1</sup> Admittedly, conducting the study in this manner meant that the two randomly assigned groups may have been nonequivalent with respect to some unknown variables that might have otherwise affected the results (Cook & Campbell, 1976). However, some reassurance of

The *adequate explanation* condition was created in Plant A. To effect this, a meeting (lasting approximately 90 min) was called at the end of a work week. At that meeting, all employees were told by the company president that their pay was going to be reduced by 15%, effective the following week, for a period expected to last 10 weeks. During this meeting several types of explanations were provided. On the basis of recent research (Folger & Bies, 1989; Tyler & Bies, 1990), I hypothesized that these explanations would mitigate reactions to the pay cut. The workers were told that company management seriously regretted having to reduce their pay but that doing so would preclude the need for any layoffs. They were further assured that all plant employees would share in the pay cuts and that no favoritism would be shown.<sup>2</sup> A relevant verbatim passage follows:

Something we hate to do here at [company name] is lay off any of our employees. But, as you probably know, we've lost our key contracts with [company names], which will make things pretty lean around here for a little while. As a result, we need to cut somewhere, and we've come up with a plan that will get us through these tough times. I've been working on it with [name of person] in accounting, and we're sure it will work. The plan is simple: Starting Monday, we will each get a 15% cut in pay. This applies to you, to me, to everyone who works here at [name of plant]. If we do it this way, there'll be no cut in benefits and no layoffs—just a 15% pay reduction. So, either your hourly wages or your salary will be reduced by 15%. Will it hurt? Of course! But, it will hurt us all alike. We're all in it together. Let me just add that it really hurts me to do this, and the decision didn't come easily. We considered all possible avenues, but nothing was feasible. I think of you all as family, and it hurts me to take away what you've worked so hard for. But, for the next 10 weeks, we'll just have to tough it out.

In addition to these remarks, the basis for the decision was clearly explained and justified by presenting charts and graphs detailing the temporary effects of the lost contracts on cash-flow revenues. Projections verified that the cash-flow problem dictating the need for the pay cuts was only temporary, and this was clearly explained. All employees were assured that the pay cut was designed to last only 10 weeks.<sup>3</sup> Specifically, the employees were told the following:

The reason I'm sharing all this information with you is that I want you to understand what is happening here. It's just a temporary problem we're facing, and one that I hope will never happen again. At least the best course of action from our accounting department is clear: The pay cuts will work, and they will not have to last longer than 10 weeks. The new jobs we'll be picking up from [name of company] will really help get us back on our feet. Hopefully, by then we'll be stronger than ever. Of course, I know we're no stronger than our people, and I personally thank each and every one of you for your strength.

The tone of the presentation was such that a great deal of respect was shown for the workers, and all questions were answered with sensitivity. Approximately 1 hr was spent answering all questions. Each response brought an expression of remorse at having to take such action (e.g., "Again, I really wish this weren't necessary."). The good intent of

between-group similarity is provided by the demonstrated equivalence between worker characteristics, economic conditions, and job duties for both plants. Moreover, the deliberate assignment of Plant C to the control condition raises the possibility that something besides the lack of manipulation may have been responsible for the results (Cook & Campbell, 1976). However, informal postexperiment interviews with plant officials and employees confirmed that no unusual "local history" events occurred during the study period. Further assurance that this was not a problem comes from the fact that, before and after the pay cut, the control group's responses were identical to the other groups' responses for all measures used in the study.

this message was reinforced by the fact that the president issued the message in person.

Plant B was the site of the *inadequate explanation* condition. Here, a meeting lasting approximately 15 min was called at the end of a work week. All employees were told by a company vice president that their pay was going to be reduced by 15%, effective the following week, for a period expected to last 10 weeks. The only additional information that was provided indicated that the lost contracts dictated the need for the pay cut. No expressions of apology or remorse were shared, and the basis for the decision was not clearly described. The following verbatim remarks characterize this condition:

It is inevitable in a business like ours that cost-cutting measures are often necessary to make ends meet. Unfortunately, the time has come for us to take such measures here at [company name]. I know it won't be easy on anyone, but [name of company president] has decided that a 15% across-the-board pay cut will be instituted effective Monday. This is largely the result of the fact that we've lost our contracts with [name of companies]. However, soon we'll be picking up jobs with [name of company], so we're sure the pay cuts will last only 10 weeks. I realize this isn't easy, but such reductions are an unfortunate fact of life in the manufacturing business. On behalf of [company president's name] and myself, we thank you for bearing with us over these rough times. I'll answer one or two questions, but then I have to catch a plane for another meeting.

Finally, because the parts manufactured at Plant C were unaffected by the lost contracts, no pay cuts were mandated there. Plant C constituted the *control* condition for the study.

### Measures

Two categories of dependent measures were used: actuarial data on employee theft, and self-report measures tapping some of the processes assumed to be underlying the theft behavior.

<sup>2</sup> Before the meetings scheduled in each plant, the individuals involved (i.e., company president in Plant A and a vice president in Plant B) met with me to develop outlines of their presentations. Several carefully crafted sentences conveying salient aspects of the manipulation were prepared for inclusion in the speaker's notes. Because local company norms dictated using informal meetings instead of formal presentations, complete scripts for the entire sessions could not be prepared in advance. As a result, it was necessary to establish that key differences in the manipulated variables were actually communicated in the meetings. With this in mind, each session was videotaped, and the videotapes were played back to a group of 12 undergraduate students after all identifying information was deleted. The students were asked to indicate in which of the two tapes (Tape A for Plant A; Tape B for Plant B) the speaker (a) presented more information about the pay cuts and (b) expressed greater remorse about the pay cuts. The order of presentation of the tapes was randomized. Virtually all of the students agreed that the speaker on Tape A presented more information and expressed greater remorse. Taken together with my in-person confirmation that the manipulations were conducted as desired, these findings suggest that differentially adequate explanations were given to the two groups. Unfortunately, it was not possible to conduct further analyses on these tapes because the host company insisted that they be destroyed to prevent the unwanted dissemination of sensitive company information.

<sup>3</sup> Because of the sensitive and privileged nature of the internal accounting information, I was not permitted to divulge these data. Indeed, although I helped company officials present this information in understandable form, these charts and graphs were never made part of my file.

*Employee theft rates.* The measure of employee theft used for this study was the company accounting department's standard formula for computing "shrinkage." The formula yielded the percentage of inventory (e.g., tools, supplies, etc.) unaccounted for by known waste, sales, use in the conduct of business, or normal depreciation. (For a discussion of the difficulties attendant to deriving such measures, see Hollinger & Clark, 1983.) These measures were obtained unobtrusively (during nonwork hours) by representatives of the company's headquarters on a weekly basis during the study period. The persons taking inventory were aware of any legitimate factors that contributed to accounted-for changes in inventory levels (such as shipments received, supplies used during projects, etc.) but were blind to the experimental hypotheses.<sup>4</sup>

Because no single standard for computing shrinkage is uniformly used (Hollinger & Clark, 1983), it was not possible to compare the base rates of employee theft in the present sample to any industry-wide average. However, evidence that the employee theft rate studied here was not atypical was provided by showing that the mean theft rate for the 10-week period before the pay cut was not significantly different from the overall theft rate for all three plants for the prior year,  $F < 1.00$ . These data are important in that they provide some assurance that the changes in theft rates observed were not simply deviations from unusual patterns that later merely regressed to the mean.<sup>5</sup>

*Questionnaire measures.* Two types of questionnaire measures were needed to establish the validity of the study and to facilitate interpretation of the theft data—one group of questions to verify differences in familiarity with the basis for establishing pay (the manipulation check), and another group of questions to establish differences in perceived payment equity. The questionnaires were administered bi-weekly (during odd-numbered weeks in the study period) at the plant sites during nonworking hours. Because a larger, unrelated study had been going on for several months, the workers were used to completing questionnaires, making it unlikely that any suspicions were aroused by the questions inserted for this study. Participants were assured of the anonymity of their responses.

The "pay basis" measure was designed to provide a check on the validity of the payment-group variable. Participants answered four items on a 5-point scale ranging from *not at all* (1), to *slightly* (2), to *moderately* (3), to *highly* (4) to *extremely* (5). The questions were (a) "How adequate was your employer's explanation regarding the basis of your current pay?" (b) "How familiar are you with the way your employer determines your pay?" (c) "How thoroughly did your employer communicate the basis for your current pay to you?" and (d) "How much concern did your employer show about your feelings when communicating your pay?" A high degree of internal consistency was found for these items (coefficient alpha = .89).

The "pay equity" measure consisted of four items, three of which were anchored with the same scale points as the pay basis items. Specifically, participants responded to the following items: (a) "To what extent do you believe your current pay reflects your actual contributions to the job?" (b) "How fairly paid do you feel you currently are on your job?" and (c) "How satisfied are you with your current overall pay level?" The fourth item asked, "Relative to what you feel you should be paid, do you believe your current pay is: \_\_\_ much too low, \_\_\_ a little too low, \_\_\_ about right, \_\_\_ a little too high, \_\_\_ much too high?" Because only the first 3 points of this bidirectional scale were actually used, responses to this 3-point scale were combined with the 5-point unidirectional scales for the other items. Coefficient alpha was high (.84), justifying combining the individual items. The option of using existing standardized scales tapping reactions to pay (e.g., the Pay Satisfaction Questionnaire; Heneman & Schwab, 1985) was rejected in favor of ad hoc measures because these were judged to be much more sensitive to the measurement objectives of the present study (cf. Heneman, 1985).

## Results

### *Preliminary Analyses*

Prior to the principal data analyses, preliminary analyses were conducted to determine whether to separate the 15 bi-weekly questionnaire responses into three equal groups, reflecting responses before, during, and after the pay cut. The five 2-week response periods were treated as a repeated measure in mixed-design analyses of variance (ANOVAs) in which the payment group was the between-subjects factor (adequate explanation, inadequate explanation, no pay cut). Separate analyses were conducted for each of the three groups. Because no significant main effects or interactions involving the response periods were obtained in analyses for either questionnaire measure (all  $F_s < 1.00$ ), the decision was made to combine the observations into three groups composed of more reliable observations (before, during, or after the pay cut).

Because only one employee-theft-rate figure was reported for each week (the figure was aggregate, as opposed to individual, data), it was not possible to conduct a parallel set of ANOVAs for this measure. However, separate tests were performed within each payment group to compare each week's theft rate to the mean for all 10 weeks. This process was repeated separately for each of the three response periods (i.e., before, during, and after the pay cut). Because no significant effects emerged in any of these analyses (all values of  $t < .50$ ,  $df = 9$ ), the decision was made (paralleling that for the questionnaire measures) to group the weekly scores into three 10-week response periods.

### *Employee Theft Rate*

Analyses of theft rates were based on a  $3 \times 3$  mixed-design ANOVA in which payment group was the between-subjects variable, response period was the within-subjects variable, and the 10 weekly theft rates within each cell constituted the data. A significant Payment Period  $\times$  Response Period interaction was found,  $F(4, 56) = 9.66$ ,  $p < .001$ . Figure 1 summarizes the means contributing to this interaction.

For each payment group, simple effects tests were performed to determine whether the means differed significantly across response periods. Any significant effects were followed up with the Tukey honestly significant difference (HSD) procedure (with alpha set at .05). In addition, tests for quadratic trend components were performed using orthogonal polynomials (Hays, 1963). This analysis was performed to note trends in the data over time in a situation in which the number of available

<sup>4</sup> Although the theft-rate figures (i.e., percentage of inventory loss unaccounted for) were used internally to compute dollar-loss figures, data substantiating a specific dollar-loss amount caused by the thefts were not made available to me. Again, this decision was prompted by the company's desire to avoid potential embarrassment.

<sup>5</sup> Unfortunately, week-by-week theft-rate data were not available prior to the study period. As a result, it was impossible to compare the weekly theft rates during the study to earlier weekly theft rates. Thus, it was not possible to rule out the possibility raised by one reviewer that the results may reflect some seasonal fluctuations in theft that coincided with the manipulation period.

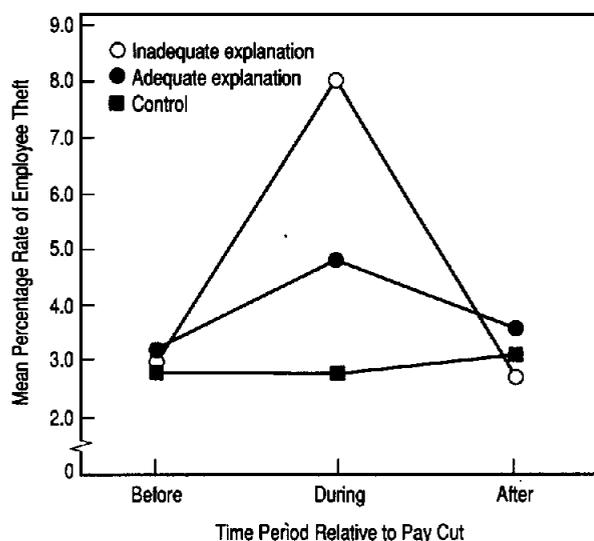


Figure 1. Mean percentage of employee theft as a function of time relative to pay cut.

data points was too small to use time series analyses (Zuwaylif, 1970).

A simple effects test within the inadequate-explanation condition was significant,  $F(2, 27) = 9.15, p < .001$ . Post hoc tests revealed that significantly higher levels of theft were observed during the pay reduction than before or after the pay reduction. Consistent with this configuration, the quadratic trend was highly significant,  $F(1, 27) = 12.18, p < .001$ .

Within the adequate-explanation condition, the overall simple effects test was weaker but still significant,  $F(2, 52) = 3.76, p < .05$ . This effect was the result of a similar, though less pronounced, pattern of means showing theft to be higher during the pay cut than either before or after the pay cut. Tests for a quadratic trend component failed to reach conventional levels of significance,  $F(2, 52) = 2.10, p < .15$ .

Finally, within the control group, simple effects tests revealed that the means did not differ from each other significantly across the three response periods,  $F(2, 55) < 1.00$ .

To establish pre- and postmanipulation equivalence, it was useful to compare means between payment groups (adequate explanation, inadequate explanation, no pay cut) within response periods. Simple effects tests showed no significant simple main effects of payment group before or after the pay cut,  $F < 1.00$  in both cases. However, the effect of payment group was highly significant during the pay cut,  $F(2, 27) = 10.71, p < .001$ . Tukey HSD tests revealed that the three means were significantly different from each other. In other words, within the pay-reduction period, the theft rate in the inadequate-explanation condition ( $M = 8.9$ ) was significantly higher than that in the adequate-explanation condition ( $M = 5.7$ ), which was in turn higher than that in the control condition ( $M = 3.7$ ).

### Questionnaire Responses

Responses to the pay basis and pay equity questionnaires were analyzed with ANOVA designs identical to that used for the

employee-theft measure. For these dependent variables, however, the data consisted of individual responses to the summed items constituting each questionnaire within each cell. The two questionnaire measures were not significantly correlated,  $r = .07$ .

For the pay basis measure, a significant Payment Group  $\times$  Response Period interaction was obtained,  $F(4, 280) = 256.10, p < .0001$ . The corresponding means and standard deviations are summarized at the top of Table 2. As shown, post hoc tests revealed that employees in the adequate-explanation condition demonstrated greater understanding of the basis for pay determination than employees in the other two conditions once the explanation occurred (i.e., during and after the pay cut). The adequate-explanation manipulation successfully enhanced employees' understanding of the basis for pay determination.

A significant interaction effect also was obtained for the pay equity measure,  $F(4, 280) = 29.05, p < .001$ . The corresponding means and standard deviations are summarized at the bottom of Table 2. As shown, post hoc tests revealed that during the pay cut, employees in the inadequate-explanation condition expressed the greatest perceptions of pay inequity. Workers whose pay reductions were adequately explained to them did not express heightened payment inequity while their pay was reduced.

### Turnover

A summary of missing data and data lost because of voluntary turnover appears in Table 1. Not surprisingly, the majority of the turnover occurred among employees experiencing inadequately explained pay reductions (12 of the 52 workers, or 23.1% of those still on the job at that time). Resignations in other conditions were uniformly 5% or less. Consistent with this, the distribution of resignations over conditions during the pay-cut period was highly significant,  $\chi^2(2, N = 13) = 20.48, p < .001$ —a result of the fact that 12 of the 13 resignations occurred in the inadequate-explanation group. By contrast, the distribution of resignations across conditions was equal before the pay cut,  $\chi^2(2, N = 3) < 0.5$ , and after the pay cut,  $\chi^2(2, N = 5) < 0.5$ .

### Discussion

The data support the hypothesis derived from equity theory (Adams, 1965) that workers experiencing underpayment inequity would attempt to redress that inequity by raising their inputs—in the present case, by pilfering from their employer. Indeed, while workers experienced a 15% pay reduction, they reported feeling underpaid and stole over twice as much as they did when they felt equitably paid. Two distinct interpretations of these theft data may be offered, both of which are consistent with equity theory (Adams, 1965). First, it is possible that the pay reduction led to feelings of frustration and resentment, which motivated the aggressive acts of theft. This possibility is in keeping with recent research findings demonstrating that pay cuts are associated with negative affective reactions to organizational authorities (Greenberg, 1989) and that increases in vandalism correlate positively with perceptions of mistreatment by authorities (DeMore et al., 1988). Such an interpretation follows from a reciprocal deviance orientation to inequity

Table 2  
*Data Summaries for Questionnaire Measures*

Measure/payment group	n	Response period					
		Before		During		After	
		M	SD	M	SD	M	SD
<b>Pay basis<sup>a</sup></b>							
Inadequate explanation	30	40.70 <sub>a</sub>	4.38	76.10 <sub>b</sub>	6.48	73.73 <sub>b</sub>	5.70
Adequate explanation	55	43.22 <sub>a</sub>	5.58	42.39 <sub>a</sub>	3.40	43.74 <sub>a</sub>	4.93
Control	58	42.36 <sub>a</sub>	6.49	40.72 <sub>a</sub>	3.83	41.90 <sub>a</sub>	4.46
<b>Pay equity<sup>b</sup></b>							
Inadequate explanation	30	56.87 <sub>a</sub>	5.54	40.20 <sub>b</sub>	7.56	57.43 <sub>a</sub>	6.70
Adequate explanation	55	61.22 <sub>a</sub>	9.57	59.56 <sub>a</sub>	9.52	56.03 <sub>a</sub>	9.37
Control	58	61.29 <sub>a</sub>	8.67	60.98 <sub>a</sub>	9.18	58.02 <sub>a</sub>	8.57

*Note.* Within each row and each column, means not sharing a common subscript are significantly different from each other beyond the .05 level on the basis of the Tukey honestly significant difference technique corrected for confounded comparisons with the Cicchetti (1972) approximation.

<sup>a</sup> Mean scores for the pay basis measure could range from 20 to 100. Higher scores reflect greater degrees of familiarity with the basis for establishing pay. <sup>b</sup> Mean scores for the pay equity measure could range from 20 to 90. Higher scores reflect greater degrees of perceived payment equity.

reduction, which suggests that employees' acts of deviance are encouraged by their beliefs that their employers defaulted on their obligations to them by reducing their pay (Kemper, 1966). From this perspective, acts of theft may be understood as a manifestation of feelings of mistreatment.

It is also possible to interpret the thefts as direct attempts to correct underpayment inequity by adjusting the balance of valued resources between the worker and the specific source of that inequity. As such, acts of theft may be interpreted as unofficial transfers of outcomes from the employer to the employee. Because no direct evidence is available suggesting that the stolen items had any positive valence to the employees, it is impossible to claim unambiguously that the theft rates represented employees' attempts to increase their own outcomes. Although such an interpretation is consistent with a considerable amount of evidence on the distribution of rewards and resources (for reviews, see Freedman & Montanari, 1980; Leventhal, 1976), it is also possible that disgruntled employees may have been content to reduce the valued resources available to the agent of their discontent. That is, they may have been motivated to reduce the employer's worth whether or not doing so directly benefited themselves. Unfortunately, the questionnaire items that would have been necessary to provide more refined interpretations of the present data might also have aroused subjects' suspiciousness that theft was being studied, thereby creating the potential for subject reactance (Webb, Campbell, Schwartz, Sechrest, & Grove, 1981). As a result, no such self-report data were collected. Nevertheless, the results are clearly in keeping with equity theory.

The present data also reveal a critical moderator of the tendency to pilfer to restore equity with one's employer—namely, the use of an adequate explanation for the pay cut. Pay cuts that were explained in an honest and caring manner were not seen by employees as being as unfair as pay cuts that were not explained carefully. Accordingly, reactions to carefully explained underpayment also were less severe (i.e., the pilferage rates were lower). These findings add to a recently developing body of

research showing that the use of adequately reasoned explanations offered with interpersonal sensitivity tends to mitigate the negative effects associated with the information itself (for reviews, see Folger & Bies, 1989; Tyler & Bies, 1990). The explanations used in the present study were obviously quite successful in reducing costs, both to employees (in terms of inequity distress) and employers (in terms of pilferage and turnover).

An interesting and important aspect of the present study is that a sizeable portion of the participants in the inadequate-explanation condition voluntarily left their jobs during the pay-reduction period; in fact, a much larger proportion resigned than did so in any other condition (or within the same condition at other times). It is tempting to take this finding as support for the idea that quitting one's job is an extreme form of reaction to underpayment inequity (Finn & Lee, 1972) and that the voluntary turnover found here was another form of reaction to inequity. However, because of the nonrandom design of the study, it is not possible to rule out factors other than the experimental manipulation—a difficulty common to quasi-experimental studies (Cook & Campbell, 1976). Despite this problem, several facts lend support to the inequity interpretation. First, the finding that the theft rate immediately before the manipulations did not differ significantly from the previous year's theft rate suggests that nothing out of the ordinary was happening that may have been responsible for the results. Second, because the theft rate was highest precisely under the only conditions in which feelings of inequity were high (i.e., during the pay-cut period following an inadequate explanation), feelings of inequity and theft rate probably are related, both resulting from the manipulated variable exactly as predicted by equity theory (Adams, 1965) and referent cognitions theory (Folger, 1986). Because this interpretation is theoretically supported, its position is strengthened relative to alternatives that may be raised in the absence of random assignment.

Generalizing from the present findings, it appears that adequately explaining inequitable conditions may be an effective means of reducing potentially costly reactions to feelings of

underpayment inequity. To be effective, however, such explanations must be perceived as honest, genuine, and not manipulative (Tyler, 1988). Still, to the extent that underpayment conditions are acknowledged and justified by employers (as opposed to ignored or minimized by them), it appears that both workers and their organizations may stand to benefit. Given the high costs of employee theft (American Management Association, 1977), it appears that explaining the basis for inequities may be a very effective (and totally free) mechanism for reducing the costs of employee theft.

Practical implications notwithstanding, the present findings raise some important questions for equity theory (Adams, 1965) about the use of various modes of inequity reduction. Whereas the focus of this study was on pilferage, turnover was another type of response that occurred. Unfortunately, the nature of the present data makes it impossible to determine the trade-offs between various modes of inequity reduction. Did some employees resign in response to underpayment while others (perhaps those with fewer options for alternative employment) stayed on and expressed their negative feelings by stealing? Or was it that the most aggrieved employees stole company property before leaving, while others simply lowered their inputs? Because the theft rates were aggregate, actuarial data and could not be traced to particular employees, and because performance data were not collected, it was not possible to determine when and how different forms of inequity-reduction behavior are likely to occur. As a result, serious questions remain regarding how different inequity-resolution tactics may be used in conjunction with each other.

Confidence in interpretations of the present findings is limited because actuarial-level dependent measures (theft and turnover) were collected in conjunction with an individual-level variable (perceived payment equity), thereby making it impossible to conduct mediational analyses of the results. Exacerbating this problem is the fact that the use of a quasi-experimental design does not allow the discounting of alternative explanations (as noted earlier). Thus, although it is plausible that inequity leads to stealing unless mitigated by an adequate explanation, it is impossible to statistically discount the alternative possibility that unknown preexisting differences between the plants constituting the payment groups (e.g., different norms against stealing or differential acceptance of management's promise that the pay cut would be temporary) may have been responsible for the results. However, in support of the present findings, it is important to note that such limitations are inherent to some degree in all quasi-experimental research designs (Cook & Campbell, 1976).

Although nonrandom assignment precludes the discounting of alternative explanations, support for the present interpretation of the data may be derived from converging sources of theoretically based data. In this case, several lines of analogous research converge with my claim that adequate explanations enhanced the acceptance of undesired outcomes. For example, Folger and his associates (e.g., Folger & Martin, 1986; Folger, Rosenfield, & Robinson, 1983) measured laboratory subjects' feelings of discontent in reaction to procedural changes that created unfavorable conditions for them. Consistent with referent cognitions theory (Folger, 1986), Folger and his colleagues found that these feelings of discontent were reduced only when

the need to make procedural changes was adequately explained. Similarly, in another line of investigation, Weiner et al. (1987) found that persons victimized by another's harmdoing expressed less anger toward the harmdoer when claims of mitigating circumstances were offered for the harmdoer's actions. Both lines of investigation show that negative affective reactions are reduced by the presentation of adequate explanatory information. As such, they provide good convergent evidence for the my claim that adequately explained pay cuts mitigated feelings of inequity and reactions to underpayment inequity.

Finally, an important question may be raised about the compound nature of the explanation manipulation used in the present study. Because the adequate-explanation condition and the inadequate-explanation condition differed along several dimensions (postulated a priori to contribute to mitigation of the effects of the inequity), it was not possible to determine the individual effects of the various contributing factors. Specifically, the explanations differed in terms of several factors. Some of these, such as the quality of the information and the interpersonal sincerity of its presentation, have been recognized as mitigating reactions to undesirable outcomes (Shapiro & Buttner, 1988). Other differences between conditions, such as possible differences in the credibility of the source (the president versus the vice president) have not yet been studied. Clearly, the unique effects of these factors are prime candidates for future research efforts.

To conclude, the results of the present study shed new light on employee theft—one of the most important problems in the field of human-resource management. The evidence confirms that employee theft is a predictable response to underpayment inequity and reveals that such reactions can be substantially reduced by the inexpensive tactic of explaining the basis for the inequity in clear, honest, and sensitive terms.

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### Correction to Greenberg

In the article "Employee Theft as a Reaction to Underpayment Inequity: The Hidden Cost of Pay Cuts," by Jerald Greenberg (*Journal of Applied Psychology*, 1990, Vol. 75, No. 5, pp. 561-568), through no fault of the author, the means and standard deviations in the first two rows of the During and After columns of Table 2 were transposed across rows. A corrected version of Table 2 is presented here.

Table 2  
*Data Summaries for Questionnaire Measures*

Measure/payment group	n	Response period					
		Before		During		After	
		M	SD	M	SD	M	SD
<b>Pay basis<sup>a</sup></b>							
Inadequate explanation	30	40.70 <sub>a</sub>	4.38	42.39 <sub>a</sub>	3.40	43.74 <sub>a</sub>	4.93
Adequate explanation	55	43.22 <sub>a</sub>	5.58	76.10 <sub>b</sub>	6.48	73.73 <sub>b</sub>	5.70
Control	58	42.36 <sub>a</sub>	6.49	40.72 <sub>a</sub>	3.83	41.90 <sub>a</sub>	4.46
<b>Pay equity<sup>b</sup></b>							
Inadequate explanation	30	56.87 <sub>a</sub>	5.54	40.20 <sub>b</sub>	7.56	57.43 <sub>a</sub>	6.70
Adequate explanation	55	61.22 <sub>a</sub>	9.57	59.56 <sub>a</sub>	9.52	56.03 <sub>a</sub>	9.37
Control	58	61.29 <sub>a</sub>	8.67	60.98 <sub>a</sub>	9.18	58.02 <sub>a</sub>	8.57

*Note.* Within each row and each column, means not sharing a common subscript are significantly different from each other beyond the .05 level on the basis of the Tukey honestly significant difference technique corrected for confounded comparisons with the Cicchetti (1972) approximation.

<sup>a</sup> Mean scores for the pay basis measure could range from 20 to 100. Higher scores reflect greater degrees of familiarity with the basis for establishing pay. <sup>b</sup> Mean scores for the pay equity measure could range from 20 to 90. Higher scores reflect greater degrees of perceived payment equity.