

WHEN INEQUALITY IS EQUITABLE: VALIDITY,
PROPRIETY AND THIRD PARTY ALLOCATIONS*

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Abstract

Theories of equity and distributive justice suggest that actors will use legitimate distribution rules as a basis for actions designed to maintain or restore equity. However, those theories do not consider the possibility that conflicting but equally legitimate distribution rules may apply to a given situation. Recent developments in the study of legitimation processes imply that distribution rules can be either valid (legitimated by the collectivity or its agents) or proper (legitimated by a focal actor). Both forms of legitimation are presumed to have powerful effects on behavior. This study examines the behavior of third-party allocators when the validity and propriety of distribution rules varies. The findings indicate that although both forms of legitimation have significant effects on allocative behavior* the effects of validity are more powerful.

Theory and research on equity and distributive justice has generally focused on either or both of two important issues. One line of research is concerned with individual and collective responses to injustice. It has been argued that individuals experience tension or distress as a result of relative deprivation (Merton and Rossi; Stouffer et al.), cognitive dissonance or imbalance (Adams, a; Alexander and Simpson) or inequitable exchanges (Adams, b; Homans; Walster et al.), and given the existence of distress, individuals act to establish equity. A number of empirical investigations, have examined the kinds of actions individuals take to establish or maintain equity and the conditions under which such actions are taken.

A second line of work has sought to specify the conditions under which situations are defined as equitable or inequitable. It has been argued that conceptions of justice are formed on the basis of comparisons of inputs and outcomes associated with self and others in exchange (e.g., Adams, b; Homans; Walster et al.), comparisons with existing systems of values and norms regulating exchange (Blau), or comparisons with a general social type, group, or category of actors (Berger et al.; Zelditch et al.).

There is considerable disagreement about the nature of individual conceptions of equity. Homans has argued that actors evaluate the justness of an exchange on the basis of a simple rule of proportionality. Other theorists agree that a principle of proportionality is used but disagree on its empirical form (Adams, a; Austin and Walster; Harris; Walster et al.). Much of the early work on equity processes focused on pay equity (Adams and Jacobsen; Lawler) but issues of equity are also associated with the distribution of other socially valued rewards. Status-value theorists (Berger et al.; Zelditch et al.) suggest that a determination of justice is the

outcome of a complex comparison process which includes comparisons with specific individuals (local comparisons) and collectivities of actors (referential comparisons). Some theorists suggest that factors not related to pay are important to a determination of pay-equity and result in the activation of an equality standard (Jasso; Leventhal and Anderson).¹

No matter how equity is defined, there is general agreement that individuals will act to restore or maintain justice when standards of equity are violated or threatened. Cook has argued that distribution rules are important to the activation of equity processes. Distribution rules specify the relationship between dimensions of evaluation (inputs) and the outcomes or rewards which are allocated. Once a distribution rule is established, behavior is generally assumed to be nonproblematic. That is, actors are expected to use the rule as a basis for actions which create or maintain equity.

An important scope restriction on Cook's formulation is the requirement that the focal actor (the actor whose responses to equity or inequity are of central concern) perceive the relevant distribution rule as legitimate or appropriate. In this context it is argued that there are two general types of inequitable systems: First, there are systems in which a legitimate distribution rule is applied in an inequitable fashion. Second there are situations in which an existing distribution rule is defined as illegitimate (cf. Cook and Parcel). But legitimation is a complex process which may have independent effects on equity processes. There are several objects of legitimation, e.g., persons, positions and actions (Walker et al.; Zelditch and Walker), and the legitimacy of each can be evaluated from the perspective of one or more of three sources of legitimacy—the focal actor, peers of the

focal actor, or persons to whom the focal actor is subordinate.

Equity standards which are legitimated by a focal actor are said to possess propriety, i.e, they are believed to represent desirable models of action or to be appropriate. The effects of propriety are generally limited to direct effects on the behavior of the actor who holds the beliefs. Propriety can be contrasted with legitimation through validation.^o A standard of behavior is legitimated through validation if it is believed to be binding on all the members of a relevant collectivity (Dornbusch and Scott; Weber). Validation is established through the collective support of rules and norms by peers of the focal actor (endorsement) or by superordinate agents of the collectivity (authorization).

Cook's requirement that distribution rules possess legitimacy raises an interesting set of issues. Theories of legitimacy generally suggest that actors are more likely to engage in behavior which is legitimate than behavior which is not legitimate. Hence, actors should be more likely to engage in actions which are consistent with a legitimate distribution rule—actions which serve to establish or maintain equity—than actions which are inconsistent with such a rule, or those which are consistent with an illegitimate distribution rule. Theories of equity and distributive justice are generally consistent with legitimacy theories in such instances. But equity theories are silent on the issue of how actors will behave when conflicting but equally legitimate standards of equity exist. This article examines the behavioral implications of competing distribution rules when one rule possesses propriety and the other is valid. Legitimation theory is used

to construct several hypotheses which are tested with experimental data on third-party allocations.

Legitimacy and Equity; Theory

Cook (and see Cook and Parcel) has argued that legitimate distribution rules are important to the activation of equity processes. Behavior is relatively nonproblematic given the existence of a legitimate distribution rule. But the legitimacy of social objects can be evaluated from at least three different perspectives, all of which have implications for the actions of individuals and groups. A given distribution rule may be proper or improper, endorsed or unendorsed, or authorized or not authorized. Behavior would appear to be unproblematic when characterizations of the three sources of legitimation are consistent, e.g., when a rule is proper, endorsed and authorized, or when consistency is implied due to the silence of one or more sources of legitimation. The latter case is illustrated by situations in which an actor believes a distribution rule is legitimate (the rule possesses propriety) and has no information about endorsement or authorization. But behavior is problematic when there are conflicting evaluations of the same rule, e.g., when a rule is authorized by superordinate agents of the collectivity but rejected by peers of the focal actor, or when competing standards are legitimated. Equity theories have not addressed this issue and as a consequence, relatively little evidence has been brought to bear on it.³

While it is not entirely clear how the various sources and objects of legitimacy are related (Walker et al.; Zelditch and Walker), there appear to be fundamental differences in the behavioral implications of propriety and validity. Propriety has its principal effects on the behavior of the focal actor, i.e., the actor who believes that some social object possesses

legitimacy. On the other hand, validity appears to have both direct and indirect effects on behavior. It has been demonstrated that endorsement has significant effects on the behavior of high-status actors (Michener and Burt), and on the likelihood that subordinate actors will initiate social change (Walker et al.). A substantial amount of the endorsement effect appears to be mediated through propriety. Similarly, (Thomas et al.) have demonstrated that authorization has important effects on the suppression of social change and (Walker and Zelditch) demonstrate that while both propriety and validity (authorization) have significant effects on the behavior of supervisory personnel, only validity has important effects on the likelihood that powerful actors will impose sanctions on their subordinates. The available literature seems to suggest that validity is the more powerful agent of social control. And the strength of validity appears to be derived from its collective (as against individual) origins. These findings suggest that, given the choice between proper and valid distribution rules, actors will more often utilize collective <valid> standards to assess equity. These basic ideas about the differential effects of proper and valid standards of equity are tested using laboratory data on third-party allocations in the next section, of this paper.

Method

Subjects in this investigation were eighty-three male undergraduates who volunteered to participate in a sociology experiment. Volunteers were promised that they would be paid for participating in the study, although they were not told how much they would earn. All participants passed an initial screening designed to eliminate those who had been involved in other laboratory investigations which employed deceptions. Responses of an additional eighteen subjects who were suspicious or failed to understand

procedures are not included in the analyses reported below.

Procedures

When they arrived at the laboratory, subjects were individually escorted from a reception area to the study area. They each drew a colored token from an urn and were told that their choice designated them as a "supervisor." (In reality all subjects were supervisors.) Each subject was seated in a soundproofed room which was equipped with a desk, chair, audio speaker, signalling device and a variety of message slips, and told to await further instructions. All subjects in a laboratory run received detailed audio-taped instructions simultaneously.

The investigation was presented as a study of the effectiveness of various communications systems in groups whose members could not engage in face-to-face interaction. Subjects were told that they would be supervising two five-person work teams, the "Blue" and "Red" teams. Individual members of the fictitious teams were designated by the letters A-E. Experimental subjects were told that their principal duties were to supervise team organization, evaluate the performances of teams and of individual team members and to pay each member of both teams at specified intervals.

The subjects were told that the teams they were supervising would work an identical series of ten graph-construction problems (see Walker et al. and Zelditch and Walker for a more complete description of the basic task). At the beginning of each problem every member of both teams had some information (a set of points and lines) necessary to construct a five-point, multiline graph. Team members had to exchange information among themselves in order to solve the graphs and they did so by exchanging written messages using standardized message forms. Team members were to send their answers to their

supervisors after they had solved the graph. An experimental trial was completed when a supervisor had received an answer from each member of the two teams he supervised.

Each supervisor was instructed to compare the answers he received from team members to answers from a master answer sheet. The supervisors noted the team member who had sent the answer, the team to which he belonged (whether Blue or Red) and whether his answer was correct or incorrect. After the supervisor received answers from all members of a team, he was required to determine the number of correct answers, calculate the amount the team had earned (at a rate of \$.50 for each correct answer) and to send the results to team member C. Team earnings were to be pooled because teamwork was necessary for any member of a team to get the correct answer and supervisors were told that they would pay team members from the pooled earnings.

Team member C was the only person permitted to send messages (other than answers) to the supervisor. On each trial, the supervisor received an "Allocation Request" from member C on both teams. The request indicated a suggested pay distribution for the money earned on the trial just completed. The supervisors were instructed that they had the authority to make all final pay decisions and that they could either accept or reject C's requests. After a supervisor made his final pay decisions, he recorded the amount each team member was to receive on a pay sheet and team members were told to begin work on the next problem.

The supervisors and their "teams" worked a practice problem during which answers were transmitted and checked and requests for pay were made and approved or rejected. Supervisors completed an evaluation of the teams and of individual team members after the practice problem had been completed. The

supervisors were told that this unofficial evaluation was designed to prepare them for the actual evaluations which would be made after five problems had been completed. The evaluation form used in the informal evaluation was identical in every way to the form used after the fifth problem was completed. After the informal evaluation was completed, the instructions were summarized* the supervisors were reminded to record their allocation decisions on the pay sheets because they would be asked to write checks to team members after the fifth problem was completed? and subjects began the five criterion trials.** After the fifth problem was completed, supervisors evaluated each of the teams, paid each team member from the cumulative earnings and the study was stopped. At this point, experimental subjects were interviewed, debriefed and paid for their participation.

The supervisors received answers from team members and received pay requests from member C of each team during each of the five trials. All answers were standardized so that they were always correct, the order in which team members sent answers to the supervisors was controlled by experimental assistants so that no team member "outperformed" other team members, and neither team performed significantly faster than the other.³ Only the requests for pay were permitted to vary. Each team earned \$2.50 on each of the criterion trials. Member C on the Blue team always requested \$.50 for himself and for each of his coworkers (pay equality). In contrast, member C on the Red team always requested \$.70 for himself and \$.45 for each of the other team members (pay inequality).

Experimental Manipulations: Creating Proper and Valid Distribution Rules

It is important that valid and proper standards exist in order to test arguments about their relative effects on allocative behavior. Two experimental procedures were introduced to establish valid and proper distribution rules. Standards of propriety were established by varying the work structures to which teams were assigned. The supervisors were told that the teams they were supervising were using either a Bavelas "wheel" structure or an all-to-all structure. The central figure (team member C) must handle four times as many messages as any of the other team members in order to accomplish complete information interchange in the wheel structure. It was assumed that supervisors would apply the principle of proportionality (Homans) and believe that team member C was entitled to more pay than his coworkers under such conditions. Supervisors who adopted this position were classified as having adopted an inequality standard of equity.

When teams are assigned to the all-to-all network every team member can communicate with every other member and hypothetically all team members handle an equal number of messages. Under such conditions, it was assumed that supervisors—again assuming they applied the rule of proportionality—would adopt the position that all team members should receive the same pay. When a supervisor believed that team members should receive equal pay, he was classified as having adopted an equality standard of equity.

A valid distribution rule was established through authorization, i.e., by varying what was authorized by the host experimenter. Depending upon the experimental treatment to which they were assigned, supervisors were told that there was an allocation rule which required them to pay all team members equally or they were given no information about how to allocate earnings to

team members. Supervisors who were exposed to the directive were operating under a valid standard of equality while those who were not exposed to the directive were classified as operating under conditions of nonvalidity. As a result of these two proceduresj experimental subjects are distributed across four experimental treatments. In treatment 1, subjects believe pay should be divided equally and this (proper) rule is also valid. In treatment 2 the equality rule is proper but nonvalid. In treatment 3, supervisors believe that C should receive more pay than his coworkers and this inequality standard is proper but invalid. Finally, supervisors in treatment h believe that an inequality rule is proper but such a rule is nonvalid.* The distribution of subjects by experimental treatment is displayed in Table 1.

Table 1 about here

Dependent Variable and Hypotheses

The effects which proper and valid distribution rules have on the amounts of pay which supervisors award to the members of the teams they supervise is the principal concern of this research. Supervisors were informed that they were to make all final decisions about pay, and technically, a supervisor could award all earnings to one individual, or impose any distribution plan he desired. But it was anticipated that concerns about equity would determine the actual distributions of rewards. If supervisors believed that team members should be paid equally, all team members (including team member C) should earn approximately \$2.50 over five trials. On the other hand, if supervisors believed that it was equitable for team members to be paid unequally, team member C should receive greater rewards than his coworkers.

The dependent variable is the total amount (in dollars) paid to team member C over the five criterion trials.

The arguments advanced here suggest that supervisors will pay team member C an equitable wage. But the research design introduces variation in the propriety of distribution rules—whether a supervisor adopts an equality or equity standard—and in their validity. When an equality standard is activated supervisors should experience pressure to make team member C's earnings approximate the earnings of his coworkers—he should receive about \$2.50 over the five trials. On the other hand, it is expected that supervisors will pay team member C significantly more than \$2.50 when inequality is the legitimate standard of equity. Hypothesis 1 is a formal statement of that belief.

Hypothesis 1; Supervisors who adopt an inequality standard of equity award higher earnings to team member C than supervisors who adopt an equality standard of equity.

By the same reasoning, supervisors should feel pressure to make team member C's earnings approximate those of his coworkers when there is a valid standard which specifies equality. That is, when equality is validated supervisors should feel constrained to create equality no matter what there personal standards of equity are. It is expected that propriety will determine the nature of allocations in the absence of valid equity standards. As a result team member C should have higher earnings under the nonvalidity condition than under the valid (equality) condition. Hypothesis 2 is a formal statement of the prediction regarding the effects of validity.

Hypothesis 2; Supervisors award higher earnings to team member C in the absence of a valid standard than they do when there is a valid standard specifying equality.

Study condition 2 is the treatment in which there is a valid distribution

rule specifying equality while the supervisors are expected to believe that earnings should be divided unequally. Treatment 2 permits an examination of the issue which is central to this paper: How is equity determined when proper and valid standards of equity conflict? Legitimacy theory and findings from some related work (Walker and Zelditch) suggests that validity should have the more powerful effects on behavior. Hence, it is expected that the valid standard of equity (equality) will have greater influence on the allocative behavior of supervisors than their own sense of propriety when the two standards conflict. Such an effect should be represented by an "interaction effect." That is, there should be relatively little difference in the responses of supervisors who adopt equality standards when validity of standards is varied but substantial differences in the responses of supervisors who adopt inequality standards when validity is varied. Hypothesis 3 is a statement of the expected effect.

Hypothesis 3: Supervisors who adopt an inequality standard of equity award higher earnings to team member C under the nonvalidity treatment than under the validity treatment. Supervisors in the validity and nonvalidity treatments who adopt an equality standard of equity make similar allocations to team member C.

Two categorical variables were constructed as the operational measures of propriety and validity and were used to examine the effects of variation in the propriety and validity of distribution rules on the rewards allocated to team member C, EARNINGS. PROPRIETY takes a value of 0 when equality is the proper standard of equity and 1 when inequality is the equitable distribution rule. VALIDITY takes a value of 0 when there is a valid distribution rule specifying equality of allocations to team members and 1 when there is no valid distribution rule.

Two sets of findings are discussed below. The first set of findings

provides checks on the success of the attempts to create experimental variation in propriety and validity. The second set of findings are the data which bring evidence to bear on the hypotheses. The checks on the success of experimental manipulations utilizes data taken from the responses to the two questionnaires administered during the study and from the post-session interview.

Analytic Procedures

The principal hypotheses suggest an analysis of variance model with main effects of PROPRIETY and VALIDITY and a PROPRIETY X VALIDITY interaction. However, the design is unbalanced due to unequal cell frequencies (see Table 1). As a consequence, the data are analyzed using the GLM procedure (SAS). The GLM procedure uses least squares methods to fit general linear models and is suitable for fitting ANOVA models with unbalanced designs. Output from the GLM procedure includes values of the F-ratio for the hypothesized model, and for each of the design variables in the model.

Results

The investigation used two experimental procedures to establish validity and propriety. Validity was created by authorization, i.e., the host experimenter told the subjects that there was a rule which required them to pay all subjects an equal share of the earnings. Validity was assumed if subjects heard the rule which prescribed the allocation of equal payments to team members. The responses of all participants who indicated to the interviewer that they had not heard the rule when it was given or who heard it and chose not to believe it were eliminated from the analysis.⁷ Subjects who were exposed to the rule are assumed to be operating

under conditions of validity while subjects who were not exposed to the rule were in the nonvalid condition.

One of the items on the questionnaire which was administered after the practice trial asked subjects to indicate whether they believed team earnings should be divided equally or unequally. Subjects responded to the question using a five-point scale on which 1 indicates a strong feeling that earnings should be divided unequally and 5 indicates a strong feeling that earnings should be divided equally. The response categories were collapsed and it is assumed that subjects who marked either 1 or 2 on the scale had adopted an inequality standard of equity and subjects who marked 4 or 5 had adopted an equality standard. Data for nine persons who were indifferent are not included in the analyses which follow.

Table 2 about here

The data in Table 2 are the mean earnings awarded to team member C by experimental treatment. An examination of the row means suggests that supervisors who believe that team members should receive unequal allocations award more money to team member C (\$2.96) than supervisors who believe that team members should receive equal allocations (\$2.[^]9). Similarly, supervisors who are not constrained by a valid distribution rule award more earnings to team member C (\$2.79) than supervisors who are given a valid rule (\$2.62). The highest awards are made to team member C when there is no valid rule and the supervisors believe that earnings should be unequal. Under those conditions C receives an average of \$3.10. But C's earnings fall to an average of \$2.72 when there is a valid standard of payment. It is also clear

that a valid rule affects the allocations to team member C when the supervisors believe that team members should receive equal payments. Under that condition, team member C receives an average of \$2.54 when there is a distribution rule which specifies equality of payment. But team member C's earnings fall to an average of only \$2.44 in the absence of a valid rule.

Table 3 about here

The data in Table 3 are the results of the ANOVA on team member C's earnings. The findings support the general model ($F = 26.72, p = .0001$). There are significant main effects of PROPRIETY ($F = 54.19, p = .0001$) and VALIDITY ($F = 7.70, p = .0063$) and a significant PROPRIETY X VALIDITY interaction ($F = 19.73, p = .0001$). These results are consistent with Hypotheses 1, 2 and 3.®

Discussion and Summary

It has been argued that legitimate distribution rules are necessary for the activation of equity processes (Cook). But legitimation is a complex process and it is possible that multiple standards of legitimacy exist in many social situations. Equity theory is generally silent on the nature of social action when two equally legitimate distribution rules imply conflicting behavior. Legitimacy theories suggest that both validity and propriety have powerful effects on behavior. They imply that propriety will determine the course of behavior in the absence of valid standards. But when valid standards exist in conflict with proper standards, valid, i.e., collective, standards should have the more powerful effects on behavior.

This paper has used data on third-party allocations to ideas about the

separate and joint effects of propriety and validity on behavior. The basic findings suggest that, as predicted by legitimacy theory, both proper and valid distribution rules have powerful effects on behavior. In addition, there is a significant PROPRIETY X VALIDITY interaction. Third parties make allocations which are more similar to those prescribed by the valid standard than those prescribed by a proper standard when the two standards conflict. The results are entirely consistent with theories of legitimacy and are useful in explaining Sell and Martin's findings in which actors failed to comply with legitimate distribution rules. These findings suggest that the investigators actually created conflicting distribution rules and the effects of a legitimate (endorsed) distribution rule dampened the effects of the rule established (authorized) by the experimenters.

The findings reported here are also informative for research on collective mobilization. One of the fundamental anomalies in the literature on collective behavior is that persons who by all objective standards appear to be unjustly treated, often fail to mobilize in order to restore or establish a just distribution of scarce goods. It has been argued that the failure of disadvantaged group members to act in ways designed to establish or restore justice is due to false consciousness (Marx), their low self-evaluations (Delia Fave; Stolte), or the rational calculation of differences in the utilities of individual and collective goods (Olson).

The findings reported here are entirely consistent with the view that collective standards of legitimacy significantly affect the behavior of actors in social relationships (Bachrach and Baratz). Although this research focuses on superordinate actors, the findings demonstrate that actors are more likely to use collective standards of legitimacy rather than their own standards when

the two conflict. In order for persons to actively pursue actions to establish justice, they must first recognize injustice (by employing their own, i.e., or proper distribution rules). But when the existing distribution of scarce rewards is legitimated, they must act in opposition to valid (collective) standards of legitimacy. This research suggests that justice-restoring behavior is problematic under such conditions. Hence, this research has implications for research on collective responses to injustice as well as having immediate implications for the understanding of responses of individuals to conflicting standards of equity.

NOTES

1. Although "equality" standards are often contrasted with "equity" standards, it is more meaningful to frame the issue in terms of competing standards of equity. From this perspective an "equality" standard is one which specifies a uniform distribution of valued rewards among relevant actors. In contrast, an "equity" standard is a standard which specifies an unequal distribution of rewards. Although either standard can be defined as equitable, standards which specify proportional distributions of rewards, e.g., meritocratic standards based on quality or quantity of performances, are used more often in developed Western societies.

2. In general, the use of the terms propriety, validity, endorsement and authorization is consistent with that of Dornbusch and Scott. Minor differences in usage are discussed elsewhere (Walker et al.; Zelditch and Walker) and readers are referred to those sources for a more complete discussion of the concepts.

3. A recent paper by Sell and Martin might be considered an exception. Although the investigators were concerned with the conditions under which experimental subjects fail to comply with legitimate distribution rules, their establishment of group consensus can be considered a form of legitimation (of an alternate rule) by endorsement. In their study, two legitimate rules, one authorized and the other endorsed, always represented competing definitions of equity. Under such conditions (and without information on propriety) legitimacy theories would predict that endorsement would act to dampen the effects of authorization and the general finding of significant noncompliance with the authorized rule is consistent with a legitimation argument. There are also important differences in rates of noncompliance which may be due to differences in responses to particular combinations of rules which are endorsed and authorized or to differences in propriety.

Supervisors were led to believe that the teams would work ten problems but no experimental run exceeded five trials. They were told that their teams would complete ten trials in order to create the possibility that they could sanction team members prior to beginning the second set of five trials. Data on sanctioning behavior have been analyzed in a separate paper (Walker and Zelditch).

5. It might be argued that "perfect" scores would arouse suspicion but even though the problems appear to be complex upon initial examination, they are relatively simple and in our experience with subjects who actually work the problems mistakes are rare. In addition, none of the subjects who were eliminated due to suspicion were suspicious of the pattern of correct answers.

6. There are important distinctions between invalidity and nonvalidity. An action is invalid if it is inconsistent with a valid standard. Under such conditions, all other things equal, actors should abandon the invalid behavior and use the valid standard as a basis for action. But when there are no valid standards an actor must rely on some other basis for acting, e.g., his or her own sense of propriety. As a consequence, there should be important differences in the responses of actors whose own standards of behavior are

invalid and those of actors holding similar standards which are nonvalid.

7. Of the eighteen subjects whose responses were initially eliminated from V the analysis, ten were dropped from the treatment in which teams were assigned to the wheel structure and supervisors were given a valid rule (treatment 2). This is a generally unacceptable rate of suspicion for experimental research. The investigator retains confidence in the design due to the manner in which subjects were eliminated in this treatment. The majority of the respondents who were eliminated indicated that they had heard the rule but chose to ignore it. They indicated that they ignored the instruction because it seemed[^] illogical to pay all team members equally when it was clear that C did more work. The subjects were not "suspicious" in the conventional sense and their overall responses are similar to subjects who were not given a rule. The combined suspicion rate for subjects in the other three treatments is 13.1 percent.

8. The mean earnings under treatment 2 are unexpected and somewhat puzzling on first inspection. However, they are easily explained in the context of the overall research design. Team member C on the Red teams always requested that he be paid more than his coworkers and, even though other means of sanctioning were available to them (see Walker and Zelditch for a discussion of differences in sanctioning for violations of propriety and validity), some supervisors "punished" them by awarding them lower earnings than other team members. The mean pay of Red C's is \$2.34 in this treatment. The average pay for Blue C's in this condition is \$2.53, an amount which varies little from the mean earnings in cell 1 (Blue and Red C's receive \$2.55 and \$2.54 respectively in that treatment).

A separate analysis with an added categorical variable, C's team membership (TEAM), was conducted with this finding in mind. The results of that analysis indicate a substantial PROPRIETY X TEAM interaction which falls just short of statistical significance ($F = 3.76$, $p = .06$). Although adding the team membership variable helps to account for the unexpected finding in cell two, it does not alter the substantive interpretation of the findings. There is no main effect of team membership and none of the other interactions in this expanded model approach statistical significance.

REFERENCES

- Adams, J. S. a: 1963. "Toward an Understanding of Inequity." Journal of Abnormal and Social Psychology 67:422-36.
- Adams, J. S. b: 1965. "Inequity in Social Exchange." In L. Berkowitz (ed.), Advances in Experimental Social Psychology. Vol. 2. New York: Academic Press.
- Adams, J. S. and P. R. Jacobsen. 1964. "Effects of Wage Inequities on Work Quality." Journal of Abnormal and Social Psychology 69:19-25.
- Alexander, C. N., Jr. and R. L. Simpson. 1964. "Balance Theory and Distributive Justice." Sociological Inquiry 34:182-92.
- Austin, W. and E. Walster. 1974. "Reactions to Confirmations and Disconfirmations of Expectancies of Equity and Inequity." Journal of Personality and Social Psychology 30:208-16.
- Bachrach, P. and M. Baratz. 1970. Power and Poverty. New York: Oxford.
- Bavelas, A. 1950. "Communications Patterns in Task-oriented Groups." Journal of the Acoustical Society of America 22:725-30.
- Berger, J., M. Zelditch, Jr., B. Anderson, and B. P. Cohen. 1972. "Structural Aspects of Distributive Justice: A Status Value Formulation." in J. Berger, M. Zelditch, Jr., and B. Anderson (eds.), Sociological Theories in Progress Vol. 2. Boston: Houghton-Mifflin.
- Blau, P. M. 1964. Exchange and Power in Social Life. New York: Wiley.
- Cook, K. S. 1975. "Expectations, Evaluations and Equity." American Sociological Review 40:372-88.

- Cook, K. S. and T. L. Parcel. 1975. "Equity Theory: Directions for Future Research." Paper presented at the annual meeting of the American Sociological Association, August, San Francisco, California.
- Delia Fave, L. R. 1980. "The Meek Shall Not Inherit the Earth: Self-Evaluation and the Legitimacy of Stratification." American Sociological Review 45: 955-71.
- Dornbusch, S. M. and W. R. Scott. 1975. Evaluation and the Exercise of Authority. San Francisco: Jossey-Bass.
- Harris, R. J. 1976. "Handling Negative Inputs: On the Plausible Equity Formulae." Journal of Experimental Social Psychology 12:194-S09.
- Homans, G. C. 1974. Social Behavior: Its Elementary Forms. New York: Harcourt, Brace and Jovanovich.
- Jasso, G. 1980. "A New Theory of Distributive Justice." American Sociological Review 45:3-32.
- Lawler, E. E., III. 1968. "Effects of Hourly Overpayment on Productivity and Work Quality." Journal of Personality and Social Psychology 10:306-313.
- Leventhal, G. S. and D. Anderson. 1970. "Self-interest and the Maintenance of Equity." Journal of Personality and Social Psychology 15:57-62.
- Marx, K. and F. Engels. 1947. The German Ideology. New York: Bedminster Press.
- Pier-ton, R. K. and A. S. Rossi. 1968. "Contributions to the Theory of Reference Group Behavior." In R. K. Merton (ed.), Social Theory and Social Structure. Rev. and enl. edition. New York: Free Press.
- Michener, H. A. and M. R. Burt. 1975. "Use of Social Influence Under Varying Conditions of Legitimacy." Journal of Personality and Social Psychology 32:398-407.

- Olson, M. 1965. The Logic of Collective Action: Public Goods and the Theory of Groups. Cambridge, Mass.: Harvard University Press.
- SAS Institute Inc. 1982. SAS User's Guide: Statistics. Cary, N. C.: SAS Institute Inc.
- Sell, J. and M. W. Martin. 1983. "The Effects of Group Benefits and Type of Distribution Rule on Noncompliance to Legitimate Authority." Social Forces 61:1168-1185.
- Stolte, J. F. 1983. "The Legitimation of Structural Inequality: Reformulation and Test of the Self-Evaluation Argument." American Sociological Review 48:331-42.
- Stouffer, S. A., E. A. Suchman, L. C. DeVinney, S. A. Star, and R. M. Williams, Jr. 1949. Studies in Social Psychology in World War II. Vol. 1. Princeton: Princeton University Press.
- Thomas, G. M., H. A. Walker, and M. Zelditch, Jr. 1983. "Legitimacy and Compliance: Effects of Endorsement and Authorization." Paper presented at the West Coast Conference on Small Groups, San Jose, California.
- Walker, H. A., G. M. Thomas, and M. Zelditch, Jr. Forthcoming. "Legitimation, Endorsement and Stability." Social Forces.
- H. A. and M. Zelditch, Jr. 1985. "Legitimacy and the Exercise of Authority: The Effects of Validity and Propriety." Working Paper #85-1, Center for Sociological Research, Stanford University.
- Walster, E., E. Berscheid and G. W. Walster. 1973. "New Directions in Equity Research." Journal of Personality and Social Psychology 25:151-76.
- Weber, M. 1968. Economy and Society. Edited by G. Roth and C. Wittich. New York: Bedminster Press.

Zelditch, M., Jr., J. Berger, B. Anderson, and B. P. Cohen. 1970. "Equitable Comparisons." Pacific Sociological Review 13:19-26.

Zelditch, M., Jr., and H. A. Walker. 1984. "Legitimacy and the Stability of Authority." Pp. 1-25 in Advance in Group Processes: Theory and Research. Vol. 1. Edited by E. J. Lawler. Greenwich, Conn.: JAI Press.

Table 1. DISTRIBUTION OF SUBJECTS BY STUDY CONDITION.

| PROPRIETY | <u>VALIDITY</u> | |
|-----------------|-----------------|---------------|
| | Valid Rule | No Valid Rule |
| Equality Rule | S2 | 19 |
| Inequality Rule | 16 | 17 |

Table 2. MEAN EARNINGS (IN DOLLARS) OF TEAM MEMBER C BY STUDY CONDITION.

| PROPRIETY | <u>VALIDITY</u> | | Row Means |
|-----------------|-----------------|---------------|-----------|
| | Valid Rule | No Valid Rule | |
| Equality Rule | 2.54 | 2.44 | 2.49 |
| Inequality Rule | 2.72 | 3.18 | 2.96 |
| Column Means | 2.62 | 2.79 | |

Table 3. ANOVA: TEAM MEMBER C'S EARNINGS BY VALIDITY AND PROPRIETY OF DISTRIBUTION RULES

| SOURCE | DF | SUM OF SQUARES | MEAN SQUARE | F | P |
|---------------|-----|----------------|-------------|-------|-------|
| MODEL | 3 | 11.62 | 3.87 | 26.72 | .0001 |
| ERROR | 144 | 20.87 | .15 | | |
| PROPRIETY (A) | 1 | 7.86 | 7.86 | 54.19 | .0001 |
| VALIDITY (B) | 1 | 1.12 | 1.12 | 7.70 | .0063 |
| A x B | 1 | 2.86 | 2.86 | 19.73 | .0001 |