Participants' Reactions to "Equity with the World"

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According to traditional Equity theory, the injustices that an individual encounters in one relationship should not affect his other relationships. By definition, the equitableness of one relationship (say the AB relationship) depends entirely on how much Participants A and B contribute to the relationship and how much they get out of it.

Austin, in Austin and Walster (1973), however, argues that Equity theory must make transrelational predictions. He argues that persons attempt to maintain both "Person-specific Equity" and "Equity with the World" (e.g., Equity with others in general). The authors predicted (and found) that whether a person focuses on "Person-specific Equity" or "Equity with the World" depends on whether or not he feels "accountable" for his behavior. When participants knew they could not be held accountable for their actions, they routinely sacrificed Person-specific Equity in order to maintain Equity with the World. However, when they knew they would have to confront their second partner eventually, they rarely sacrificed Person-specific Equity. (Evidently, they assumed their partners would not sympathize with their desire to maintain transrelational equity.)

In this experiment, we predicted (and found) that such pessimism (by persons wishing to restore "Equity with the World") is not justified. Inequitably treated partners' dissatisfaction and hostility were markedly blunted when individuals believed that their "unfair" partner was attempting to restore "Equity with the World."

Since the beginning of civilization, men undoubtedly have been concerned about the amount of "justice," "fairness" and "equity" in their interpersonal and institutional arrangements. Although contemporary scholars continue to be interested in the general issue of social justice, theory and research in social psychology have had a fairly narrow focus. Researchers have focused on one aspect of justice, the principle of equity.

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In recent years, researchers have tested many diverse propositions regarding equity behavior and uncovered a multitude of situational variables which determine how individuals respond to inequity. This body of research impressively documents the importance of an equity norm in business relationships and in less formal social encounters (see Lawler, 1968; Walster *et al.*, 1973, for literature reviews).

Theoretical Background

Aristotle was the first to propose an "Equity" theory of justice. Recent Equity researchers have been guided by several theorists (Homans, 1961; Adams, 1965; Walster et al., 1973) who have elaborated the Aristotelian conceptions. According to Equity theory, a relationship is equitable when the ratio of a person's outcomes to inputs is equal to the corresponding outcome/input ratio of another person. Walster et al. (1973) supply a precise mathematical definition of "Equity." A relationship is equitable when:

$$\frac{\text{Outcomes} - \text{Inputs}}{\text{person } A \text{ person } A | k_A} = \frac{\text{Outcomes} - \text{Inputs}}{|\text{Inputs person } B| k_B}^{3}$$

Consequences of Inequity

A basic thesis of Equity theory is that inequity produces a negative emotional state for the participants, which, in turn, motivates them to reduce their distress by restoring equity. Equity theorists maintain that both the beneficiaries and the victims of an inequity experience distress. Numerous studies document their contention (cf. Pritchard

³ The notation for the equity formula is:

Outcomes (O) = the positive and negative consequences that a scrutineer perceives a participant has incurred as a consequence of his relationship with another;

Inputs (I) = the participant's contributions to the exchange, which are seen (by a scrutineer) as entitling him to rewards or costs; $k_A = \text{sign } (I_A) \times \text{sign } (O_A - I_A);$

 $k_B = \text{sign } (I_B) \times (O_B - I_B).$

The exponents k_A and k_B simply take on the value of +1 or -1, depending on the sign of A and B's inputs and the sign of their gains (Outcomes-Inputs). The exponent's effect is simply to change the way relative outcomes are computed. If k = +1, then we have (O - I/|I|), but if k = -1, then we have $(O - I) \times |I|$. Without the exponent k, the formula would yield meaningless results when I < 0 and O - I > 0, or I > 0 and O - I < 0.

et al., 1972; Austin & Walster, 1974). Further, several researchers have found that distress does indeed lead directly to equity-restoring behavior (Ross & McMillen, 1973; Austin & Walster, 1973). There are two general techniques available to victims and harmdoers seeking to reduce their distress.

Restoration of Actual Equity. One way equity can be re-established in a relationship is for the participants to allow the harmdoer to voluntarily compensate the victim. Many studies confirm the proposition that harmdoers often exert substantial effort to make restitution (Berscheid & Walster, 1967; Freedman et al., 1967). Victims are even more eager to seek restitution [see Leventhal and Bergman (1969) and Marwell, Schmitt and Shotola (1971)].

Restoration of Psychological Equity. Participants can also reduce their distress by justifying their predicament. They can distort reality and persuade themselves (and perhaps others) that although their relationship may appear inequitable, in fact, it is completely fair. In this way individuals come to redefine what is equitable. An abundance of studies demonstrate that harmdoers do rationalize their behavior (Sykes & Matza, 1957; Brock & Buss, 1961; Glass, 1964). There is even some experimental evidence that, under the right circumstances, victims also tend to accept (and even justify) their own exploitation (Jecker & Landy, 1969; Austin & Walster, 1974).

To recapitulate, for a decade researchers have been interested in how individuals respond to injustice. Equity theorists have studied the reactions of overpaid and underpaid workers, exploiters and their victims, and philanthropists and their beneficiaries. Unfortunately, equity researchers have concentrated on testing the theory in the most primitive of relationships: they have examined individuals' behavior in a single dyadic relationship, usually in a single situation. Researchers have seldom studied individuals' reactions to a series of complicated interlocking relationships.

"Equity with the World"

To the traditional Equity theorist, this "restriction" is a natural one. The injustices that an individual encounters in one relationship should

*Theorists have applied a wide assortment of labels to this emotional response to inequity: "anger," "guilt," "conditioned anxiety," "dissonance," "fear of retaliation," etc. However, theorists seem to concur that inequity-produced distress arises from two sources. First, the child quickly discerns that inequitable behavior is punished. Thus, fear of external sanctions contributes to distress. Second, theorists generally agree that the vast majority of persons "internalize" the norm of equity to some degree. Consequently, when individuals violate this strongly held norm, and their own self-expectations, they experience "self-concept distress." Thus, "internal sanctions" contribute to distress.

not affect his behavior in other relationships. By definition, the equitableness of one relationship (say the AB relationship) depends entirely on how much Participants A and B contribute to the AB relationship and how much they got out of it. For example, if Person A exploits Person B, he cannot restore equity to the AB relationship by making restitution to Person C. Such displaced "restitution" would only create a second inequity, this time with Person C.

On the surface, the traditionalist's argument is a compelling one. However, Austin (in Austin and Walster, 1973) points out that such an analysis is deceptively simple. Austin argues that if an experimenter is to predict Person A's reactions to equity or inequity, he must specify (1) with whom $Person\ A$ perceives himself to be in a relationship, and (2) how A evaluates his own and his partner's inputs and outcomes. The E and outside Os may agree that Participant A is in separate relationships with Persons B and C. Unfortunately, Participant A may disagree. He may compare himself with the "appropriate" partner (B or C), but then again, he may recalcitrantly insist on comparing himself with both partners at once (B $plus\ C$) or with "others in general." If Person A does choose to ignore the partner with whom we think he should compare himself, and chooses instead to compare himself with a different person, or collection of persons, then Austin argues, Equity theory is forced to make transrelational predictions.

On the basis of this reasoning, Austin predicts that people will try to maintain both Person-specific Equity and equity with the world in general. If people are unable to do both, they will compromise and try to do a *little* of both.

"Equity with the World" (EwW) is defined as "The degree of equity present in the totality of a person's relationships." For example, if a person is continually cheated by others (e.g., the urban ghetto dweller; the perennial "sucker") he falls short of maintaining EwW. Similarily, if a person continually exploits others (e.g., a racketeer; an unethical businessman) he should be aware of his inequitable position relative to "others in general." In brief, determination of EwW requires individuals to calculate the specific outcome/input ratios of each relationship and to make a subsequent global assessment of their net equity across relationships. Like Person-specific Equity, EwW is thus rooted in social comparisons.

Transrelational Equity Behavior

There is an abundance of anecdotal support for Austin's contention that individuals seem to be motivated to maintain Equity with the World. For example, an old Chinese proverb says, "When one is helped, he is obligated to help ten others so that he might in this way help himself." (This admonition is, of course, a ten-fold exaggeration of Austin's proposition.) A more vivid example of the Equity with the World principle appeared in a recent news story. On July 21, 1973, it was reported that a man was attacked on the streets of New York City and robbed of his weekly salary. The victim reportedly went to his apartment, got a rifle, and began shooting at innocent bystanders. When this bitter man was apprehended by police, he accounted for his behavior by saying, "I was tired of getting 'ripped off'." It appears, then, that occasionally the goal of achieving equity with the world overshadows the consequences one's behavior has on specific relationships.

By defining EwW in the above manner, Austin and Walster (1973) were able to make several straightforward deductions from Equity theory. They reasoned that if a person perceives that he has been underrewarded relative to others in general, he will attempt to restore EwW by subsequently exploiting some other person or persons. Conversely, if an individual realizes that others are overbenefiting him, he will strive to overbenefit someone else in return. An individual is therefore forced to create additional inequities in order to restore EwW. This illustrates the transrelational nature of EwW behavior.

Austin and Walster (1973) found experimental support for the contention that individuals will try to maintain both Person-specific Equity and Equity with the World.

Equity with the World vs A Belief in a Just World

On the surface, Austin's Equity with the World hypothesis and Lerner's Just World hypothesis seem to be distinct, but very complementary, concepts.

Lerner postulates that individuals are universally motivated to believe that the world is just and that people "get what they deserve and deserve what they get" (Lerner, in press). He and his colleagues (Simmons & Lerner, 1968) attempt to explain transrelational helping behavior in terms of persons affirming their beliefs in a just world.

Unfortunately, on closer scrutiny, it becomes difficult to tell if Equity theory and Lerner's principle would generate different predictions in this area or not.

Equity theory's propositions (Walster et al., 1973) are quite specific. The theory provides rules which tell us when a scrutineer will, or will not, perceive a relationship (or collection of relationships) to be equitable ("just"). It provides rules (i.e., a Cost-Benefit analysis) which enable us to predict when individuals will try to restore psychological equity vs actual equity. Austin uses these same rules to predict when individuals will focus on Person-specific Equity vs Equity with the World.

Unfortunately, Lerner's insightful formulation is not yet complete. Lerner does not yet specify: What will people perceive to be "Just"? When will individuals content themselves with believing that this is the best of all possible worlds, all evidence to the contrary? When will they admit the world is unfair and try to change it? The motive which Lerner postulates may very well be present to some degree in all types of justice behavior. The problem is, however, to explain when individuals will focus on Person-specific equity and when on Transrelational equity.

Until it is possible to compare and contrast the two theories with some precision, we must content ourselves with pointing out one difference in Austin and Lerner's general emphasis. Lerner assumes that people are concerned with trying to maintain a belief in equity or justice. Austin assumes that people are primarily concerned with actually maintaining justice in their relationships. Together, the two theorists provide comprehensive information on this topic.

The Present Study: "Equity with the World" Revisited

Austin and Walster proposed that one variable, accountability, would determine whether a person would focus on Person-specific Equity or Equity with the World. They proposed that if individuals know they will not have to confront their second partner, they will compromise: they will partially sacrifice the equity of their relationship with their second partner in order to partially restore Equity with the World. If they have to confront him they will be less willing to sacrifice Person-specific equity.

A substantial body of research suggests that accountability creates concern over self-presentation. This literature indicates that persons choose, as behavioral guides, those norms and comparisons which are least costly and which will stand up as feasible justifications for their actions (cf. Shapiro, 1973; Stokols & Schopler, 1973; Leventhal, Michaels & Sanford, 1972; Wiggins, 1966). Furthermore, Zajonc's work on social facilitation (Zajonc & Scales, 1966) demonstrates that the mere presence of others tends to produce socially dominant responses. Austin and Walster assumed in their experiment that Person-specific Equity would be considered the least costly and most socially acceptable (i.e., dominant) method of reward allocation when future interaction with a partner was expected.

Austin's data support this contention. Under conditions of Low accountability, when Person A was underrewarded by his first partner, he took somewhat more than he deserved from the second partner; when he was overrewarded by his first partner, he took somewhat less than he deserved from his second one. Conversely, when Person A expected to have to confront his second partner subsequently, he focused almost entirely on maintaining Person-specific Equity and made virtually no attempt to restore Equity with the World. Evidently, participants did not anticipate much

understanding, were they to try to explain to their second partner that they had only sacrificed the equity of their relationship in an effort to maintain transrelational equity. Evidently, participants assumed that their second partners would not understand their plight. Unfortunately we have no information as to whether or not such pessimism is justified.

The following experiment was designed to supplement Austin and Walster (1973). It was designed to investigate how people will react when they discover that their partners are sacrificing the Equity of their relationships, in an attempt to maintain Equity with the World. Specifically, our experiment was designed to test four hypotheses.

Hypotheses I and II simply restate two traditional Equity propositions.

Hypothesis I. People will be more satisfied (and less distressed) when they are equitably rewarded than when they are inequitably rewarded (i.e., when they are underrewarded or overrewarded).

Hypothesis II. People will be more satisfied when they are inequitably overrewarded than when they are inequitably underrewarded.

Hypotheses III and IV predict how individuals will react when they discover that their partners are partially sacrificing the Equity of *their* relationship in order to maintain Equity with the World.

Hypothesis III. If a person is told that his partner's exploitive behavior (i.e., his underreward) is a consequence of his partner's previous exploitation (and presumed desire to restore Equity with the World), this information will inhibit the person's negative reaction to the reward and the reward allocator.

Hypothesis IV. If a person is told that his partner's excessively generous behavior (i.e., his overreward) is a consequence of his partner's previous excessive good fortune, this information will inhibit the person's somewhat negative reaction to the reward and reward allocator.

Theoretical Rationale

Hypotheses I and II are simple deductions from Equity theory (Walster *et al.*, 1973) and receive strong support from several studies (Austin & Walster, 1974; Pritchard *et al.*, 1972).

Hypotheses III and IV are clearly the *raison d'etre* for this experiment. If confirmed, these hypotheses will supply two important pieces of information regarding equity behavior: (1) If persons show they are familiar with EwW motivated behavior, it will supplement Austin and Walster's earlier data, thus demonstrating the utility of the EwW construct. (2) Austin and Walster found that in high accountability condi-

tions, individuals "played it safe." (Evidently they feared that their partner would not understand their desire to maintain Situation-specific Equity and Equity with the World.) If this experiment demonstrates that partners *are* sympathetic to EwW behavior, it not only will demonstrate the well known fact that social situations are filled with conflicting expectations and uncertainty, but it will also suggest that persons can "drive a better bargain" because others do accept EwW as a valid justification for inequitable acts.

The theoretical basis for the EwW hypotheses (III and IV) is perhaps best captured by the old French adage, tout comprendre c'est tout pardonner, to understand all is to forgive all. A momentary reflection will reveal that this intuitive point of view can be derived from four similar theoretical positions.

- (1) Predictablity. Many theorists have elegantly proposed the idea that persons desire consistency in their interpersonal environment (Kelly, 1955; Festinger, 1957). Research shows that when predictability is established in advance (i.e., when expectancies are formed), unpleasant events produce less distress (Aronson & Carlsmith, 1963; Johnson, 1973) and less physiological arousal (Barber & Coules, 1959; Birnbaum, 1964). One study of particular importance in this regard (Austin & Walster, 1974) found that an expected inequity did produce less distress than an unexpected one. Hypotheses III and IV propose that inequity-produced distress will be reduced when subjects are supplied wth a "good reason," EwW information, and predictability is established post hoc.
- (2) Empathy. Since persons try to maintain EwW strategies themselves, it should be easy for them to empathize with their partner's desire to do so. Aronfreed (1970) has pointed out the close link between empathy (or lack of empathy) on one's affective reactions. Such theorists might predict that inequitably rewarded subjects should be less distressed when they can empathize with their partner's motivations (EwW) than when they cannot. Studies by Aderman et al. (1974) and Piliavin et al. (1967) show that when subjects empathize with a victim, they rate her considerably more attractive. Similarly, subjects may feel their partner is more similar to them [and thus more attractive (Byrne, 1971)] when they can empathize with him than when they cannot. Empathy should also deter subjects from labeling their partner as a "bad" person. Subjects will probably not feel that their partner is a "good" person if she has exploited them, but EwW information should at least inhibit subjects from negatively stereotyping their partner. (See Schur, 1971; Kraut, 1973 on the effect of labeling.)
- (3) Psychological Equity. According to Equity theory, when persons are engaged in an inequitable relationship they either (a) seek redress,

- or (b) attempt to restore "psychological equity." That is, they try to convince themselves, and others, that the inequity does not really exist. According to this view, theorists might argue that persons feel less distress when they know the others' EwW status than when they do not, because in the former case they have a convenient rationalization for their own good fortune or ill fate, while in the latter they do not.
- (4) Just World. Lerner's "just world" hypothesis possibly could account for our predicted results. If subjects feel that the world is a fairer place when they have EwW information than when they do not, then subjects could be expected to experience less distress and like their partners more in the former case. Logically, however, EwW information could have a variety of effects on a subject's belief about the general fairness of the world. On one hand, subjects in the EwW condition know that their partner is following some standard of fairness. On the other hand, they have to face the fact that their partner was treated unjustly in the recent past and that he is currently treating them unfairly.

All four processes (predictability, empathy, restoring psychological equity and reaffirming a belief in a just world) are overlapping. If Hypotheses III and IV are supported, each process may contribute to the results. Each position is somewhat distinct, but their redundancy in this one area poses some difficulties on interpretation. This perhaps points out the immature nature of social psychological theory.

PROCEDURE

To test the four hypotheses, it was necessary to: (1) Inform the subject that, in a previous relationship, his partner had been underrewarded, equitably rewarded, or overrewarded; (2) Arrange things so that this partner underrewards, equitably rewards, or overrewards the subject; (3) Ascertain whether knowledge of the partner's previous reward influences the subject's cognitive and affective evaluation of his equitable or inequitable reward.

Subjects

Subjects were 135 University of Wisconsin undergraduate women. They were randomly sampled from a list of subjects who were interested in participating in social psychology experiments.

Experimental Setting and Cover Story

Our procedure was virtually identical to that described in Austin and Walster (1974). When the subject reported to the laboratory, she was ushered into an experimental room. Soon, a second "subject" appeared. The experimenter explained to the subject that her colleague had just finished participating in a decision-making study. When the girl who had been scheduled to participate this hour had cancelled her appointment, he had asked this girl to fill in in the present study. Then, he escorted the subject and her experienced partner to separate rooms.

The experimenter then explained the ostensible purpose of the study. He explained

that he was interested in decision making in business and industry. He hoped that by investigating decision making in controlled laboratory conditions, he would come to better understand the decision making process. The experimenter then reviewed the experimental procedure. He explained that in this study there were two positions, that of a Worker and that of a Worker/Decision-maker. First, both subjects would be asked to work on a simple anagram task. (They were to make as many words as possible out of "Mississippi.") After 10 min, the experimenter would collect their papers, score them, and tell them how well they both had done. Then, one of them would be chosen to serve as the Decision-maker. The Decision-maker's job was to distribute \$3 between the two of them, on the basis of their task performance. Finally, after the Decision-maker had decided how to distribute the \$3, the experimenter would ask both subjects to evaluate the Decision-maker's decision. In that way, he hoped to gain a better understanding of the decision making process.

The experimenter asked the subject to draw a slip of paper from an envelope to determine which one of them would be the Worker and which would be the Decision-maker/Worker. Actually, the experimenter controlled the bogus decision. Invariably, the slip designated the partner as the Decision-maker.

Manipulation of Subject's Reward

After the subjects had worked 10 min on the anagram task, the experimenter collected and scored it. Then he told the subjects that she and her partner had secured identical scores. (He mentioned that since the task was very easy, this frequently happened.) Since both subjects had worked equally hard and had done equally well, the subject had every reason to expect that the Decision-maker would split the \$3 evenly.

At this point, we manipulated our first independent variable (subject's reward) by providing subjects with false information. The experimenter gave the subject the card on which the Decision-maker had indicated how she wished to divide the \$3. The subject learned that the Decision-maker had decided to underreward her (i.e., pay her \$1), equitably reward her (\$1.50), or overreward her (\$2). The experimenter then announced the amount and paid the subject. If subjects voiced surprise at the decision, the experimenter stated that it did not seem fair to him either.

Manipulation of Partner's Previous Reward

At the beginning of the experiment, the experimenter informed the subject that her partner had been in a decision making experiment previously. The Partner's Previous Reward was manipulated via a note from the Decision-maker, which accompanied the decision. The message said, "The reason I decided to give you (\$1, \$1.50, or \$2) and keep (\$1, \$1.50, or \$2) was because I received (\$1, \$1.50, or \$2) in the experiment I was just in, when our scores were about equal." This information was designed to lead subjects to believe that the partner was previously underrewarded, equitably rewarded, or overrewarded.

Dependent Measures

Subjects were then asked to fill out a questionnaire. This questionnaire was designed to measure subjects' cognitive and affective evaluations of their equitable or inequitable reward and to measure how attractive they perceived their partner to be: (1) Subjects' cognitive evaluations: We asked subjects how fair the decision was, how satisfied they were with the decision, how well suited for decision making their part-

ner was, and whether or not they would hire her for a vacant supervisory job. (2) Subjects' affective reactions: We asked subjects how happy, how angry and how guilty they felt about the decision. (3) Subjects' attraction to their partner: We asked subjects how attractive their partner was, whether they would like to be good friends with her, and whether they would like to be in other experiments with their partner.

RESULTS AND DISCUSSION

Manipulation Checks

Two postexperimental questions assessed the efficacy of our manipulation of Partner's Previous Reward. First, subjects were simply asked if their partner had previously participated in an experiment. All subjects indicated they were aware of her earlier participation. In addition, all subjects correctly reported how much their partner had received in the previous experiment.

We checked the effectiveness of our second manipulation, Subject's Reward, by asking subjects how fair their reward was. Equitably paid subjects (\$1.50) should perceive that they were treated more fairly than do overrewarded or underrewarded subjects. They do. When we examine the conditions in which the partner's previous reward was equitable, (via a planned comparison) we find that equitably treated subjects perceive their payment as more fair than do inequitably treated ones (i.e., over-rewarded and underrewarded subjects) t(126) = 11.46, p < .001.

Cognitive Evaluations

Three scales assessed subjects' cognitive evaluations of their rewards. As we indicated earlier, the Fairness scale asked subjects how fair the Decision-maker's decision was. The Satisfaction scale asked subjects how satisfied they were with the decision. The Evaluation of Partner scale, which was comprised of two questions, asked subjects (1) how well suited the Decision-maker was for decision making, and (2) whether the subject would hire him for a vacant supervisory job if given the opportunity to do so.

We tested Hypotheses I–IV via Analysis of Variance techniques and with more specific Scheffé comparison techniques.

Analysis of Variance. Basically, in Hypotheses I–IV we are predicting that Subject's Reward and that Subject's Reward \times Partner's Previous Reward will interact in affecting the subject's cognitive reactions to her payment. (Thus, we expect to secure a significant A main effect and an $A \times B$ interaction.) Our Analysis of Variance data strongly support this expectation. Subjects' Reward significantly affects the subjects' responses on the Fairness scale ($F(2,126)=237.06,\ p<.001$), on the Satisfaction scale ($F=206.37,\ p<.001$), and on the Evaluation of Partner's scale (F=1.001)

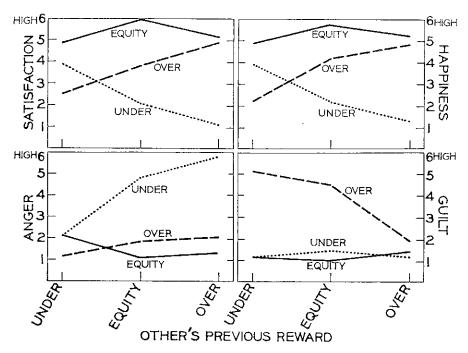


Fig. 1. The effect of relative reward and previous reward of other on cognitive and affective evaluations.

177.39, p < .001). Also, as predicted, the Partner's Previous Reward and the Subject's Reward interact in effecting the subject's responses [on the Fairness scale (Interaction F(4,126) = 73.90, p < .001); on the Satisfaction scale (F = 61.12, p < .001); and on the Evaluation of Partner scale (F = 53.02, p < .001)]. Figure 1 and Table 1 illustrate these results.

Hypotheses I–IV can be precisely tested by using Scheffé $post\ hoc$ comparisons. 5

Hypothesis I states that (when subjects are aware that their partners have been equitably rewarded previously) subjects who are equitably rewarded will be more satisfied than either underrewarded or overrewarded subjects. We tested this hypothesis with two Contrasts. Contrast Γ_1 compared equitably rewarded persons with underrewarded persons. Contrast Γ_2 compared equitably rewarded persons with overrewarded ones. The data strongly support Hypothesis I. For the Fairness scale, Contrast $\Gamma_1(8,126) = 22.56$, p < .006. For the Satisfaction scale $\Gamma_1 = (F = 31.13, p < .006)$. For the Fairness scale, Contrast $\Gamma_2 = (F = 10.08, p < .006)$ and for the Evaluation of Partner scale (F = 6.23, p < .006).

Hypothesis II states than (when subjects are aware that their partner has been equitably rewarded previously) subjects who are inequitably overrewarded will be more satisfied than subjects who are inequitably

⁵ The probability levels (α) reported here are uniformly based on a familywise error rate per dependent measure for each hypotheses tested.

underrewarded. The data strongly support this hypothesis. A Contrast between these two cells was significant for the Fairness scale $(F(8,126)=7.50,\ p<.003)$, the Satisfaction scale $(F=5.75,\ p<.003)$ and the Evaluation of Partner scale $(F=6.94,\ p<.003)$.

These results support previous Equity findings.

Hypothesis III predicts that underrewarded subjects will be more satisfied if they know that their partner's exploitative behavior is a consequence of his previous exploitation (and presumed desire to restore equity with the world) than if they do not.

If subjects believe that a partner's desire to restore equity with the world is a valid reason for generating Person-specific inequities, certain kinds of information should inhibit their negative reaction to inequity. For example, the underrewarded subject should feel less distressed if she believes that her partner was previously underrewarded, and that her exploitive behavior reflects an attempt to restore equity with the world, than if she does not. Subjects should feel that their partner's behavior was not a personal affront, but action directed at the world at large. On the other hand, if the explanatory message does not make sense in terms of equity with the world, it should have no impact, or should even aggravate the subject's distress at being treated inequitably. For example, the exploited subject should feel full distress if she is told that her partner was equitably rewarded or overrewarded previously. From this information, all she can conclude is that her partner is a greedy person.

The data suggest that individuals are sympathetic to their partners' desire to restore equity with the world. Contrasts between the appropriate conditions indicates that deprived subjects feel their partners' decision was more Fair $(F(8,126)=7.50,\ p<.006)$, are more Satisfied $(F=6.75,\ p<.006)$, and Evaluate their partner more highly $(F=6.23,\ p<.006)$ if their partner was deprived than if she was equitably treated. Similarly, deprived subjects rate their partner more highly if she was previously deprived than if she was overrewarded. [They rate her as more Fair $(F(8,126)=19.07,\ p<.006)$, more Satisfied $(F=16.33,\ p<.006)$, and Evaluate her more highly $(F=14.39,\ p<.006)$.]

Similarly, Hypothesis IV predicts that overrewarded subjects will be more comfortable about a "bonus" if they know that their partner was overrewarded previously. Although all the Means are in the predicted direction, Hypothesis IV receives only limited support. Scheffé Contrasts between the appropriate conditions indicate that overrewarded subjects are more Satisfied if their partner was overrewarded previously than if she was equitably rewarded (F = 2.37, p < .05). However, they do not feel her decision was more fair or evaluate her any more highly (Fs = n.s.). Overrewarded subjects do feel the decision was more fair

 $(F(8,126)=16.51,\ p=.006),$ are more Satisfied $(F=12.00,\ p<.006),$ and Evaluate their partner more highly $(F=9.56,\ p<.006)$ if she was overrewarded previously than if she was underrewarded. Thus, while Hypothesis IV is generally supported, it is clear from both our Analysis of Variance tests and our Scheffé Contrasts that overrewarded subjects are simply far less concerned than are deprived subjects about why their partners behaved inequitably. This finding is congruent with the consistent Equity theory finding that overrewarded persons are simply less dissatisfied than underrewarded persons with inequitable payments (see Austin and Walster, 1974).

Affective Reactions

Next, we assessed subjects' affective reactions to their rewards by asking them how happy, angry and guilty they felt.

Our Analysis of Variance makes it clear that the Subject's Reward and Subject's Reward \times Partner's Previous Reward both had a significant impact on the subject's emotional state. As predicted, Subject's Reward significantly affects the Subject's Happiness $(F(2,126)=178.25,\ p<.001),$ Anger $(F=233.56,\ p<.001),$ and Guilt $(F=227.22,\ p<.001).$ Also, as predicted, Subject's Reward \times Partner's Previous Reward interact in shaping subject's emotional responses. Interaction F's = happy $(F(4,126)=56.80,\ p<.001);$ anger $(F=49.06,\ p<.001);$ guilt $(F=33.72,\ p<.001).$

Let us now turn to our Scheffé comparisons, and precise tests of our hypotheses. These analyses provide strong support for Hypotheses I–IV.

Hypothesis I. As predicted, (when their partner was previously equitably rewarded) equitably treated subjects are more happy (F(8,126) = 22.25, p < .004) and less angry (F = 30.08, p < .004) than under-rewarded subjects. Similarly, equitably rewarded subjects are more happy (F(8,126) = 4.18, p < .004) and less guilty (F = 25.96, p < .004) than were overrewarded subjects.

Hypothesis II. As Equity theory predicts, (when their partner was previously equitably rewarded) overrewarded subjects are more happy $(F(8,126)=7.14,\,p<.003)$ than are underrewarded subjects. As Equity theory, and everyone else, would predict, underrewarded subjects are more angry $(F=18.75,\,p<.003)$ but less guilty $(F=20.42,\,p<.003)$ than overrewarded subjects.

Hypothesis III predicts that if underrewarded subjects know their partner's exploitative behavior is a consequence of the fact that he was previously exploited, they will have more positive affective reactions to the reward than they would otherwise. This Equity with the World prediction was supported. As Table 1 indicates, underrewarded persons

The Effect of Partner's Previous Reward and Subject's Reward on Subject's Cognitive Evaluations, AFFECTIVE REACTIONS, AND ATTRACTION TABLE 1

Partner's previous reward	Subject's reward	Fair- ness scale	Satisfaction scale a	Evaluation of partner scale ^a	${ m Happy}^a$	$\mathrm{An}\text{-}_{ger^b}$	Guilt	Attrac- tion scale	"Equity with World" scale
Underreward (\$1)	Underreward (\$1)	4.0	3.9	6.7	3.9	2.1	1.2	12.0	3.6
Equity (\$1.50)	Underreward (\$1)	2.2	2.1	4.3	2.2	4.9	1.4	4.5	1.6
Overreward (\$2)	Underreward (\$1)	1.1	1.1	2.4	1.3	5.9	1.2	3.7	1.3
Underreward (\$1)	Equity (\$1.50)	5.0	4.8	9.3	4.9	2.1	1.2	14.3	1.5
Equity (\$1.50)	Equity (\$1.50)	0.0	0.9	11.7	5.7	1.1	1.0	17.1	4.0
Overreward (\$2)	Equity (\$1.50)	5.2	5.1	10.3	5.2	1.3	1.3	17.0	1.5
Underreward (\$1)	Overreward (\$2)	2.2	2.5	4.7	2.2	1.2	5.2	15.5	1.4
Equity (\$1.50)	Overreward (\$2)	4.0	3°.8	8.1	4.1	1.9	4.5	14.2	1.7
Overreward (\$2)	Overreward (\$2)	4.9	4.9	9.1	4.8	2.1	1.9	14.6	65 4.

^a The higher the number, the more satisfied subjects are with the decision.

^b The lower the number, the more dissatisfied subjects are with the decision.

were more happy (F(8,126) = 5.34, p < .004) and less angry (F = 15.65, p < .004) if their partner had been underrewarded previously than if he had been equitably rewarded. Underrewarded persons were also more happy (F(8,126) = 12.64, p < .004) and less angry (F = 29.15, p < .004) if their partner was underrewarded previously than if he was overrewarded. Thus, the Affect measure provides strong support for our first transrelational prediction.

The second transrelational proposition (Hypothesis IV) concerns over-rewarded subjects. Hypothesis IV predicts that overrewarded subjects who know that their partner's excessively generous behavior is due to the fact that he was excessively rewarded, will be happier and less guilty than their peers. Three of four contrasts support this Equity with the World prediction. Overrewarded individuals, whose partners were previously overrewarded, are significantly less guilty (F(8,126) = 14.04, p < .004) and more happy, but not significantly so, than are subjects whose partners were equitably treated previously. As predicted, over-rewarded individuals were happier (F(8,126) = 12.07, p < .004) and less guilty (F = 22.27, p < .004) if their partner was previously over-rewarded than if he was underrewarded.

Summary

As in previous Equity research, Hypotheses I and II received strong support. Hypotheses III and IV were generally supported. Except for one contrast, all under- and overreward comparisons supported our transrelational predictions. Under- and overrewarded persons' "distress" is substantially reduced when they can attribute their partner's inequitable behavior to his desire to maintain Equity with the World. It appears that people are capable of empathizing with their partner's desire to sacrifice their relationship in order to maintain equity with the world.

Attraction Ratings

Our experiment was primarily designed to investigate the effect of Subject's Reward and Partner's Previous Reward on subjects' cognitive evaluations and affective states. However, we had one additional interest, we were interested in determining the effect of these variables on the subject's liking for his partner. We have seen that the knowledge that one's partner is restoring transrelational equity (i.e., restoring equity with the world) reduces one's resentment at being treated inequitably. One might then expect that such knowledge will enhance a person's attraction to his partner. If we find this to be the case, it has intriguing implications. A person's interpersonal attraction toward another is a potent determinant of the viability of their relationship. We might

speculate that inequitable behavior *per se* might not weaken or terminate relationships. If an exploiter's or benefactor's inequitable behavior is attributed to his desire to restore Equity with the World, he may well be forgiven.

In order to test these hypotheses, we assessed Interpersonal Attraction via three questions: (1) "How attractive would you say the other person in this experiment is?"; (2) "Would you like to be good friends with the other person?"; (3) "Would you like to participate in future experiments with the other person?" We summed Subjects' responses on these items in order to form an 18 point Attraction scale.

Hypothesis I–IV (and our speculations regarding inequity, attraction and the viability of relationships) are partly supported by Analysis of Variance and Scheffé comparisons. Although we secured a highly significant Main effect for Subject's Reward (F(2,126) = 367.20, p < .001) and a significant Subject's Reward × Partner's Previous Reward interaction (F(4,126) = 46.88, p < .001), it is clear from Table I and Fig. 2 that our hypotheses are only partly supported when tested via the Attraction scale. Only for underrewarded persons does a knowledge that the partner's injustices are motivated by a desire to restore equity with the world have any salutary effect on the relationship.

Scheffé contrasts strongly support Hypothesis I. When their partner was paid equitably previously, equitably treated subjects find their partner to be more Attractive than do underrewarded subjects $(F(8,126)=47.25,\ p<.003)$ or overrewarded subjects $(F=2.45,\ p<.06)$. Further, as Hypothesis II predicts, inequitably overrewarded subjects rate their partner more favorably than do inequitably underrewarded subjects $(F=28.18,\ p<.003)$. Thus, Hypothesis I and II are firmly supported when attraction is the dependent measure. This finding can be construed as replicating an early finding of Wicker and

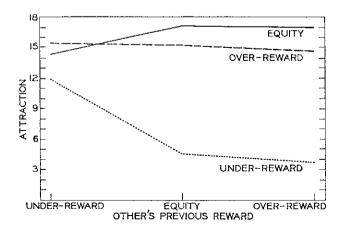


Fig. 2. The effect of relative reward and previous reward of other on attraction.

Bushweiler (1970), who also investigated the effect of Equity on Interpersonal Attraction.

Two contrasts support Hypothesis III, and our speculations regarding the impact of transrelational equity behavior on attraction, and on a relationship's viability. As predicted, deprived subjects are more attracted to their exploitative partner when they believe he was previously underrewarded than when they believe he was equitably rewarded or overrewarded (Fs(8,126) = 16.88, p < .002 and 20.65, p < .002, respectively). These tests confirm Hypothesis III; they indicate that an individual's knowledge that his partner is engaging in equity with the world type behavior prevents the development of the hostility which is usually directed toward an exploiter.

Hypothesis IV, and our speculations concerning overrewarded subjects, are not supported by Scheffé contrasts. In all conditions, overrewarded persons are quite attracted to their partner; a knowledge of his previous reward condition does not enhance or reduce his attractiveness. Both Contrasts yielded F ratios less than 1.0, and as Table 1 shows, there was a reversal from the predicted direction of cell means. These data harshly challenge our theorizing about attraction and Equity with the World for overrewarded individuals. Perhaps the old adage, "Don't bite the hand that feeds you" has some merit. Subjects were evidently reluctant to rate a person negatively, when he had voluntarily deprived himself to reward them.

Supplementary Data. Our experiment provides experimental support for our four hypotheses. Additional support for Hypotheses III and IV comes from subjects' verbal reports as to the factors which influenced them. In the postexperimental interview, prior to debriefing, the experimenter said: "All Decision-makers were asked to write the reasons for their decision on the card given to the worker. I noticed there was some writing on your card. On a rating scale of 1-4, to what extent did the Decision-maker's reason make sense?" If our reasoning (that the Subject's appreciation of equity with the world considerations accounts for our data) is correct, then only subjects with "congruent" information should rate the Decision-maker highly in this regard. Subjects were told that their partner was previously underrewarded, equitably rewarded, or overrewarded. Then they were rewarded. There are only three cells where the bogus reason provided subjects was congruent with their reward received in terms of equity with the world, i.e., when the Partner's Previous Reward and the Subject's Reward were identical.

Examination of the Equity with the World scale in Table 1 shows that the subject's responses in the three cells where information and rewards were congruent are markedly different from subject's responses in nearly all the other cells. A planned Comparison between these three cells and the remaining six cells was highly significant (t(126) = 25.00, p < .001). A logical inference from this test is that the explanation provided by the decision maker "made more sense" to the subject, because they resonated to the desire to restore equity with others in general.

SUMMARY

An experiment was conducted to test four hypotheses on Equity behavior: Hypothesis I stated that equitably rewarded subjects should be more satisfied than overrewarded or underrewarded ones. Hypothesis II predicted further that overrewarded persons would be less dissatisfied than underrewarded persons. These fundamental propositions of Equity theory were strongly supported.

Two additional hypotheses were aimed at augmenting an earlier finding on transrelational equity behavior. Hypothesis III suggested that exploited persons would be more satisfied if they could attribute their partner's behavior to his desire to maintain Equity with the World than if they could not. Hypothesis IV made a parallel prediction for overrewarded persons. It predicted that overrewarded persons would be less dissatisfied if they could attribute their partner's behavior to a desire to restore equity with the world than if they could not. These hypotheses were also strongly supported. Transrelational considerations had a strong impact on subjects' cognitive and affective responses to inequity.

Austin and Walster (1973) proposed and demonstrated that persons are motivated to maintain both equity with specific persons and with others in general (i.e., with the World). Austin and Walster found that if it is not possible to do both, persons will compromise: They will partially sacrifice Person-specific Equity in order to maintain partial equity with the world relationships. This experiment demonstrated that although individuals may not realize it, their partners are able to sympathize with their attempts to maintain transrelational Equity. Knowing that one's exploiter or patron was motivated by previous rewards apparently reduces one's dissatisfaction, distress, and prevents a deterioration in one's liking for him.

The finding that persons actively seek to maintain or to restore Equity with the World and are sympathetic to others' attempts to do so, has implications for other areas of research. For example, sociologists, psychologists, and legal researchers have long been interested in "senses of injustice" as a cause of crime, delinquency, and even revolutions (Matza, 1964; Cahn, 1964). Research on Equity with the World may provide a comprehensive, albeit tentative, theoretical framework for investigating the effect of such "senses of injustice."

REFERENCES

- Adams, J. S. Inequity in social exchange. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, Vol. II. New York: Academic Press, 1965, 267—299.
- ADERMAN, D., BREHM, S. S., & KATZ, L. B. Empathetic observation of an innocent victim: The just world revisited. *Journal of Personality and Social Psychology* 1974, 29, 342–347.
- Aronfreed, J. The socialization of altruistic and sympatheic behavior: Some theoretical and experimental analyses. In J. Macaulay & L. Berkowitz (Eds.), Altruism and Helping Behavior. New York: Academic Press, 1970, 103–126.
- Aronson, E., & Carlsmith, J. M. Some hedonic consequences of the confirmation and disconfirmation of expectancies. *Journal of Abnormal and Social Psychology*, 1963, 66, 151–156.
- Austin, W., & Walster, E. Reactions to confirmations and disconfirmations of expectancies of equity and inequity. *Journal of Personality and Social Psychology* (in press, 1974).
- Austin, W., & Walster, E. "Equity with the World": An investigation of the transrelational effects of equity and inequity. Unpublished manuscript, University of Wisconsin, 1973.
- BARBER, T. X., & Coules, J. Electrical skin conductance and galvanic skin response during "hypnosis." *International Journal of Clinical and Experimental Hypnosis*, 1959, 7, 79–92.
- Berscheid, E., & Walster, E. When does a harmdoer compensate a victim? *Journal of Personality and Social Psychology*, 1967, 6, 435-441.
- Birnbaum, R. M. Autonomic reaction to threat and confrontation conditions of psychological stress. Unpublished doctoral dissertation, University of California, Berkeley, 1964.
- Byrne, D. The Attraction Paradigm. New York: Academic Press, 1971.
- Cahn, E. The Sense of Injustice. Bloomington: Indiana University Press, 1964.
- Festinger, L. A Theory of Cognitive Dissonance. Stanford: Stanford University Press, 1957.
- Freedman, J. L., Wallington, S. A., & Bless, E. Compliance without pressure: The effects of guilt. *Journal of Personality and Social Psychology*, 1967, 7, 117–124.
- GLASS, D. Changes in liking as a means of reducing cognitive discrepancies between self-esteem and aggression. *Journal of Personality*, 1964, 32, 531–549.
- Homans, G. C. Social behavior: Its elementary forms. New York: Harcourt, Brace & World, 1961.
- JECKER, J., & LANDY, D. Liking a person as a function of doing him a favor. Human Relations, 1969, 22, 271–278.
- JOHNSON, J. Effects of accurate expectations about sensations on the sensory and distress components of pain. *Journal of Personality and Social Psychology*, 1973, 27, 261–275.
- Kraut, R. E. Effects of social labeling on giving to charity. *Journal of Experimental Social Psychology*, 1973, 9, 551-562.
- Lawler, E. E., III. Equity theory as a predictor of productivity and work quality. *Psychological Bulletin*, 1968, **70**, 596-610.
- LERNER, M. Social psychology of justice and interpersonal attraction. In T. Huston

- (Ed.), Perspectives on Interpersonal Attraction. New York: Academic Press, (in press).
- Leventhal, G. S., & Bergman, J. T. Self-depriving behavior as a response to unprofitable inequity. *Journal of Experimental Social Psychology*, 1969, 5, 153-171.
- LEVENTHAL, G. S., MICHAELS, J. W., & SANFORD, C. Inequity and interpersonal conflict: Reward allocation and secrecy about reward as methods of preventing conflict. *Journal of Personality and Social Psychology*, 1972, 23, 88–102.
- MARWELL, G., SCHMITT, D. R., & SHOTOLA, R. Cooperation and interpersonal risk. Journal of Personality and Social Psychology, 1971, 18, 9-32.
- MATZA, D. Delinquency and Drift. New York. Wiley, 1964.
- PILIAVIN-HARDYCK, J. A., PILIAVIN, I. M., & VADUM, A. C. Reactions to the victim in a just or nonjust world. Paper read at meeting of the Society of Experimental Social Psychology, Bethesda, Maryland, 1967.
- Pritchard, R., Dunnette, M., & Jorgenson, D. Effects of perception of equity and inequity on worker performance and satisfaction. *Journal of Applied Psychology*, 1972, **56**, 75–94.
- Ross, M., & McMillen, M. J. External referents and past outcomes as determinants of social discontent. *Journal of Experimental Social Psychology*, 1973, 9, 437–449.
- Shapiro, E. G. The effect of future interaction on reward allocation in dyads: Equity or equality? Unpublished manuscript, University of Iowa, 1973.
- Schur, E. M. Labeling Deviant Behavior. New York: Harper & Row, 1971.
- Simmons, C. H., & Lerner, M. J. Altruism as a search for justice. *Journal of Personality and Social Psychology*, 1968, 9, 216–225.
- Stokols, D., & Schopler, J. Reactions to victims under conditions of situational detachment: The effects of responsibility, severity and expected future interaction. *Journal of Personality and Social Psychology*, 1973, 25, 199–211.
- Sykes, G. M., & Matza, D. Techniques of neutralization: A theory of delinquency. American Sociological Review, 1957, 22, 664-670.
- Walster, E., Berscheid, E., & Walster, G. W. New directions in equity research. Journal of Personality and Social Psychology, 1973, 25, 151-176.
- Wiggins, J. Status differentiation, external consequences, and alternate reward distributions. *Sociometry*, 1966, **29**, 89–103.
- Zajonc, R. B., & Scales, S. M. Social facilitation of dominant and subordinate responses. *Journal of Experimental Social Psychology*, 1966, 2, 160–168.

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