# Equity and Workplace Status: A Field Experiment

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In a field experiment, 198 employees in the underwriting department of a large insurance company were randomly reassigned on a temporary basis to the offices of either higher, lower, or equal-status coworkers while their own offices were being refurbished. The present study tested the hypothesis, derived from equity theory, that the status value of the temporary offices would create increases, decreases, or no change in organizational outcome levels. The resulting pattern of performance supported equity theory. Specifically, relative to those workers reassigned to equal-status offices, those reassigned to higher status offices raised their performance (a response to overpayment inequity) and those reassigned to lower status offices lowered their performance (a response to underpayment inequity). As hypothesized, the size of these performance changes was directly related to the magnitude of the status inconsistencies encountered. The value of these findings in extending equity theory to the realm of nonmonetary outcomes is discussed.

There can be little doubt about the existence of certain trappings of success in organizations—physical symbols (cf. Goodsell, 1977) reflecting the organizational status of job incumbents (Steele, 1973). Indeed, previous research has confirmed that certain indicators of status demarcation (cf. Konar & Sundstrom, 1985), such as large offices (Langdon, 1966), carpeting (Joiner, 1976), and proximity to windows (Halloran, 1978), are recognized as rewards symbolizing one's high standing in an organizational status hierarchy. Although these environmental rewards typically are associated with relatively highstatus individuals, thereby reinforcing the social order of organizations (Edelman, 1978), there are some occasions in which the status of the job incumbent and the physical symbols associated with that status are not matched (Wineman, 1982). Such instances may be recognized as cases of status inconsistency, (cf. Stryker & Macke, 1978) and, as such, reactions to them may be explained by equity theory (e.g., Adams, 1965; Walster, Walster, & Berscheid, 1978).

According to equity theory, workers who receive levels of reward (i.e., outcomes) higher or lower than coworkers who make equivalent contributions to their jobs (i.e., inputs) are considered overpaid and underpaid, respectively. Such inequitable states have been shown to result in dissatisfaction and to bring about increases and decreases, respectively, in job performance (for a review, see Greenberg, 1982). As such, the present investigation addresses whether the characteristics of an employee's workspace influence his or her perceptions of equitable treatment on the job. If the characteristics of one's work space are perceived as constituting part of one's work-related rewards, then it follows that receiving work-space-derived rewards

greater or less than coworkers of equal status may create conditions of overpayment and underpayment inequity, respectively. The focal question of the present investigation is whether equity theory explains the reactions of persons encountering consistencies and inconsistencies between their job status and the rewards offered by their work space.

Although there is little direct evidence bearing on this question, managers have intuitively believed and long advocated the importance of basing office design decisions on employees' ranks in their organizations' status hierarchies as a mechanism for ensuring equitable treatment (Robichaud, 1958). According to equity theory, an employee's work space may be recognized as an element of equitable treatment insofar as it is perceived as a reward that reflects his or her organizational status. Indeed, previous research (e.g., Konar, Sundstrom, Brady, Mandel, & Rice, 1982) has shown that several elements of work space, such as the nature of the furnishings, amount of space, capacity for personalization, and the ability to control access by others, have been found to covary with workers' relative status rankings (for reviews, see Becker, 1981, 1982; Davis, 1984; Sundstrom, 1986).

Although previous researchers have not incorporated workspace elements into equity theory-based predictions directly, extrapolations from existing research suggest that reactions to work-space characteristics may be predictable from equity theory. For example, Burt and Sundstrom (1979) found in a field study that workers who were underpaid financially were less dissatisfied with their pay if they worked under conditions that were more environmentally desirable than those who did not receive additional work-space-related benefits. These results suggest that the desirable working conditions constituted an additional reward that offset the dissatisfaction created by inadequate monetary payment. Such a finding is consistent with the possibility that workers' reactions to their work spaces may be explained by equity theory. Inequities created by nonmonetary rewards have also been studied by Greenberg and Ornstein (1983), who found that experimental subjects who were over-

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paid by receiving an inappropriately high job title responded by increasing their job performance, as predicted by equity theory. Thus, much as an inappropriately high job title resulted in attempts to redress overpayment inequity by raising inputs, similar reactions may result from overpayments created by the introduction of work-space elements that are inappropriately lavish for one's organizational ranking.

On the basis of this logic, the present study tested hypotheses derived from equity theory in an organizational setting in which the refurbishing of offices necessitated the reassignment of employees to temporary offices. Specifically, I hypothesized that employees reassigned to offices of higher status workers (i.e., those who are overpaid in terms of office status) would be more productive than those reassigned to offices of other equal-status workers. Similarly, employees reassigned to offices of lower status workers (i.e., those who are underpaid in terms of office status) would be expected to be less productive than those reassigned to offices of other equal-status workers.

Following from equity theory's proposition that the magnitude of the inequity-resolution efforts will be proportional to the magnitude of the inequity (Adams, 1965; Walster et al., 1978), it was expected that improvements or decrements in performance would be greater the larger the over- or underpayments, respectively. Employees reassigned to offices of workers two levels above them would be expected to perform at a higher level than employees reassigned to offices of more modestly overpaid workers one level above them. Similarly, employees reassigned to offices of workers two levels below them would be expected to perform at a lower level than employees reassigned to offices of more modestly underpaid workers one level below them.

## Method

#### Subjects

The 198 participants in the study (123 men and 75 women) were drawn from three groups of salaried employees in the life insurance underwriting department of a large insurance company. There were 91 underwriter trainees (Mdn age = 24 years; Mdn job tenure = 8 months), 60 associate underwriters (Mdn age = 28 years; Mdn job tenure = 1 year, 9 months), and 47 underwriters (Mdn age = 31 years; Mdn job tenure = 3 years, 2 months). All of these employees were charged with the responsibility for reviewing and either approving or disapproving applications for life insurance on the basis of the extent to which information uncovered in their investigations satisfied the company's criteria for risk. The primary difference in responsibility for the three groups was the monetary size of the policies they were permitted to approve.

### Design

Because the offices of the underwriting department were being refurbished, an opportunity presented itself for studying the behavior of employees working temporarily (10 consecutive work days) in offices regularly assigned to higher, lower, or equally ranked coworkers in the underwriting department. With the cooperation of the participating organization, assignment to temporary office conditions was made at random. The reassignment made it possible to create conditions of potential overpayment (assignment to a higher status office), underpayment (assignment to a lower status office), or equitable payment (assignment to an equal-status office), as well as the degree of inequitable payment (office assignment either one or two levels above or below the

Table 1 Summary of Study Design

Worker group/temporary office	n	Payment condition	
Trainee			
Other trainee	42	Equitably paid	
Associate	18	One-step overpaid	
Underwriter	12	Two-steps overpaid	
Own	19	Control	
Associate			
Trainee	18	One-step underpaid	
Other associate	18	Equitably paid	
Underwriter	12	One-step overpaid	
Own	12	Control	
Underwriter			
Trainee	12	Two-steps underpaid	
Associate	12	One-step underpaid	
Other underwriter	12	Equitably paid	
Own	11	Control	

worker's status). To create control groups, some workers in each employee group remained in their own permanent offices during the study period. Table 1 summarizes the experimental design and reports the number of subjects assigned to each condition.

In addition to these between-subjects elements, the design of the present study also included time as a within-subjects element. Repeated measures of the dependent variables were taken at six intervals: the second week before reassignment to a temporary office, the first week before reassignment, the first week during the reassignment period, the second week during reassignment, the first week back in one's permanent office after reassignment, and the second week after reassignment.

#### Procedure

Office assignment procedure. Before the study began, workers (except those in the control groups) were informed that they would have to work for 2 consecutive 5-day work weeks in other offices while their own offices were being refurbished. So as to not disrupt performance, but allowing ample time for workers to gather their belongings, workers were informed of the impending temporary move 2 workdays in advance. Workers drew lots to determine their temporary office assignments and were not permitted to switch these assignments. This procedure helped safeguard against the possibility that reactions to office assignments could be the result of perceived managerial favoritism or hostility result-

<sup>&</sup>lt;sup>1</sup> The number of employees within each worker group assigned to each condition was predetermined by the number of available offices and the number of desks per office. To maintain the characteristics of the permanent offices while they were used as temporary offices, the number of temporary residents assigned to an office was kept equal to the number of its permanent residents. Further stimulating the permanent characteristics of the offices, while also avoiding possible confoundings due to having mixed-status office mates, all multiple-employee offices were shared by equal-status coworkers.

<sup>&</sup>lt;sup>2</sup> To keep constant the amount of time that all of the workers spent in their temporary offices, none were allowed to return to their permanent offices in advance of the 2-week period, even if the work was completed ahead of schedule. The physical separation of the various offices and the placement of construction barriers made it unlikely that workers could learn of any possible early completions. Because the 2 weeks allowed for completion of the offices was liberally budgeted, no delays in returning to permanent offices were necessitated.

Table 2
Physical Characteristics of Offices

Physical characteristic	Offices			
	Underwriter trainees $(n = 15)$	Associate underwriters $(n = 30)$	Underwriters $(n = 47)$	
No. of occupants per office	6ª	2	1	
Presence of door	No	No	Yes	
Occupant space (m2 per occupant)	21.34	29,87	44,81	
Desk size $(m^2)$	1.14	1.32	1.53	

Note. Because the host company standardized office characteristics as a function of employee status, there was very little or no variation in the values reported here.

ing from an undisclosed (and potentially capricious) basis for the office assignments. The procedure also controlled against any possible selfselection bias in office reassignments.

Office characteristics. The offices used in the study were those regularly assigned to either underwriter trainees, associate underwriters, or underwriters. In the organization studied, as in others (e.g., Harris, 1977; Kleinschrod, 1987), the offices of workers of different status-rankings differed along several predetermined, standardized dimensions. Consensual knowledge of such differences helped reinforce the status differences between the offices used in the study. The key physical characteristics of the offices used in the experiment are described in Table 2. Although these dimensions were known within the host organization to reflect status differential, it is instructive to note that they are not idiosyncratic. Indeed, these dimensions are among those found in the survey study by Konar et al. (1982) to be associated with status differences among employees in other organizations.

As shown in Table 2, the offices of associate underwriters were shared by fewer office mates, allowed more space per person, and had larger desks than the offices of underwriter trainees. Underwriters' offices were always completely private (used by only one person), allowed the most space per person, and had the largest desks. In addition, the underwriters' offices had doors, whereas the offices of underwriter trainees and associate underwriters did not. The use of these status markers (cf. Konar & Sundstrom, 1985) is in keeping with previous studies showing that higher status is associated with the use of unshared, private offices (Sundstrom, Burt, & Kamp, 1980), greater floorspace (Harris, 1977), larger desks (Wylie, 1958), and the option to limit access to oneself by the presence of doors (Geran, 1976).

Performance measure. The principal dependent measure was job performance in reviewing applications for life insurance. It was the practice of the company studied to derive corrected performance scores for all underwriters. (Such measures typically were used, in part, as the basis for performance evaluations and pay raises.) Raw performance measures were computed weekly on the basis of the number of cases completed. These were then adjusted by supervisory personnel for decision quality, the complexity of the cases considered (both of which were based on predetermined criteria), and the number of hours spent reviewing application files, resulting in a corrected performance score. So as to provide a basis of comparison for interpreting these scores, the mean corrected performance scores of the workers studied in the 2 months prior to the present investigation was 49.2. Because this score was not significantly different than the two prereassignment scores observed in this investigation, F < 1.00, ns, there is no reason to believe that the study period was in any way atypical.

Questionnaire measures. To help explain the performance measure, questionnaire data were collected as supplementary measures. These questionnaires were administered at three times: one week before reas-

signment, one week into the reassignment period, and one week after reassignment.

To measure job satisfaction, the 20-item general satisfaction scale of the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967) was used. It requires participants to indicate whether they are very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, or very dissatisfied with respect to a broad range of job dimensions, such as "the feeling of accomplishment I get from the job" and "the freedom to use my own judgment." This scale was chosen because it has excellent psychometric properties (Price & Mueller, 1986) and because its use enhances comparability with other tests of equity theory using the same measure (e.g., Pritchard, Dunnette, & Jorgenson, 1972). For the present sample, coefficient alpha was .88.

An additional set of questions was designed to determine the extent to which workers recognized the outcome value of their office environments. As such, a measure of environmental satisfaction was derived by asking subjects, "How pleased or displeased are you with each of the following aspects of your current work environment?": privacy, desk space, floorspace, noise level, lighting, furnishings, and overall atmosphere. Scale values could range from extremely displeased (1) to extremely pleased (7). Coefficient alpha was computed to be .82.

Finally, a separate item asked, "How would you characterize the overall level of rewards you are now receiving from your job?" Scale values could range from extremely low (1) to extremely high (7).

Manipulation checks. As the basis for explaining performance differences in terms of the inequities caused by status differences in office assignments, it was necessary to establish that workers correctly perceived the status differences of their temporary offices and, also, had unaided and unimpaired opportunities to perform in their temporary offices. Accordingly, checklist questions addressing these matters were administered at the end of the first week in the temporary offices (at the same time as the second administration of the questionnaire measures). Because these questions were not applicable to workers in the control group, the checklist was not administered to them.

Specifically, to determine whether subjects recognized the status differences between their regular offices and their temporary offices, they were requested to respond to a checklist item that asked, "Is your

a One of the 15 offices that was larger than the others housed seven underwriter trainees; the remaining 14 housed six.

<sup>&</sup>lt;sup>3</sup> A preexperimental questionnaire conducted among employees of the host organization indicated strong consensual agreement about the existence and nature of symbols of status demarcation in their organization. In responding to an open-ended question, 222 employees surveyed identified the four dimensions listed in Table 2 most frequently (from 75% to 88%) as reflective of status differences in their organization. Such findings are in keeping with those reported in more broad-based survey research (Louis Harris & Associates, 1978).

temporary office usually assigned to a coworker of: lower status than you, equal status to you, or higher status than you?" An additional checklist item asked subjects, "Relative to your regular office, do the facilities found in your temporary office: help you do your job better, enable you to do your job equally well, or cause you to do your job more poorly?"

#### Results

# Manipulation Checks

Subjects' responses to the questionnaire item asking them to identify the relative status attached to their temporary offices showed that they were, in fact, aware of the similarities or differences between their own offices and their temporary ones. Virtually all of the subjects assigned to the offices of equal-status others recognized those offices as being of equal status. All of the subjects assigned to offices of higher and lower status others (whether one or two steps higher or lower) recognized the hierarchical level of those offices. This evidence supports the claim that subjects were aware of the status similarities or differences they encountered during the course of the study and that the manipulations of status were successful.

Another manipulation check sought to ensure that subjects' performance differences could not be attributed to differential opportunities to perform their jobs while in the temporary offices. In response to a checklist item, virtually all 198 participants reported that the facilities in their temporary offices enabled them to perform their jobs as well as they did in their regularly assigned offices. These data discount the possibility that performance increases or decreases noted while in the temporary offices were the result of opportunities provided by or thwarted by office conditions.

# Preliminary Analyses

Prior to testing hypotheses, analyses were conducted on the work performance data to determine whether combining the various cells that composed the identically defined payment conditions shown in Table 1 was justified. This was done by including the identically defined groups (as a between-subjects factor) and the observation time (as a repeated measure) in mixed-design analyses of variance (ANOVAS). Justification for combining the responses of the identically defined groups required finding no significant differences between groups, either as main effects or in interactions with the observation time.

As shown in Table 1, four distinct payment conditions were identified by more than one group of workers. Specifically, three groups of workers (those reassigned to equal-status offices) were identified as equitably paid, three groups of workers (those who remained in their own offices) were identified as control subjects, two groups of workers (those assigned to offices one status level higher) were identified as one-step overpaid, and two groups of workers (those assigned to offices one status level lower) were identified as one-step underpaid. Separate ANOVAs for the groups defining each of these four payment conditions revealed no significant main effects of group membership and no interaction of group membership with time, all values of F < 1.00, ns. Accordingly, distinct payment conditions were created by combining the data for the identically defined groups.

# Performance Measure

To test hypotheses regarding the effects of payment equity on task performance, a  $6 \times (6)$  mixed-design anova was used, in which the six payment conditions composed the between-subjects factor and the six observation periods composed the within-subjects factor. A significant interaction effect between these two factors was obtained, F(25, 950) = 8.41, p < .001; the corresponding means are displayed in Figure 1.

Simple effects tests were performed to compare the six payment groups at each of the time periods. These tests revealed no significant differences between groups during each of the two weeks before reassignment, in both cases, F < 1.00, ns, and also during the second week after reassignment, F < 1.00, ns. However, significant differences between groups were found as workers readjusted to their permanent offices during the first week after reassignment, F(5, 192) = 2.85, p < .025. Newman-Keuls tests (this and all subsequent Newman-Keuls tests are based on an alpha level of .05) revealed that significant differences existed between workers in the one-step overpaid group and the one-step underpaid group, whereas those in the remaining groups were not significantly different from each other.

Significant differences emerged in simple effects tests comparing payment groups during the first week of reassignment, F(5, 192) = 13.99, p < .001. Newman-Keuls tests revealed that the performance of the equitably paid group and the control group did not differ significantly. However, compared with this base level, the one-step overpaid group was significantly more productive and the one-step underpaid group was significantly less productive. Additional comparisons showed that those who were two-steps overpaid were significantly more productive than those who were one-step overpaid, and that those who were two-steps underpaid were significantly less productive than those who were one-step underpaid. Thus, for the first week during reassignment, all hypotheses were supported.

During the second week of reassignment, a significant simple effect of payment group was found as well, F(5, 192) = 11.60, p < .001. As in the first week of reassignment, Newman-Keuls tests showed the equivalence of the control group and the equitably paid group. Also, as in the first week of reassignment, those who were one-step overpaid and underpaid performed significantly higher and lower than these base levels, respectively. The magnitude of inequity hypothesis was only partially supported during the second week of reassignment: Those who were two-steps underpaid were less productive than those who were one-step underpaid, but those who were two-steps overpaid did not perform at significantly higher levels than those who were one-step overpaid (although the difference between the means was in the predicted direction).

This finding is the result of a significant drop in performance from the first week during reassignment to the second week among those who were two-steps overpaid, t(11) = 5.56, p < .001 (this and subsequently reported t tests are two-tailed), indicating that the extreme initial reaction to gross overpayment was not sustained. By contrast, the failure to find significant differences between the first and second reassignment weeks for the one-step overpaid group, t(29) = 1.98, ns, the one-step underpaid group, t(29) = .76, ns, and the two-steps underpaid

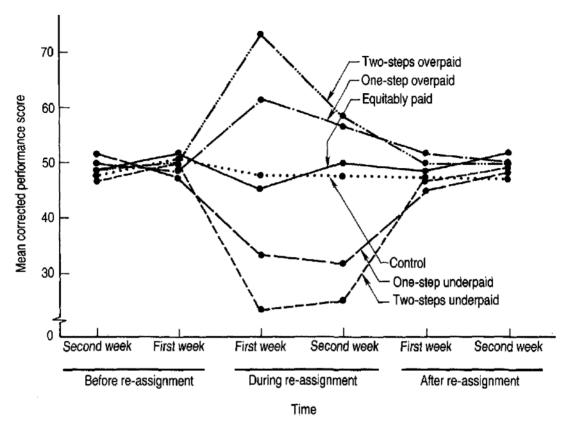


Figure 1. Mean job performance for each payment group over time.

group, t(11) = .88, ns, suggests that the impact of these inequities was relatively stable over time.

# Questionnaire Measures

Correlations between the questionnaire measures were uniformly low. Specifically, the MSQ scores were not significantly correlated with either the environmental satisfaction measure (r = .04) or the self-reports of overall reward (r = .07). Likewise, the environmental satisfaction measure and the self-reports of overall reward were not significantly correlated with each other (r = .03). The statistical independence of these measures justifies the use of separate univariate analyses.

As in the case of the performance measure, a set of preliminary analyses was performed for each questionnaire measure that showed nonsignificant differences between the various groups defining each payment condition, all values of F < 1.00, ns. Accordingly, the same six payment conditions that were used for the performance measure were created in analyses of the questionnaire measures. However, because there were three questionnaire-administration periods (as opposed to six performance-measurement periods), analyses of the questionnaire items were based on  $6 \times (3)$  mixed-design ANOVAs.

A significant Payment  $\times$  Time interaction was found for responses to the MSQ, F(10, 389) = 3.01, p < .005. A simple effects test found this interaction to be the result of betweengroup differences during the reassignment period, F(5, 192) = 2.59, p < .01, and no significant differences either before or after

the reassignment, in both cases F < 1.00, ns. Newman-Keuls comparisons of the means within the reassignment period revealed significantly lower levels of satisfaction reported by workers who were two-steps underpaid (M = 44.15) compared with any of the other cells (combined M = 75.50), none of which were significantly different from each other.

Analyses of the environmental satisfaction questionnaire also revealed a significant interaction effect, F(10, 389) = 3.65, p < .001. Simple effects tests found that both the prereassignment and the postreassignment levels of satisfaction were not significantly different from each other, in both cases, F < 1.00, ns, although significant differences emerged during the reassignment period, F(5, 192) = 3.18, p < .01. Newman-Keuls tests showed that compared with the equitably paid group and the control group (which were not significantly different from each other; combined M = 29.75), the two overpaid groups were significantly higher (although not significantly different from each other; combined M = 40.50) and the two underpaid groups were significantly lower (although not significantly different from each other; combined M = 18.10).

Self-reports of overall reward received also revealed a significant Payment  $\times$  Time interaction, F(10, 389) = 3.74, p < .001. Although perceived reward levels were not significantly different at the prereassignment and postreassignment sessions, in both cases, F < 1.00, ns, significant differences emerged during the reassignment period, F(5, 192) = 3.61, p < .005. Newman-Keuls tests comparing these means revealed that those who

were two-steps overpaid (M=5.90) reported significantly higher reward levels than either those who were only one-step overpaid, equitably paid, or in the control group (the means for which were not significantly different from each other; combined M=4.33). The means for these groups, however, were significantly higher than the means for those who were either one- or two-steps underpaid (which were not significantly different from each other; combined M=2.75).

#### Discussion

The results of the present study provide strong support for hypotheses concerning the status value of offices (Edelman, 1978; Konar & Sundstrom, 1985) as outcomes amenable to analysis by equity theory (e.g., Adams, 1965). The performance increases demonstrated by overpaid workers and the decreases demonstrated by underpaid workers in the present study take their place among many other studies that successfully support equity theory predictions (see reviews by Greenberg, 1982, 1987). The unique contribution of the present work, however, is the finding that conditions of overpayment and underpayment were able to be created by manipulating nonmonetary outcomes—elements of the work environment associated with organizational status.

### *Implications*

As such, these findings support Adams's (1965) claim that "job status and status symbols" (p. 278) constitute outcomes in the equity equation, a notion that is just beginning to receive empirical support (e.g., Greenberg & Ornstein, 1983). This is in contrast to the well-established impact of monetary outcomes demonstrated in the equity theory literature (Greenberg, 1982, 1987). The specific vehicle of status examined in the present work, the physical environment of offices, although previously recognized by students of office design (e.g., Becker, 1981, 1982; Steele, 1973), heretofore has received scant attention as a possible determinant of workers' equity perceptions (e.g., Burt & Sundstrom, 1979). The present work extends the findings of research by Konar et al. (1982), which demonstrated that certain physical features of offices are related to organizational status by showing that these physical symbols of status demarcation operate as outcomes amenable to equity theory analysis. As such, the present findings provide a useful complement to the accumulated literature on office design (e.g., Davis, 1984; Konar et al., 1982; Sundstrom, 1986) by providing an explanatory mechanism that may account for employees' reactions to their work environments (e.g., Wineman, 1982).

The present investigation also supports equity theory's prediction that the reaction to an inequity will be proportional to the magnitude of the inequity experienced (Adams, 1965, p. 281). Specifically, underpaid workers were found to reduce their performance (i.e., lower their inputs) more when they were extremely underpaid (i.e., assigned offices of others two steps below them) than when they were more moderately underpaid (i.e., assigned offices of others one step below them). Likewise, workers who were more overpaid (i.e., assigned to offices of others two steps above them) raised their performance more than those who were more moderately overpaid (i.e., assigned to

offices of others one step above them). This set of findings is particularly noteworthy in that it is one of only a few studies (e.g., Leventhal, Allen, & Kemelgor, 1969) that directly manipulate the magnitude of the inequity encountered. As such, it is notable in attempting to reverse a trend toward the "striking absence of attempts to quantify the magnitude of inputs and outcomes, and thus inequities in the research literature on equity" (Adams & Freedman, 1976, p. 52).

Of particular interest in the present research is the observed tendency for overpayment inequity to bring about overall lower levels of performance increments than did underpayments bring about performance decrements. Such a finding is in keeping with Adams's (1965) supposition that the threshold for experiencing overpayment inequity is higher than that for underpayment inequity. Similarly, several studies (see review by Walster et al., 1978) have shown that reactions to underpayment are more pronounced than reactions to overpayment. The overall weaker effects of overpayment demonstrated in the present study appear to be the result of lower performance levels in the second week of overpayment than in the first week. Similar temporary effects of overpayment have been demonstrated in both laboratory (e.g., Greenberg & Ornstein, 1983) and field (e.g., Pritchard et al., 1972) settings. Such findings are in keeping with theoretical assertions that reactions to inequity may be moderated by the passage of time (Cosier & Dalton, 1983). Knowing that their overpayment was only going to be temporary, workers may have had little motivation to redress the inequity they experienced by sustaining high levels of performance (Greenberg, 1984). In contrast to the sustained effects of underpayment, more precise explanations for the diminished effects of overpayment over time are lacking and should be recognized as a topic in need of future research.

Further evidence for the less potent effects of overpayment relative to underpayment are provided by the job satisfaction data. Significantly lower levels of satisfaction were found only for the most extremely underpaid workers, but not for overpaid workers, thereby corroborating the weaker effects of overpayment demonstrated by Pritchard et al. (1972). In this regard, it is essential to note that the failure to find more pronounced differences on the job satisfaction measure does not weaken the equity-theory-based interpretation of the present findings. Although equity theory postulates that behavioral reactions to inequity are driven by attempts to alleviate feelings of dissatisfaction (Walster et al., 1978), it has been argued elsewhere (Greenberg, 1984) that such affective mediation has not been clearly demonstrated in previous research and may not be a necessary precondition for behavioral reactions to inequity.

Indeed, an equity theory analysis of the pattern of observed performance differences is supported by other questionnaire findings. Specifically, during the reassignment period, extremely overpaid workers reported receiving higher rewards and extremely underpaid workers reported receiving lower rewards than equitably paid workers. Apparently the office-assignment manipulation was successful in getting workers to perceive changes in their outcome levels. Specific evidence attesting to the fact that these overall rewards were the result of the work environment is provided by the findings of the environmental satisfaction questionnaire: During the reassignment period, overpaid workers reported greater satisfaction, and underpaid

workers reported less satisfaction, compared with equitably paid workers (and compared with their reactions to their permanent offices). Such evidence not only shows that workers were aware of the differences in their work environments, but also that changes in environmental satisfaction levels (outcomes) may account for the observed performance differences (inputs).<sup>4</sup>

# Limitations and Future Research Directions

Prompted by the diminished impact of overpayment over time found in the present study, one cannot help but wonder how long the observed effects of status-based inequities would persist. Before managers can be advised to manipulate work-place elements as a tactic for improving subordinates' attitudes or job performance (cf. Goodsell, 1977; Ornstein, in press), future longitudinal investigations need to be conducted to determine the persistence of the presently observed effects (or any reactions to inequity; Cosier & Dalton, 1983). Previous research suggesting that workers suspecting such manipulative intent might actually lower their performance (Greenberg & Ornstein, 1983) would dictate against intentional manipulations of inequity for instrumental purposes (Greenberg, 1982; Greenberg & Cohen, 1982). Clearly, future research is needed to determine the long-term reactions to inequities.

Additional future research is needed to help determine the relative contributions of the specific environmental elements manipulated in the present study. Indeed, the complex set of manipulations that defined relative status in the present study makes it impossible to determine which specific features may have had the greatest impact on the results. For example, we cannot determine from the present study whether the results were due to subjects' knowledge of the status of the office's permanent resident or of the status value of any of the furnishings or design (cf. Davis, 1984; Sundstrom, 1986). Although the inherent confounding of these features was necessary to enhance the validity of this field experiment, it would appear useful to isolate these factors in future laboratory experiments to determine their individual contributions (as outcomes) to inequity effects.

# Conclusion

Given the importance of the workplace environment as a determinant of workers' job attitudes (Oldham & Fried, 1987; Sundstrom et al., 1980), it should not be surprising to find that workers' assignment to offices was related to their perceived level of job rewards and to their actual job performance. In this regard, equity theory proved to be a useful mechanism for explaining workers' reactions to temporarily encountered environmental conditions. As such, this work broadens the potential horizons of research and theory on organizational justice (Greenberg, 1987), as well as that on workplace environments (Becker, 1981; Sundstrom, 1986). As the rapprochement between these lines of investigation develops, we may well begin to understand the potential of the work environment as a tool for use by practicing managers (cf. Goodsell, 1977; Ornstein, in press; Steele, 1973).

<sup>4</sup> Unfortunately, however, because these questionnaires were administered only once during the reassignment period, the responses cannot be used to gauge changes in affective reactions within this critical period.

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# Calls for Nominations for JCCP, Educational, JPSP: Attitudes, and JPSP: Interpersonal

The Publications and Communications Board has opened nominations for the editorships of the Journal of Consulting and Clinical Psychology, the Journal of Educational Psychology, and the Attitudes and Social Cognition section and the Interpersonal Relations and Group Processes section of the Journal of Personality and Social Psychology for the years 1991–1996. Alan Kazdin, Robert Calfee, Steven Sherman, and Harry Reis, respectively, are the incumbent editors. Candidates must be members of APA and should be available to start receiving manuscripts in early 1990 to prepare for issues published in 1991. Please note that the P&C Board encourages more participation by members of underrepresented groups in the publication process and would particularly welcome such nominees. To nominate candidates, prepare a statement of one page or less in support of each candidate.

- For Consulting and Clinical, submit nominations to Martha Storandt, Department of Psychology, Washington University, St. Louis, Missouri 63130. Other members of the search committee are Bernadette Gray-Little, Fred Knifer, and Hans Strupp.
- For Educational, submit nominations to Richard Mayer, Department of Psychology, University of California, Santa Barbara, California 93106. Other members of the search committee are Robert Glaser, Jill Larkin, Sigmund Tobias, and Noreen Webb.
- For JPSP: Attitudes, submit nominations to Don Foss, Department of Psychology, University of Texas, Austin, Texas 78712. Other members of the search committee are Marilyn Brewer, David Hamilton, Melvin Manis, and Richard Petty.
- For JPSP: Interpersonal, submit nominations to Frances Degen Horowitz, Department of Human Development and Family Life, University of Kansas, Lawrence, Kansas 66045.
   Other members of the search committee are Kay K. Deaux, Phoebe C. Ellsworth, and Robert M. Krauss.

First review of nominations will begin February 15, 1989.