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# DISTRIBUTIVE JUSTICE, EQUITY, AND EQUALITY

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## *Abstract*

This chapter provides a general review of the research conducted over the past two decades on individuals' conceptions of equity and distributive justice and their reactions to inequity. Various theoretical formulations are identified and important topics for further theoretical development and empirical investigation are discussed. In conclusion, the authors suggest that micro-level concepts of distributive justice have certain limitations. Consideration of more macro-level concepts suggests possibilities for integrating equity and distributive justice theories with sociological theories of power, conflict, and collective action. This integration, if achieved, would bring notions of justice to the forefront in the analysis of social change.

## INTRODUCTION

During a recent flight the first author of this chapter was interrupted by the male passenger on her right with the predictable question, "What are you working on?" The reply: "I'm writing an article on justice." To which the businessman emphatically responded, "There is no justice!" If that were indeed the case, there would be no need for this review chapter. But justice has been a topic of interest to social scientists and philosophers for decades. If properly indexed, the amount of material written on this subject would more than likely fill several rooms. Thus we must limit scope.

Here, we focus upon the specific research tradition identified in the early 1960s as "distributive justice" (Homans 1961) or "equity theory" (Adams 1965). This pragmatic decision does not reflect on the merits of relevant material published in philosophy and other social sciences excluded from

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consideration here. What we omit in detail can be obtained by reading several recent collections (see Berkowitz & Walster 1976; Mikula 1980a; Lerner & Lerner 1981; Greenberg & Cohen 1982; Messick & Cook 1983).

All social systems evolve mechanisms for distributing valued resources and for allocating rights, responsibilities, costs, and burdens. Theories of distributive justice specify the conditions under which particular distributions (and, more recently, distributional procedures) are perceived to be “just” or “fair.” In this chapter we describe various conceptions of justice commonly found in the social science literature and review the research that has been conducted on individuals’ allocation preferences and their reactions to inequitable allocations. In the concluding section we move beyond “micro” conceptions of justice to more “macro” justice concerns.

## CONCEPTIONS OF JUSTICE

Distinct types of justice principles can be identified in the social science literature. We first distinguish between equity and distributive justice. The former involves notions of exchange and the latter concerns general fairness in allocation situations. The terms denote distinct types of justice. In concluding this section we use Eckhoff’s (1974) five principles of equality to indicate how most existing conceptions of justice fit within a more general theoretical framework. We use the terms “justice principles” and “distribution rules” interchangeably; different distribution rules are codifications of different underlying principles of justice.

### *Equity: Fair Exchange*

It is commonplace in social psychology to conceive of distributive justice or equity as issues that arise whenever two or more persons exchange valued resources, be they goods, services, money, love, or affection. This concept has its roots in early exchange theoretic formulations proposed by Adams (1965), Homans (1961), and Blau (1964). Exchanges between actors involve the mutually beneficial transfer of valued resources. In the simplest case involving two actors (A and B) engaged in the exchange of two valued resources (x and y), the resource A provides (e.g. x) is both actor A’s input to the exchange and actor B’s outcome; the resource B provides (e.g. y) is B’s input and A’s outcome (see Cook & Emerson 1978).

Within the exchange framework, equity is typically defined as the equivalence of the outcome/input ratios (Adams 1965; Walster et al. 1973) of all parties involved in the exchange. When these ratios are not equal, inequity is said to exist. This “ratio” concept is the most commonly cited definition of equity despite considerable debate over the “proper” equity formula (see Harris 1976; Moschetti 1979; Alessio 1980). Recent evidence even suggests that a

linear model is more appropriate than the ratio model for representing individuals' equity judgments (Harris 1980, 1983).

### *Distributive Justice: Fair Allocation*

While many social situations can be conceived in exchange terms, that framework does not encompass all situations in which justice is a concern. Eckhoff (1974) makes a useful distinction between the mutually beneficial, two-way transfer of valued resources (i. e. exchange as reciprocation)<sup>1</sup> and the one-way distribution of resources across a category or "circle" of recipients (i.e. allocation).<sup>2</sup>

For our purposes, allocation occurs when an allocator distributes valued rewards, resources, rights, obligations, etc.,<sup>3</sup> to an array of recipients. Whether the recipients are involved in a direct exchange relation with the distributor or indirectly with each other is a secondary analytical distinction. Furthermore, in many situations exchange and allocation processes combine (Eckhoff 1974).<sup>4</sup>

### *Procedural Justice: Fair Procedures*

Participants in exchange and allocation also evaluate the fairness of the mechanisms or procedures involved. This general topic, only recently researched, has been called "procedural justice" (see Thibaut & Walker 1975; Leventhal et al 1980).

Despite what might be perceived as a fair or just distribution of outcomes, the procedures by which the distribution was arrived at may be defined as unjust or illegitimate. Conversely, what participants consider a fair and unbiased procedure (e.g. drawing lots) might nevertheless result in a distribution of outcomes that some would define as inequitable or unjust. Thus distributive justice and procedural justice represent distinct types of justice judgments.

<sup>1</sup>Eckhoff distinguishes several types of reciprocity involving the transfer of (a) two negatively valued resources (-, -); (b) a positively valued resource followed by a negatively valued one (+, -); (c) a negatively valued resource followed by a positively valued one (-, +); and (d) two positively valued resources (+, +). The transfer of positively valued resources (+, +) is identified as exchange.

<sup>2</sup>Allocation situations are sometimes conceived as instances of "indirect" exchange (see Blalock and Wilken 1979).

<sup>3</sup>The distribution of negatively valued outcomes like punishment, liabilities, or fines is distinct from the allocation of positively valued resources and is discussed more fully in the section on Retributive Justice, below.

<sup>4</sup>Other investigators (e.g. Cohen 1979; Leventhal et al 1980) stress the distinction between exchange and allocation. Cohen (1979), for example, distinguishes between (a) individual deserving, which focuses on levels of deserving derived from the comparison of exchange ratios, and (b) distributive justice, which consists of principles governing allocations and the evaluation of existing distributions.

### *Retributive Justice: Just Compensation*

Finally, in what is often conceived as an entirely separate set of social situations, actors are sometimes concerned with the fairness of the allocation of punishments (i.e. does the punishment fit the crime?) or of the level of compensation for victimization (e.g. victim compensation laws, affirmative action policies, and the like; see Macaulay & Walster 1971; Blackstone & Heslep 1977). Despite Hogan & Emler's (1981) recent claim that retribution, not distribution, is the most fundamental principle of social life, only recently have equity/justice theorists begun to explore this class of concerns empirically (e.g. Austin et al 1976; Hamilton & Rytina 1980). According to Hogan & Emler (1981:130), although "justice...always contains a positive and a negative side, as reflected in the terms distributive justice and retributive justice, psychologists have focused almost exclusively on the positive side—on allocating and exchanging benefits on a just basis."

### *Justice: Principles of Equality*

A general approach to justice that easily incorporates equity and distributive justice, and that provides indirectly for procedural and retributive justice, is the concept of multiple justice principles or distribution rules. While many social scientists (e.g. Rescher 1966; Deutsch 1975; Leventhal 1976a,b) have advocated this approach, perhaps the most systematic effort is that of Eckhoff (1974). He identifies five distinct principles of equality that are applied during allocation.<sup>5</sup> (Exchange can be defined as a special class of allocation in which the distribution mechanism is the two-way transfer of mutual benefit.) Table 1 presents Eckhoff's classification of justice principles.

Within this framework most distribution rules can be conceived as equality principles. The "equality rule" traditionally referred to in the justice literature (i.e. equal amounts to each recipient) Eckhoff calls "objective equality." The "equity rule," also labeled the "contributions rule" (i.e. equality of outcome/input ratios or equality relative to individual contributions),<sup>6</sup> is Eckhoff's principle of "relative equality." The "needs rule" (Schwartz 1975, 1977) (i.e. equality of outcomes taking into account need and/or desert) is classified by Eckhoff as a principle of "subjective equality."

The principle of rank order equality is found in Homans' earlier work (1958:604): "If the costs or investments of the members of one group are higher than those of another, distributive justice requires that their rewards should be higher, too." He refers to this as a condition of equilibrium because it is a

<sup>5</sup>Philosophical statements that justice is not the same as equality (e.g. Lucas 1980) do not completely contradict Eckhoff's position. These philosophical statements generally refer to objectively equal amounts, only one of the equality principles identified by Eckhoff.

<sup>6</sup>In research comparing objective and relative equality these two principles are typically labeled the equality and contributions rules, respectively (see Leventhal 1976a,b; Schwinger 1980).

**Table 1** Principles of equality applied to allocation

| What is to be equal                           | Relevant characteristics of recipients |         |        |        |          |      |
|---|--|---------|--------|--------|----------|------|
|   | Need                                   | Fitness | Desert | Status | Position | None |
| 1. Equal amounts to each (objective equality) |  |         |        |        |          | X    |
| 2. Subjective equality                        | X                                      |         | X      |        |          |      |
| 3. Relative equality (equity)                 |  | X       | X      |        |          |      |
| 4. Rank order equality                        |  |         |        | X      | X        |      |
| 5. Equal opportunity                          | X                                      | X       |        |        |          | X    |

condition of “felt justice”<sup>7</sup> (see Cook & Parcel 1977). This concept is also the basis for Berger et al’s (1972, 1983) status-value theory of distributive justice, which formulates the problem in status-consistency terms. Normative expectations emerge in status situations concerning the proper or just allocation of rewards. Problems of distributive injustice arise in such situations when the actual allocation of rewards is not “in line with” these normative expectations.

Equality of opportunity, the fifth principle identified by Eckhoff, is a complex conception of justice difficult to apply. This difficulty derives in part from the inherent complexity of the term “opportunity” and of the historical antecedents of inequality. Many issues of distributive justice have arisen in the context of affirmative action and racial integration policies<sup>8</sup> and thus overlap with notions of retributive or compensatory justice.

Eckhoff’s typology enables us to classify justice principles into two broad categories: (a) those that depend upon the characteristics of recipients (Table 1, principles 2, 3, and 4) and (b) those that do not (principles 1 and 5). Recently, Brickman et al (1981) have made a similar distinction. Brickman classifies the principles that depend upon recipients’ characteristics as “microjustice” principles; those that specify the nature of the outcome distribution without reference to recipients’ characteristics are classified as “macrojustice” principles.<sup>9</sup>

<sup>7</sup>He also refers to this as a condition of “status congruence.” Concerning the relationship between distributive justice and status congruence Homans (1974:246) concludes, “Perhaps there are no pure cases of distributive justice; perhaps it always comes mixed with some status anxiety.”

<sup>8</sup>For example, Jencks (1972) concludes from his assessment of schooling opportunities in America that equalizing one aspect of the education/occupation system is unlikely to have much effect on the degree of inequality in other areas.

<sup>9</sup>More specifically, microjustice principles specify the correspondence between individual characteristics and outcomes, indicating levels of individual desert; macrojustice principles refer not to individuals but to the shape of the distribution of outcomes in some aggregate.

### *Concluding Comment*

The recent move away from earlier monistic formulations of justice (e.g. Adams 1965) facilitates the analysis of more complex and interesting issues of social justice and injustice. Not only might different distribution rules (and concomitant conceptions of justice) apply under different conditions, but various rules might be applied in combination (Leventhal 1976b) or sequentially to determine the ultimate just or fair distribution of a reward or resource (Cook & Yamagishi 1983). Further theoretical development along these lines will make justice theory and research applicable to a wider range of social phenomena.

### SITUATIONAL AND INDIVIDUAL FACTORS AFFECTING RULE PREFERENCE

Much of the research on equity and distributive justice over the past decade has attempted to discover which principles are appropriate or preferred in various social situations. This research generally has attempted to: (a) specify the appropriateness of particular distribution rules for achieving certain goals (e.g. Leventhal 1976a,b; Leventhal et al 1980) and (b) identify factors affecting individual preferences for certain rules (see Schwinger 1980; Mikula 1980b). Rule appropriateness and preferences are typically analyzed using data obtained from either vignettes or interactions in laboratory settings.

#### *Goals of Interaction: The Functions of Distribution Rules*

The goals of interaction are important determinants of the selection of an appropriate distribution rule (Leventhal 1976a,b). These investigations generally focus on three rules: contributions (or equity), need, and equality (i.e. Eckhoff's principles 1–3). When the goal is to facilitate and enhance productivity, the contributions rule is preferred (Porter & Lawler 1968; Lawler 1971; Leventhal 1976a,b). Deviations from the application of this rule may occur (a) when overrewarding lesser contributors is perceived as necessary to stimulate their performance (Leventhal & Whiteside 1973; Greenberg & Leventhal 1976) and (b) when there is so much antagonism and rivalry among coworkers that overrewarding the lesser contributors may prevent dissatisfaction and disruptive behavior (Goode 1967; Lawler 1971; Steiner 1972).

While use of a contributions rule presumably facilitates productivity, the actual assessment of productivity in experimental situations is rare. After reviewing 24 studies, Miller & Hamblin (1963) found that the productivity promoting function of the contributions rule was realized in only 14 of the studies, typically under the condition of low task interdependence; results from the remaining studies suggested that use of an equality rule was correlated with higher productivity.

When concern for preserving harmony in a group is paramount, distributions of equal amounts may be deemed appropriate in order to minimize perceived relative deprivation and emphasize members' "common fate" (Leventhal et al 1972; Steiner 1972; Smith & Cook 1973), thus promoting solidarity. Leventhal & Michaels' (see Leventhal et al 1980) research confirmed this prediction; however, their findings also suggest that when sizeable differences in levels of performance exist among group members, subjects prefer using a distribution rule that simultaneously rewards superior performance while keeping all members satisfied enough to prevent strong negative feelings.

Finally, the "needs" rule is often defined as appropriate when the well-being of individuals is most salient (Schwartz 1975, 1977) or when individuals' needs are perceived to be closely linked to group success (Leventhal 1976a,b). Furthermore, scarcity contributes to the use of a needs rule; when the supply of a valued resource is low, both need for the resource and readiness or ability to use it are taken into account in allocation decisions (Leventhal et al 1973b). Leventhal et al (1980) have identified factors that seem to weaken perceived appropriateness of the use of a needs rule in particular situations such as severe scarcity, emotional detachment from the group, and belief that the use of a needs rule perpetuates dependency.

### *Factors Influencing Distribution Rule Preference*

Many influences upon individuals' preferences for particular distribution rules have been explored: (a) characteristics of the relationships among group members; (b) cognitive mediating factors; (c) number of relevant inputs; and (d) other personal and situational factors.

**CHARACTERISTICS OF THE RELATIONSHIP** Research results indicate that preferences for particular distribution rules vary based on factors typically associated with interpersonal attraction processes such as similarity, proximity, and degree of self-disclosure. Actors who perceive themselves as attitudinally similar to one another are more likely to prefer equal distributions over "equitable" ones (Greenberg 1978a). Proximity is usually assessed only indirectly in empirical situations by varying the perceived probability of future interaction. For example, Greenberg (1979) and Shapiro (1975) report that actors who anticipate future interaction generally prefer an equality rather than an equity (contributions) rule. Where allocation decisions are made openly, preference for a contributions rule decreases; where allocation decisions are made secretly, preference for use of a contributions rule increases (Lane & Messé 1971; Leventhal et al 1972; Leventhal et al 1973a; Reis & Gruzen 1976).

Self-interest, which is often reflected empirically in rule preference (e.g. Lane & Messé 1972; Leventhal & Anderson 1970; Messick & Sentis 1979) should cause greater contributors to prefer equity and lesser contributors,



equality. However, actors involved in a continuing relationship seem to prefer an equal distribution of outcomes if they are greater contributors and an equitable distribution if they are lesser contributors. Mikula (reported in Schwinger 1980) describes this phenomenon as a “politeness ritual;” an actor “looks good” to his/her partner by selecting a distribution rule that is clearly not in his/her self-interest.<sup>10</sup>

Both affective (e.g. emotional quality) and quantitative (e.g. duration) dimensions of the relationship between actors may influence their distribution rule preferences. Studies suggest friends use an equality rule while nonfriends use an equity rule (Morgan & Sawyer 1967; Benton 1971; Austin 1980). Austin’s (1980) findings also indicate that among nonfriends the principle that promotes self-interest is systematically preferred. Lamm & Kayser (1978), in contrast, found that among friends an equality rule was not preferred if one actor exerted less effort than the other and both effort and ability were taken into account. An equal division, however, was consistently preferred among nonfriends.<sup>11</sup>

Mikula & Schwinger (1973) demonstrated that an equality rule was preferred among high contributors who liked their partners. Furthermore, when actors discussed the allocation decision, dyads characterized by positive sentiments preferred an equal distribution much more often than an equitable one, whereas in dyads characterized by negative relations the two principles were used with equal frequency. Similarly, Lerner (1974) found that when the team aspect of a relationship is emphasized, a preference for equality over equity emerges.

The effects of the quantitative dimensions of relationships on rule preference have scarcely been studied. Findings obtained by Mikula (reported in Mikula 1980b) suggest that persons involved in a long-term relationship tend to prefer an equality rule while those in short-term or temporary relationships prefer an equity rule.

Although many researchers posit that the needs rule is applied in groups that involve close personal relationships (Deutsch 1975; Lerner 1977; Mikula & Schwinger 1978), there are few empirical tests of this proposition. Recently, Lamm & Schwinger (1980) demonstrated in a vignette study that allocation according to need was more prevalent among friends than nonfriends who worked jointly and contributed equally on a task.

<sup>10</sup> Similarly, a third party more favorably evaluates an allocator who maximizes the outcomes of other group members; the most preferred allocators are those who use an equity rule when their own inputs are low and the equality rule when their own inputs are high (Kahn et al 1977; Feather & O’Driscoll 1980).

<sup>11</sup> The contradictory findings regarding the effects of friendship on rule preferences may stem, in part, from the differences in the studies. Lamm & Kayser (1978) used a vignette technique and introduced multiple inputs whereas the other studies employed a methodology allowing actual participation of subjects and included only one input as relevant in allocation decisions. Lamm & Kayser’s findings indicate that in friendships, multiple inputs are differentially weighted in such a way that poor effort implies a violation of friendship rules.

**COGNITIVE MEDIATING FACTORS** The cognitive aspects of justice processes have received attention only recently. Studies typically attempt to link attribution theory with equity theory or other theories of justice (see Cohen 1982).

In operationalizing the augmentation principle in attribution theory (Kelley 1973), Leventhal & Michaels (1969) found that the inputs of an actor who overcomes an external constraint are more highly valued, as reflected in reward allocations, than the inputs of an actor who faces no constraints and contributes the same amount. Cohen (1974) and Uray (1976) found that poorer performers receive more than their equitable share when there are constraints on their performance, but only when the probability of general success is high. When a task is very difficult, on the other hand, constraints on performance do not decrease the preferences of better performers for an equity rule. Wittig et al (1980) report that actors prefer an equality rule when performance is attributed to luck (external causation) but prefer a "compromise" rule (which produces unequal and not strictly equitable outcomes) when performance is attributed to effort (internal causation).

**NUMBER OF RELEVANT INPUTS** While there has been some discussion of the cognitive processing of multiple inputs (see Anderson & Butzin 1978; Farkas & Anderson 1979), only Cook & Yamagishi (1983) have addressed the effect of this processing on rule preference. They argue that individuals weigh inputs and distribution rules in deciding how to distribute a valued outcome. Their findings suggest that multiple distribution rules are used when a fixed amount is allocated whereas when the amount of reward is determined by member contributions, the equity rule with differentially weighted inputs is preferred and the inputs are weighted in a self-interested fashion.

Other studies examine the relevance of each single input in the context of others. Vignette studies by Kayser & Lamm suggest that the relevance of an input to distribution varies with the input level that accompanies it (Kayser & Lamm 1980). For example, among friends, effort appears to affect allocations more than ability does whereas effort and ability are equally weighted in allocations among nonfriends (Lamm & Kayser 1978).

**OTHER FACTORS** Few effects of personality upon choice of a distribution rule have been examined empirically, and these few have often been dependent upon situational factors (see Mikula 1980b). For example, in the case of greater contributors, achievement orientation is related to preference for the equity rule (Uray 1976). Those with an intense need for social approval are likely to select the rule that distributes a smaller share of the reward to themselves if they strongly admire their partners (Mikula & Schwinger 1973). Furthermore, Greenberg (1978b) suggests that persons who score high on a scale of Protestant ethic orientation prefer the equity rule in situations they perceive as

procedurally fair; when the situation is perceived as unfair procedurally, they prefer equality or some other distribution.

The findings on the effects of age on rule preference are inconclusive. Some studies suggest that self-interested allocations diminish with age (Lane & Coon 1972; Leventhal & Lane 1970). Hook & Cook (1979) provide evidence supporting the hypothesis [derived from Piaget's (1965) work] that younger children opt for the less computationally difficult rule—i.e. an equality rule—while older, more cognitively advanced children prefer an equity rule.

Similarly, findings regarding the relationship between gender and distribution rule preference are mixed. Coalition experiments suggest that females are more likely to prefer an equality to an equity principle in allocating rewards to coalition members while the opposite is true for males (e.g. Bond & Vinacke 1961; Wahba 1972; Kormorita & Moore 1976). Some studies indicate that males tend to demand a larger share of the reward than do females (Leventhal & Lane 1970; Lane & Messé 1971; Messé & Lichtman 1972), yet other evidence shows that females allocate more to themselves than males do (Lerner 1974). A number of studies (e.g. Lane & Coon 1972; Leventhal et al 1973a; Austin & McGinn 1977) report no gender differences in allocation preferences.

While studies of distribution rule preference generally examine allocations when the inputs and outcomes are positive, recently Harris (1980) and Harris & Joyce (1980) have investigated the impact of negative inputs on allocation decisions. Experiments examining allocations among four or five actors described in vignettes suggest that the negative inputs of an actor are not fully reflected in the outcome distribution; that is, the lower outcomes allocated to such an actor are not as low as a division based strictly on the contributions rule would demand. Additional findings indicate a tendency for actors to prefer an equality rule when the computations involved in the application of alternative distribution rules are more complex. This "simplifying function" of the use of a simple equality rule is reported in studies of procedural justice as well (Leventhal et al 1980).

Most studies in which rule preferences are investigated give subjects information on relative performance or contribution levels. However, to test Rawls's (1971) prediction that unequal distributions that benefit the disadvantaged are preferred under the "veil of ignorance," subjects in two studies were not informed about their own or others' positions in the system. Brickman's (1977) results confirmed the prediction, whereas those of Curtis (1979) did not.

### *Conclusions*

Studies of rule appropriateness generally provide only weak evidence concerning the underlying functions of various distribution rules. This research is limited in several respects: (a) Isomorphism between individual and group goals is typically assumed; (b) often only a single goal is operationalized at

a time; (c) rule appropriateness is typically assessed only from the allocator's viewpoint and not from the recipients' perspective; (d) a subject is typically asked to play the role of allocator and thus s/he has little at stake in the actual decisions or their consequences; and (e) few investigations examine the conditions under which different rules can be used simultaneously or in combination to promote multiple goals (e.g. harmony and productivity). In order to make more conclusive statements regarding the actual, rather than the perceived, functions of distribution rules, further research is required.

Much of the empirical work concerning rule preference appears disjointed and noncumulative. In addition, two general methodological shortcomings affect this research: (a) The two methodologies typically employed in these studies do not provide consistent results, perhaps because responding to vignettes involves "lower stakes" than determining one's own outcomes; and (b) only a handful of studies have examined rule preference in groups of three or more actors (e.g. Harris 1976; Brickman 1977; Harris & Joyce 1980). This second shortcoming also reflects the failure of existing theories to address the effects of the group context or group-level factors on members' and observers' rule preferences.

## REACTIONS TO INJUSTICE: EMPIRICAL RESULTS

Injustice is typically viewed as the violation of an appropriate distribution rule. The exchange approach to equity deals most explicitly with reactions to injustice.

### *Individual Reactions to Injustice*

Adams (1965) proposed that under inequitable conditions individuals experience distress that motivates them to restore equity by: (a) altering their own inputs; (b) altering their own outcomes; (c) cognitively distorting their own or their partner's inputs or outcomes; (d) leaving the situation; or (e) changing the object of comparison. Similarly, Walster et al (1973) identify two categories of reactions: those that restore psychological equity and those that restore actual equity. Individuals presumably choose the least costly and most adequate means of restoring equity.

**INEQUITY DISTRESS** Only a few studies attempt to test empirically the assumption that inequity creates distress or dissonance. Some evidence suggests that inequitably treated individuals report more distress than those equitably treated (Schafer & Keith 1980), especially if the inequity is unexpected (Walster & Austin 1974); that underrewarded individuals are more distressed than overrewarded ones (Lane & Messe 1971); and that an individual's tension level increases as the size of inequity increases (Leventhal et al 1969a). However, the type of distress involved has not been thoroughly explored.

**RESOLUTION OF INEQUITY** Of the five modes of resolution proposed by Adams, only three have been examined empirically. The productivity experiments of Adams and his colleagues (e.g. Adams & Rosenbaum 1962; Adams & Jacobsen 1964) address the alteration of inputs. Reallocation experiments in the tradition of Leventhal and others (e.g. Leventhal et al 1969a; Leventhal & Bergman 1969; Kahn 1972) focus on the alteration of outcomes. Evidence of "leaving the situation" was gathered incidentally in situations where restoration of equity by the alteration of either inputs or outcomes was expected (e.g. Valenzi & Andrews 1971; Schmitt & Marwell 1972).

*Productivity experiments* In the productivity experiments of Adams and others, the subject is led to believe that for a certain task s/he will receive an hourly wage or will be paid a piece rate. The subject is then overpaid, equitably paid, or underpaid. After this manipulation of payment, the subsequent quantity and/or quality of the subject's work are assessed.

Adam's (1965) theory predicts that at hourly rates, overpaid subjects will produce more, while underpaid subjects will produce less. Although some evidence supports this prediction for overpaid subjects (e.g. Adams & Rosenbaum 1962; Goodman & Friedman 1968; Lawler 1968a; Cook 1969; Wiener 1970), other studies have not found a significant effect on quantity (e.g. Friedman & Goodman 1967; Evan & Simmons 1969; Heslin & Blake 1969; Anderson & Shelley 1970; Andrews & Valenzi 1970; Wilke & Steur 1972; Valenzi & Andrews 1971; Hinton 1972). The underpaid condition has not been as rigorously investigated, but findings on this condition are also mixed. Results from Pritchard et al (1972) support the prediction, while those of Evan & Simmons (1969) and Valenzi & Andrews (1971) do not.

In piece rate experiments Adams (1965) predicts that overpaid subjects will produce less work of higher quality and underpaid subjects will produce more work of an inferior quality. Research has generally supported this prediction in the overpaid condition (e.g. Adams & Rosenbaum 1962; Adams & Jacobsen 1964; Andrews 1967; Lawler et al 1968; Evans & Molinari 1970). However, Moore, & Baron (1973) and Hinton (1972) find no main effect for payment. More recently, Vecchio (1981) found that response in the overpaid condition depended partially on the moral maturity of the individual; the equity prediction regarding quantity was true only for "morally mature" subjects.<sup>12</sup> Again, much less evidence supports (Lawler & O'Gara 1967) or refutes (Andrews 1967) the predictions for underpayment.

<sup>12</sup>Others have more specifically discussed the relationship between moral development and conceptions of justice (Berg & Mussen 1975; Karniol & Miller 1981).

*Reallocation experiments* The reallocation experiments conducted primarily by Leventhal and his associates during the 1970s usually involved performance on a task for which each member of a dyad was overpaid, equitably paid, or underpaid. Then subjects were given rewards from a second task or simply a “bonus” to allocate to group members.

Subjects generally reallocated in a manner that restored equity to the relationship—e.g. by compensating the inequitably underpaid subject (Leventhal et al 1969a; Kahn 1972; Törnblom 1977b). However, if an actor was extremely underrewarded, self-depriving behavior was induced (Leventhal & Bergman 1969). Other studies provide qualified support. When inequity is created by chance rather than intention, additional outcomes are not distributed to restore equity (Leventhal et al 1969b; Garrett & Libby 1973). Cook’s (1975) findings suggest that ascription of responsibility for the inequity may be an important determinant of individual reactions to inequity.

*Other forms of inequity resolution* Other forms of inequity resolution, including leaving the situation, have not been explicitly or extensively examined empirically. Lerner (Lerner et al 1976; Lerner 1980) suggests that people construe events in a way that enables them to believe that others get what they deserve—e.g. in order to maintain their believe in a just world, people will hold a victim responsible for his/her misfortune. Research provides evidence of this belief but also indicates that it is affected by situational and individual characteristics (Rubin & Peplau 1975; Miller 1977; Lerner 1980).<sup>13</sup>

A CRITIQUE Previous assessments of Adams’s (1965) formulation have explored alternative interpretations of these findings and the demand characteristics operative in the productivity experiments (Lawler 1968b; Pritchard 1969; Goodman & Friedman 1971). For example, Lawler (1968b) suggests that expectancy theory handles both the predictions and the results of equity research as well or better than equity theory. In addition, desires to maintain self-esteem (Andrews & Valenzi 1970) and ensure job security may have motivated subjects as much as did their feelings about equity.

The reallocation experiments provide more consistent results and appear more methodologically sound than the productivity experiments. However, the relationship between a subject’s inputs and outcomes is typically never clearly specified in these experimental situations. A lack of correspondence between theory and research is also evidenced in this work. The theory is frequently couched in exchange terms, yet the empirical tests involve primarily allocation

<sup>13</sup>An interesting social consequence of the justification of suffering produced by belief in a just world is that it alleviates an individual’s responsibility to relieve the suffering of others.

situations.<sup>14</sup> Also, exchange theory implies a “local” comparison (to one other person) while in most of the actual research a “referential” comparison (to a generalized standard) was operationalized [see Berger et al (1972) for a discussion of these comparisons]. The differences among judgments of justice when an individual compares his/her exchange ratio with that of another person, with that of a group standard, or with both simultaneously have yet to be addressed empirically. Finally, the theory purports to be able to predict the selection of an inequity resolution mode, yet not all modes have been examined nor have factors affecting preference for one mode over another been systematically studied.

More recent theoretical developments focus on factors that may influence reactions to inequity as well as the selection of a mode for restoring equity. Utne & Kidd (1980), for example, argue that attributions about the cause of the inequity affect individual reactions. Similarly, Törnblom (1977a) has developed a typology of injustice situations representing the selection of an inequity resolution mode as a function of the source and magnitude of inequity (which are dependent upon social and internal comparisons as well as the components of each actor’s outcome/input ratio), the availability of alternative modes of compensation, and whether the resolution technique creates a new situation of injustice. The theoretical implications of this typology have yet to be explored empirically.

### *Reactions to Injustice Involving Three or More Actors*

As indicated above, most of the research on reactions to inequity focuses on individuals engaged in dyadic relationships. In some instances, however situations involving three or more actors have been examined.

<sup>14</sup>Most empirical research on equity theory involves the study of allocation, not exchange, situations, even though the exchange model has been the dominant theoretical perspective. According to McClintock & Keil (1982:375):

If by an exchange model of human action one implies an explanatory system that considers how two or more actors attempt to obtain resources in settings of mutual outcome control, then one must unfortunately conclude that there have been relatively few conceptual attempts to specify how rules of equity of fairness regulate the formation and maintenance of such relationships and there have been even fewer attempts to examine fairness in such relationships.

Typically, individuals are given limited information about the actors involved in a situation (e.g. their different levels of effort and/or performance) and then are asked to allocate a reward, usually in money. As Sampson (1981:111) put it, “The standard research model has the investigator implicitly adopting an ongoing cultural framework that already assumes when justice is or is not involved. People’s responses to these predefined situations are then studied.”

REACTIONS TO A DISTRIBUTION With information on the outcomes of more than one other individual, the context of injustice may be examined insofar as both local (i.e. individual) and referential (i.e. reference group) comparisons are possible. Brickman (1975) investigates perceptions of fairness and satisfaction in response to information concerning the distribution of outcomes in four-person groups. His results indicate that perceptions of satisfaction and fairness do not correspond. Perceived satisfaction was highest in negatively skewed distributions (where one person receives no points and the others receive equal points) determined by skill; however, equal distributions were judged fairest regardless of whether they were produced by skill or chance. The inconsistency in these results may be explained by factors found to affect the pattern of perceptions in the same manner as demonstrated here: (a) the groups consisted of friends, and friends often prefer equal distributions (Morgan & Sawyer 1967; Benton 1971); and (b) fairness questions typically induce social comparisons whereas satisfaction questions usually focus attention on one's own outcomes and thus do not require taking others into account (Austin et al 1980; Messick & Sentis 1983).

Cook & Emerson (1978) examined the relationship between justice concerns and the exercise of power. Assuming that the display of the distribution of outcomes activates equity concerns, findings in four-person groups indicate that power use is restrained when knowledge of differential outcomes is provided.

TRANSRELATIONAL EQUITY COMPARISONS Austin & Walster (1975) argue that individuals assess the degree of equity they experience in the totality of their relationships, or "equity with the world" (EWW). They seek to conserve EWW when the costs of achieving "person-specific" equity is high. Thus if inequitably treated by a partner in one relationship, an actor may subsequently treat the partner in another relation inequitably in order to maintain his/her sense of equity across all relationships (e.g. if A is overrewarded by B but can't compensate B for it, then A may subsequently overreward C). Experimental evidence supports this notion when the actor is not held accountable for the inequity created in the second relationship or does not anticipate future interaction with the person s/he treats inequitably (Austin & Walster 1975; Moschetti & Kues 1978). The findings of this research, however, are limited for several reasons. The perspective assumes that inequity is a transitive relationship. Furthermore, at most only two dyadic relationships are examined. And finally, the element of time is not considered (by what time must one achieve EWW?). Thus, the applicability of this perspective to larger networks of relationships is questionable.



**COLLECTIVE REACTIONS** Collective reactions to injustice are not specifically addressed in equity theory. However, rebellion and revolution are often assumed to be based upon some form of perceived injustice (Gurr 1970; Moore 1978). Gurr's (1970) account of revolutions stems theoretically from a relative deprivation framework (Merton 1968), but he fails to develop fully the link between the individual and the group.<sup>15</sup> Moore (1978), in contrast, takes a more descriptive approach. He attempts to link the development of moral codes and the legitimation of authority to such structural features of society as the nature of the division of labor. He argues that when the "oppressed" have created their own standards of moral condemnation, people may act collectively to redress injustice. The moral elements of Moore's approach make it distinctive as well as more difficult to test because, as he recognizes, morality is relative. Both Gurr and Moore are subjects of recent criticism by deCarufel (1981:325): ". . . the problem is that social psychologists in this area have treated individual and collective actions as equivalent and have explained collective actions, such as riots and revolution, in terms of the individual psychological processes of the participants."

A few coalition experiments examine the link between individual and collective reactions to injustice. Results from Overstreet (1972) and Webster & Smith (1978) suggest that coalitions between the two "weak" members in three-person groups are likely to form when they are faced with what they perceive to be an unjust distribution. However, in many coalition situations, it is not clear whether actors respond on the basis of their perceptions of injustice or on that of an imbalance of power (Cook et al 1979). Perhaps power discrepancies stimulate coalition formation as a structural response, while similar perceptions of injustice among coalition members provide the normative basis for group solidarity, an important ingredient in collective responses.

In an experimental study Sell & Martin (1982) examine collective reactions in terms of the decision by group members to invoke a distribution rule other than the rule imposed by a "legitimate" authority. Their findings suggest that group members are more likely to "overthrow" a distribution rule sanctioned by a legitimate authority when there exists another rule upon which the group agrees and which is more beneficial to the group members collectively.

### *Conclusions*

In summary, three observations are relevant to theory and research on individuals' reactions to injustice: (a) Only two types of reactions to inequity have

<sup>15</sup>Failure to make the link between individual (or egoistic) and group (or fraternal) deprivation weakens Gurr's (1970) formulation. Furthermore, as deCarufel (1981) notes, in addition to felt fraternal deprivation, collective action requires processes of resource mobilization, organization, and leadership.

been examined empirically in any depth, and the findings pertaining to one of these, namely productivity, are inconclusive; (b) the determinants of the selection of an inequity resolution mode are not clearly specified theoretically, and few situations in which more than one type of resolution mechanism is "available" have been investigated empirically; and finally, (c) theory and research on this topic do not always correspond. Recent theoretical developments attempt to address these inadequacies in terms of cognitive processes and social comparisons; however, empirical research lags behind.

All of the perspectives on reactions to injustice imply the existence of a legitimate distribution rule [see Della Fave (1980) regarding the process of legitimation]; yet, as Sell & Martin (1982) demonstrate, the legitimate rule may not be the rule preferred by group members. As previously discussed, individual preferences for distribution rules vary depending on structural position, information available, characteristics of the relations among the actors involved, etc. Consequently, one actor's perception of what is fair in a situation may not be shared by another. Dissimilar perceptions of injustice would presumably thwart the mobilization of collective resources to overcome injustice. The precise nature of the relationship among injustice, multiple distribution rules, and individual and collective reactions to injustice remains to be addressed both theoretically and empirically.

## FROM MICRO TO MACRO CONSIDERATIONS: BEYOND THE PSYCHOLOGY OF JUSTICE

In a recent review chapter entitled "Equity and Social Exchange," McClintock & Keil (1982:383) conclude:

Explanations of the processes underlying perceived injustice are undoubtedly essential to understanding the role that fairness plays in human behavior. But the greatest advances in understanding rules of fairness in relation to human behavior will occur when we begin to understand how they help to define and to determine the structure and the ongoing processes of human interdependence and exchange. Such an understanding will have profound implications for theoretical advances in all of the social sciences.

In this section, we speculate on fruitful directions for future research.

### *Justice as Strategy: Beyond Norms*

Only recently have justice theorists begun to think in terms of the strategic implications of the use of particular distribution rules [see especially the work of Leventhal (1976b; Leventhal et al 1980)]. Heavy reliance upon normative conceptions of justice has blinded researchers to more strategic considerations (Eckhoff 1974). As Sampson (1981:111) puts it, "when we treat justice motivation intrapersonally as a fundamental psychological force that operates

in a similar manner in all people, we tend to overemphasize consensus over conflict and negotiation.” When viewed instead interpersonally, we introduce the “process of people interacting... and attempting to negotiate some agreement or compromise over what will be accepted as just and fair,” he goes on to argue. Few empirical studies have examined the nature of such negotiations concerning what constitutes a fair or just distribution. In this context, the notion of multiple distribution rules takes on even greater theoretical significance, since it clearly implies the potential for conflicting conceptions of justice.<sup>16</sup>

Eckhoff (1974) argues that concepts of justice have both strategic and normative implications within the context of allocation and exchange situations. The use of norms of justice to regulate exchange and allocation processes has important social structural consequences. Empirical analysis of these consequences is needed; research to date has focused too narrowly upon the simple application of principles of distribution and the analysis of reactions to inequitable distributions (viewed as a normative violation).

Eckhoff (1974) suggests that norms of justice and various types of exchange rules and agreements emerge to regulate exchange activity. If the return is specified in terms of some consensual notion of fairness (or equitable exchange rates), then it is not necessary to negotiate a return; thus adherence to justice norms in exchange situations both increases predictability and reduces the costs of bargaining (Thibaut & Kelley, 1959). Such norms typically emerge, Eckhoff (1974) argues, around exchange transactions not regulated by the market. Norms emerge that specify not only who shall engage in exchange but also when and under what conditions exchange shall occur. Principles of justice are only one class of norms that form to regulate the transfer of valued outcomes. To use terminology Williamson (1975) has recently popularized, “when markets fail,” systems of exchange may be regulated by principles of justice and other normative constraints as much as by centralized structures (or hierarchies) and power processes. This is more likely to be the case in systems of exchange involving actors engaged in continuing relations, where maintenance of the underlying exchange relations is of paramount value (e.g. in families, small groups, or communities characterized by some degree of intimacy, attachment, or commitment).

Eckhoff’s (1974) analysis of justice provides a general framework within which the role of justice processes can be investigated in relation to such other mechanisms as: the formation of contracts; the emergence of markets; and the evolution of agreements regulating exchange and allocation activity in various social systems, among participants varying in degree of interdependence. Within this framework justice or fairness is not as many psychologists view it

<sup>16</sup>Conflict refers here specifically to differences over distribution rules and not differences with regard to the relevant inputs in a situation.

simply one motive among many (or one set of preferences in a hierarchy of competing preferences); instead it is a fundamental aspect of social structure. Neither is justice simply the result of how powerholders wield power [as Hogan & Emler (1981) would have us believe]; rather, it results from negotiation of claims (see Rescher 1966) variously viewed as legitimate or fair by those occupying different positions in the social system.

Research by Rossi and his colleagues (Jasso & Rossi 1977; Alves & Rossi 1978) suggests that judgments of fairness in the distribution of earnings in the United States are guided by consensually held distribution rules and that many such rules operate simultaneously. These studies also indicate that certain characteristics of individuals (e.g. occupation, education, marital status, number of children, gender, ethnicity) are perceived as more important than others, and an individual's position in the social structure influences which factors are rated as most important in determining the fair level of earnings. Similarly, Tallman & Ihinger-Tallman (1979) note that lower-class individuals are more likely to advocate an equality rule than are upper-class members. Variation in distribution rule preferences in terms of structural position is also reported by Robinson & Bell (1978); in Great Britain and the United States, those who benefit from the system define objective inequality as just, while those who do not benefit (i.e. the "underdogs") define it as unjust.

Concern for justice has long been recognized anecdotally as strategically important in the mobilization of collective movements among the "powerless" (e.g. see Lawler's 1975 study of revolutionary coalitions). Thus issues of justice serve not only the interests of the powerful but also, under certain circumstances, the interests of those who define themselves as collectively powerless or relatively deprived (Martin & Murray 1983). Throughout history, various ideologies have used cries of injustice to motivate such collective actions as strikes, riots, and revolutions. Further theory and research on the strategic role of justice processes in the mobilization of collective action will extend existing theories of equity and distributive justice—a step that will move us beyond the psychology of justice to an analysis of social change.

### *Macrojustice: The Contextual Analysis of Justice*

Only recently have social psychologists begun to note that justice processes are significantly affected by general cultural, social, and economic conditions. Several contributors to the recent Lerner & Lerner (1981) volume attempt to specify, for example, how economic conditions of supply and demand correlate with justice judgments and distribution rule preferences.

Greenberg (1981) provides some evidence that the perceived fairness of particular distribution schemes is a function of resource scarcity. Results of a survey regarding the fairness of two schemes for allocating natural resources suggest that for the distribution of abundant resources no preference was felt

between a needs and an equality rule, while for distribution of scarce resources a needs rule was strongly preferred to an equality rule.

Further attempts to specify the cultural, social, and economic determinants of the perceived fairness of distribution schemes will facilitate linking equity theory and theories of distributive justice to the analysis of social change more generally (Sampson 1981). The "politics of scarcity" may well involve the strategic use of distribution rules, conflict over distributional policies, and the mobilization of collective reactions. All of these will be of interest to sociologists and political scientists. Thus the potential exists for integration of justice theories with more traditional theories of conflict, power, and coalition formation.

## CONCLUDING COMMENT

As evident in our review of the empirical literature, this field has been dominated by psychologists; thus, the emphasis upon cognitive conceptions of justice, information processing models, dyadic relations, and individual reactions to inequity should not be surprising. Yet, the psychologists are currently calling for a more "sociological" approach to the analysis of distributive justice. As Leventhal et al (1980:167) argue, "...we believe the issue of fairness is only one facet of a larger problem, namely, how people behave with respect to the allocation of rewards and resources in groups, organizations and large social systems." Leventhal et al (1980) have begun to integrate psychological analyses with "insights about the structure of social systems, large or small." Sociologists have much to contribute to this enterprise.

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## Literature Cited

- Adams, J. S. 1965. Inequity in social exchange. *Adv. Exp. Soc. Psychol.* 2:267-99
- Adams, J. S., Jacobsen, P. R. 1964. Effects of wage inequities on work quality. *J. Abnorm. Soc. Psychol.* 69:19-25
- Adams, J. S., Rosenbaum, W. B. 1962. The relationship of worker productivity to cognitive dissonance about wage inequities. *J. Appl. Psychol.* 46:161-64
- Alessio, J. C. 1980. Another folly for equity theory. *Soc. Psychol. Q.* 43:336-40
- Alves, W. M., Rossi, P. H. 1978. Who should get what? Fairness judgments of the distribution of earnings. *Am. J. Sociol.* 84:541-65
- Anderson, B., Shelly, R. K. 1970. Reactions to inequity II: A replication of the Adams experiment and a theoretical reformulation. *Acta Sociol.* 13:1-10
- Anderson, N. H., Butzin, C. A. 1978. Integration theory applied to children's judgments of equity. *Dev. Psychol.* 14:593-606
- Andrews, I. R. 1967. Wage inequity and job

- performance: an experimental study. *J. Appl. Psychol.* 51:39-45
- Andrews, I. R., Valenzi, E. R. 1970. Overpay inequity or self-image as a worker: a critical examination of an experimental induction procedure. *Organ. Behav. Hum. Perf.* 5:266-76
- Austin, W., 1980. Friendship and fairness: effects of type of relationship and task performance on choice of distribution rules. *Pers. Soc. Psychol. Bull.* 6:402-8
- Austin, W., McGinn, N. C. 1977. Sex differences in choice of distribution rules. *J. Pers.* 45:379-94
- Austin, W., McGinn, N. C., Susmilch, C. 1980. Internal standards revisited: effects of social comparisons and expectancies on judgments of fairness and satisfaction. *J. Exp. Soc. Psychol.* 16:426-41
- Austin, W., Walster, E. 1975. Equity with the world: the cross relational effects of equity and inequity. *Sociometry* 38:474-96
- Austin, W., Walster, E., Utne, M. K. 1976. Equity and the law: the effect of harmdoer's suffering in the act on liking and assigned punishment. *Adv. Exp. Soc. Psychol.* 9:163-90
- Benton, A. A. 1971. Productivity, distributive justice and bargaining among children. *J. Pers. Soc. Psychol.* 18:68-78
- Berg, N. E., Mussen, P. 1975. The origins and development of concepts of justice. *J. Soc. Iss.* 31:183-201
- Berger, J., Cohen, B. P., Zelditch, M. 1972. Structural aspects of distributive justice: a status value formulation. In *Sociological Theories in Progress*, ed. J. Berger, M. Zelditch, B. Anderson 2:119-46. Boston: Houghton Mifflin
- Berger, J., Fisek, H., Norman, R. Z., Wagner, D. G. 1983. The formation of reward expectations in status situations. In *Equity Theory: Psychological and Sociological Perspectives*, ed. D. M. Messick, K. S. Cook, pp.127-68. NY: Praeger.
- Berkowitz, L., Walster, E., eds. 1976. *Equity Theory: Toward a General Theory of Social Interaction.* *Adv. Exp. Soc. Psychol.* 9
- Blackstone, W. T., Heslep, R. D. 1977. *Social Justice and Preferential Treatment: Women and Racial Minorities in Education and Business.* Athens, GA: Univ. Georgia Press
- Blalock, H. M. Jr., Wilken, R. H. 1979. *Intergroup Processes: A Micromacro Perspective.* NY: Free Press
- Blau, P. M. 1964. *Exchange and Power in Social Life.* NY: Wiley
- Bond, J. R., Vinacke, W. E. 1961. Coalitions in mixed-sex triads. *Sociometry* 24:61-75
- Brickman, P. 1975. Adaptation level determinants of satisfaction with equal and unequal outcome distribution in skill and change situations. *J. Pers. Soc. Psychol.* 32:191-98
- Brickman, P. 1977. Preference for inequality. *Sociometry* 40:303-10
- Brickman, P., Folger, R., Goode, E., Schul, Y. 1981. Microjustice and macrojustice. In *The Justice Motive in Social Behavior*, ed. M. J. Lerner, S. C. Lerner, pp. 173-202. NY: Plenum
- Cohen, R. L. 1974. Mastery and justice in laboratory dyads: a revision and extension of equity theory. *J. Pers. Soc. Psychol.* 29:464-74
- Cohen, R. L. 1979. On the distinction between individual deserving and distributive justice. *J. Theory Soc. Behav.* 9:167-86
- Cohen, R. L. 1982. Perceiving justice: an attributional perspective. In *Equity and Justice in Social Behavior*, ed. J. Greenberg, R. L. Cohen, pp. 119-60. NY: Academic
- Cook, K. S. 1975. Expectations, evaluations and equity. *Am. Sociol. Rev.* 40:372-88
- Cook, K. S., Emerson, R. M. 1978. Power, equity and commitment in exchange networks. *Am. Sociol. Rev.* 43:721-39
- Cook, K. S., Gillmore, M. R., Little, J. 1979. Power, dependence and collective action in social exchange networks. *Univ. Wash Tech. Rep.*, No. 79-27, Department of Sociology, Seattle, WA
- Cook, K. S., Parcel, T. L. 1977. Equity theory: directions for future research. *Sociol. Inq.* 47:75-80
- Cook, K. S., Yamagishi, T. 1983. Social determinants of equity judgments: The problem of multidimensional input. In *Equity Theory: Psychological and Sociological Perspectives*, ed. D. M. Messick, K. S. Cook, pp. 95-126. NY: Praeger.
- Cook, T. D. 1969. Temporal mechanisms mediating attitude change after underpayment and overpayment. *J. Pers.* 37:618-35
- Curtis, R. C. 1979. Effects of knowledge of self-interest and social relationship upon the use of equity, utilitarian and Rawlsian principles of allocation. *Eur. J. Soc. Psychol.* 9:165-75
- deCarufel, A. 1981. The allocation and acquisition of resources in times of scarcity. In *The Justice Motive in Social Behavior*, ed. M. J. Lerner, S. C. Lerner, pp. 317-43. NY: Plenum
- Della Fave, L. R. 1980. The meek shall not inherit the earth. *Am. Sociol. Rev.* 45:955-71
- Deutsch, M. 1975. Equity, equality and need: what determines which value will be used as the basis of distributive justice? *J. Soc. Iss.* 31:137-50
- Eckhoff, T. 1974. *Justice: Its Determinants in Social Interaction.* Rotterdam: Rotterdam Press
- Evan, W. M., Simmons, R. G. 1969. Organ-

- izational effects of inequitable rewards: two experiments in status inconsistency. *Admin. Sci. Q.* 14:224-37
- Evans, M. G., Molinari, L. 1970. Equity, piece rate overpayment and job security: some effects on performance. *J. Appl. Psychol.* 54:105-14
- Farkas, A. J., Anderson, N. H. 1979. Multi-dimensional input in equity theory. *J. Pers. Soc. Psychol.* 37:879-96
- Feather, N. T., O'Driscoll, M. P. 1980. Observers' reactions to an equal or equitable allocator in relation to allocator input, causal attributions, and value importance. *Eur. J. Soc. Psychol.* 10:107-29
- Friedman, A., Goodman, P. S. 1967. Wage inequity, self-qualifications and productivity. *Organ Behav. Hum. Perf.* 2:406-17
- Garrett, J., Libby, W. L. 1973. Role of intentionality in mediating responses to inequity in the dyad. *J. Pers. Soc. Psychol.* 28:21-27
- Goode, W. J. 1967. The protection of the inept. *Am. Sociol. Rev.* 32:5-19
- Goodman, P. S., Friedman, A. 1968. An examination of the effect of wage inequity in the hourly condition. *Organ. Behav. Hum. Perf.* 3:340-52
- Goodman, P. S., Friedman, A. 1971. An examination of Adams theory of inequity. *Admin. Sci. Q.* 16:271-88
- Greenberg, J. 1978a. Allocator-recipient similarity and the equitable division of rewards. *Soc. Psychol.* 41:337-41
- Greenberg, J. 1978b. Equity, equality and the Protestant ethic: allocating rewards following fair and unfair competition. *J. Exp. Soc. Psychol.* 14:217-26
- Greenberg, J. 1979. Group vs individual equity judgments: is there a polarization effect? *J. Exp. Soc. Psychol.* 15:504-12
- Greenberg, J. 1981. The justice of distributing scarce and abundant resources. See Brickman et al 1981, pp. 289-316.
- Greenberg, J., Cohen, R. L., eds. 1982. *Equity and Justice in Social Behavior*. NY: Academic
- Greenberg, J., Leventhal, G. S. 1976. Equity and the use of over reward to motivate performance. *J. Pers. Soc. Psychol.* 34:179-90
- Gurr, T. R. 1970. *Why Men Rebel*. Princeton, NJ: Princeton Univ. Press
- Hamilton, V. L., Rytina, S. 1980. Social consensus on norms of justice: should the punishment fit the crime. *Am. J. Sociol.* 85:1117-44
- Harris, R. J. 1976. Handling negative inputs: on the plausible equity formulae. *J. Exp. Soc. Psychol.* 12:194-209
- Harris, R. J. 1980. Equity judgments in hypothetical four-person partnerships. *J. Exp. Soc. Psychol.* 16:96-115
- Harris, R. J. 1983. Pinning down the equity formula. In *Equity Theory: Psychological and Sociological Perspectives*, ed. D. M. Messick, K. S. Cook, pp. 207-42. NY: Praeger.
- Harris, R. J., Joyce, M. A. 1980. What is fair? It depends on how you phrase the question. *J. Pers. Soc. Psychol.* 38:165-79
- Heslin, R., Blake, B. 1969. Performance as a function of payment, commitment and task interest. *Psychonom. Sci.* 15:323-24
- Hinton, B. L. 1972. The experimental extension of equity theory to interpersonal and group interaction situations. *Organ. Behav. Hum. Perf.* 8:434-49
- Hogan, R., Emmer, N. P. 1981. Retributive justice. In *The Justice Motive in Social Behavior*, ed. M. J. Lerner, S. C. Lerner, pp. 125-44. NY: Plenum
- Homans, G. C. 1958. Social behavior as exchange. *Am. J. Sociol.* 62:597-606
- Homans, G. C. 1961, 1974. *Social Behavior: Its Elementary Forms*. NY: Harcourt, Brace and World
- Hook, J. G., Cook, T. D. 1979. Equity theory and the cognitive ability of children. *Psychol. Bull.* 86:429-45
- Jasso, G., Rossi, P. H. 1977. Distributive justice and earned income. *Am. Sociol. Rev.* 42:639-51
- Jencks, C. 1972. *Inequality—A Reassessment of the Effect of Family and Schooling in America*. NY: Harper and Row
- Kahn, A. 1972. Reactions to generosity or stinginess from an intelligent or stupid work partner: a test of equity theory in a direct exchange relationship. *J. Pers. Soc. Psychol.* 21:116-23
- Kahn, A., Lamm, H., Nelson, R. E. 1977. Preferences for an equal or equitable allocator. *J. Pers. Soc. Psychol.* 35:837-44
- Karniol, R., Miller, D. T. 1981. Morality and the development of conceptions of justice. In *The Justice Motive in Social Behavior*, ed. M. J. Lerner, S. C. Lerner, pp. 73-90. NY: Plenum
- Kayser, E., Lamm, H. 1980. Input integration and input weighting in decisions on allocations of gains and losses. *Eur. J. Soc. Psychol.* 10:1-15
- Kelley, H. H. 1973. The process of causal attribution. *Am Psychol.* 28:107-28
- Komorita, S. S., Moore, D. 1976. Theories and processes of coalition formation. *J. Pers. Soc. Psychol.* 33:371-81
- Lamm, H., Kayser, E. 1978. The allocation of monetary gain and loss following dyadic performance: the weight given to effort and ability under conditions of low and high intradyadic attraction. *Eur. J. Soc. Psychol.* 8:275-78
- Lamm, H., Schwinger, T. 1980. Norms concerning distributive justice: are needs taken

- into consideration in allocation decisions? *Soc. Psychol. Q.* 43:425-29
- Lane, I. M., Coon, R. C. 1972. Reward Allocation in preschool children. *Child Dev.* 43:1382-89
- Lane, I. M., Messé, L. A. 1971. Equity and the distribution of rewards. *J. Pers. Soc. Psychol.* 20:1-17
- Lane, I. M., Messé, L. A. 1972. Distribution of insufficient, sufficient and over sufficient rewards: a clarification of equity theory. *J. Pers. Soc. Psychol.* 21:228-33
- Lawler, E. E. 1968a. Effects of hourly overpayment on productivity and work quality. *J. Pers. Soc. Psychol.* 10:306-13
- Lawler, E. E. 1968b. Equity theory: a predictor of productivity and work quality. *Psych. Bull.* 70:596-610
- Lawler, E. E. 1971. *Pay and Organizational Effectiveness: A Psychological View*. NY: McGraw-Hill
- Lawler, E. E. 1975. An experimental study of factors affecting the mobilization of revolutionary coalitions. *Sociometry* 38:163-79
- Lawler, E. E., Koplin, C. A., Young, T. F., Fadem, J. A. 1968. Inequity reduction over time in an induced overpayment situation. *Organ. Behav. Hum. Perf.* 3:253-68
- Lawler, E. E., O'Gara, P. W. 1967. Effects of inequity produced by underpayment on work output, work quality, and attitudes toward the work. *J. Appl. Psychol.* 51:403-10
- Lerner, M. J. 1974. The justice motive: equity and parity among children. *J. Pers. Soc. Psychol.* 29:539-50
- Lerner, M. J. 1977. The justice motive: some hypotheses as to its origins and forms. *J. Pers.* 45:1-51
- Lerner, M. J. 1980. *Belief in a Just World: a Fundamental Delusion*. NY: Plenum
- Lerner, M. J., Lerner, S. C., eds. 1981. *The Justice Motive in Social Behavior*. NY: Plenum
- Lerner, M. J., Miller, D. T., Holmes, J. G. 1976. Deserving and the emergence of forms of justice. *Adv. Exp. Soc. Psychol.* 9:133-62
- Leventhal, G. S. 1976a. The distribution of rewards and resources in groups and organizations. *Adv. Exp. Soc. Psychol.* 9:91-131
- Leventhal, G. S. 1976b. Fairness in social relations. In *Contemporary Topics in Social Psychology*, ed. J. W. Thibaut, J. T. Spence, R. C. Carson, pp. 211-39. Morristown, NJ: General Learning Press
- Leventhal, G. S., Allen, J., Kermelgor, B. 1969a. Reducing inequity by reallocating rewards. *Psychonomic Sci.* 14:295-96
- Leventhal, G. S., Anderson, D. 1970. Self-interest and the maintenance of equity. *J. Pers. Soc. Psychol.* 15:57-62
- Leventhal, G. S., Bergman, J. T. 1969. Self-depriving behavior as a response to unprofitable inequity. *J. Exp. Soc. Psychol.* 5:153-71
- Leventhal, G. S., Karuza, J. Jr., Fry, W. R. 1980. Beyond fairness: a theory of allocation preferences. In *Justice and Social Interaction*, ed. G. Mikula, pp. 167-218. NY: Springer
- Leventhal, G. S., Lane, D. W. 1970. Sex, age and equity behavior. *J. Pers. Soc. Psychol.* 15:312-16
- Leventhal, G. S., Michaels, J. W. 1969. Extending the equity model: perceptions of inputs and allocations of reward as a function of duration and quantity of performance. *J. Pers. Soc. Psychol.* 12:303-9
- Leventhal, G. S., Michaels, J. W., Sanford, C. 1972. Inequity and interpersonal conflict: reward allocation and secrecy about reward as methods of preventing conflict. *J. Pers. Soc. Psychol.* 23:753-63
- Leventhal, G. S., Popp, A. L., Sawyer, L. 1973a. Equity or equality in children's allocation of reward to other persons? *Child Dev.* 44:753-63
- Leventhal, G. S., Weiss, T., Buttrick, R. 1973b. Attribution of value, equity and the prevention of waste in reward allocation. *J. Pers. Soc. Psychol.* 27:276-86
- Leventhal, G. S., Weiss, T., Long, G. 1969b. Equity, reciprocity and reallocating rewards in the dyad. *J. Pers. Soc. Psychol.* 13:300-5
- Leventhal, G. S., Whiteside, H. D. 1973. Equity and the use of reward to elicit high performance. *J. Pers. Soc. Psychol.* 25:75-83
- Lucas, J. R. 1980. *On Justice*. Oxford: Clarendon Press
- Macauley, S., Walster, E. 1971. Legal structures and restoring equity. *J. Soc. Iss.* 27:173-88
- Martin, J., Murray, A. 1983. Distributive justice and unfair exchange. In *Theories of Equity: Psychological and Sociological Perspectives*, ed. D. M. Messick, K. S. Cook, pp. 169-206. NY: Praeger Press.
- McClintock, C. G., Keil, L. J. 1982. Equity and social exchange. In *Equity and Justice in Social Behavior*, ed. J. Greenberg, L. Cohen, pp. 337-87. NY: Academic
- Merton, R. K. 1968. *Social Theory and Social Structure*, ed. R. K. Merton. NY: Free Press
- Messé, L. A., Lichtman, R. J. 1972. Motivation for money as a mediator of the extent to which quality and duration of work are inputs relevant to the distribution of rewards. Presented at S.E. Psychol. Assoc., Atlanta
- Messick, D. M., Cook, K. S., eds. 1983. *Theories of Equity: Psychological and Sociological Perspectives*. NY: Praeger. In press
- Messick, D. M., Sents, K. P. 1979. Fairness



- and preference. *J. Exp. Soc. Psychol.* 15:418-34
- Messick, D. M., Sentsis, K. 1983. Fairness, preference, and fairness biases. In *Equity Theory: Psychological and Sociological Perspectives*, ed. D. M. Messick, K. S. Cook, pp. 61-94. NY: Praeger
- Mikula, G., ed. 1980a. *Justice and Social Interaction*. NY: Springer
- Mikula, G. 1980b. On the role of justice in allocation decisions. In *Justice and Social Interaction*, ed. G. Mikula, pp. 127-66. NY: Springer
- Mikula, G., Schwinger, T. 1973. Sympathie zum Partner und Bedürfnis nach sozialer Anerkennung als Determinanten der Aufteilung gemeinsam erzielter Gewinne. *Psychol. Beitr.* 15:396-407
- Mikula, G., Schwinger, T. 1978. Intermember relations and reward allocation. In *Dynamics of Group Decision*, ed. H. Brändstätter, J. H. Davis, H. Schuler, pp. 229-50. Beverly Hills: Sage
- Miller, D. T. 1977. Personal deserving vs justice for others: an exploration of the justice motive. *J. Exp. Soc. Psychol.* 13:1-13
- Miller, L. K., Hamblin, R. L. 1963. Interdependence, differential rewarding, and productivity. *Am. Sociol. Rev.* 28:768-78
- Moore, B. 1978. *Injustice: the Social Bases of Obedience and Revolt*. NY: M. E. Sharpe
- Moore, L. M., Baron, R. M. 1973. Effects of wage inequities on work attitudes and performance. *J. Exp. Soc. Psychol.* 9:1-16
- Morgan, W. R., Sawyer, J. 1967. Bargaining, expectations and the preference for equality over equity. *J. Pers. Soc. Psychol.* 6: 139-49
- Moschetti, G. J. 1979. Calculating equity: ordinal and ratio criteria. *Soc. Psychol. Q.* 42:172-76
- Moschetti, G. J., Kues, J. R. 1978. Translational equity comparisons: extensions to the 3rd partner relationship and decision making model. *J. Pers. Soc. Psychol.* 36:1107-17
- Overstreet, R. E. 1972. Social exchange in a 3-person game. *J. Confl. Resolut.* 16:109-23
- Piaget, J. 1965. *The Moral Judgment of the Child*. NY: Free Press
- Porter, L. W., Lawler, E. E. 1968. *Managerial Attitudes and Performance*. Homewood, IL: Richard D. Irwin
- Pritchard, R. D. 1969. Equity theory: a review and critique. *Org. Behav. Hum Perf.* 4:176-211
- Pritchard, R. D., Dunnette, M. D., Jorgenson, D. O. 1972. Effects of perceptions of equity and inequity on worker performance and satisfaction. *J. Appl. Psychol. Mono.* 56: 75-94
- Rawls, J. 1971. *A Theory of Justice*. Cambridge: Harvard Univ. Press
- Reis, J., Gruzen, H. T. 1976. On mediating equity, equality and self-interest: the role of self-presentation in social exchange. *J. Exp. Soc. Psychol.* 12:487-503
- Rescher, N. 1966. *Distributive Justice*. Indianapolis, IN: Bobbs Merrill
- Robinson, R. V., Bell, W. 1978. Equality, success and social justice in England and the United States. *Am. Sociol. Rev.* 43:125-43
- Rubin, Z., Peplau, R. A. 1975. Who believes in a just world? *J. Soc. Iss.* 32:65-89
- Sampson, E. E. 1981. Social change and the contexts of justice motivation. In *The Justice Motive in Social Behavior*, ed. M. J. Lerner, S. C. Lerner, pp. 97-124. NY: Plenum
- Schafer, R. B., Keith, P. M. 1980. Equity and depression among married couples. *Soc. Psychol. Q.* 43:430-35
- Schmitt, D. R., Marwell, G. 1972. Withdrawal and reward reallocation as responses to inequity. *J. Exp. Soc. Psychol.* 8:207-21
- Schwartz, S. H. 1975. The justice need and activation of humanitarian norms. *J. Soc. Iss.* 31:111-36
- Schwartz, S. H. 1977. Normative influence on altruism. *Adv. Exp. Soc. Psychol.* 10: 221-79
- Schwinger, T. 1980. Just allocation of goods: decisions among three principles. In *Justice and Social Interaction*, ed. G. Mikula, pp. 95-125. NY: Springer
- Sell, J., Martin, M. W. 1982. The rejection of legitimate authority. Presented at meetings of the Am. Sociol. Assoc., San Francisco
- Shapiro, E. G. 1975. Effect of expectations of future interaction on reward allocation in dyads: equity or equality. *J. Pers. Soc. Psychol.* 31:873-80
- Smith, R. J., Cook, P. E. 1973. Leadership in dyadic groups as a function of dominance and incentives. *Sociometry* 36:561-68
- Steiner, I. D. 1972. *Group Process and Productivity*. NY: Academic
- Tallman, I., Ihinger-Tallman, M. 1979. Values, distributive justice and social change. *Am. Sociol. Rev.* 44:216-35
- Thibaut, J. W., Kelley, H. H. 1959. *The Social Psychology of Groups*. NY: Wiley
- Thibaut, J. W., Walker, L. 1975. *Procedural Justice: A Psychological Analysis*. Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Törnblom, K. J. 1977a. Distributive justice: typology and propositions. *Hum. Relat.* 31:1-24
- Törnblom, K. J. 1977b. Magnitude and source of compensation in two situations of distributive justice. *Acta Sociol.* 20:75-95
- Uray, H. 1976. Causes of performance, ascription of responsibility, and division of winnings. *Z. Soz. Psychol.* 7:69-80

- Utne, M. K., Kidd, R. F. 1980. Equity and attribution. In *Justice and Social Interaction*, ed. G. Mikula, pp. 63–93. NY: Springer
- Valenzi, E. R., Andrews, I. R. 1971. Effect of hourly overpay and underpay inequity when tested with a new induction procedure. *J. Appl. Psychol.* 55:22–27
- Vecchio, R. P. 1981. An individual-differences interpretation of the conflicting predictions generated by equity theory and expectancy theory. *J. Appl. Psychol.* 66: 470–81
- Wahba, M. A. 1972. Preferences among alternative forms of equity: the apportionment of coalition reward in the males and females. *J. Soc. Psychol.* 87:107–15
- Walster, E., Austin, W. 1974. Reactions to confirmation and disconfirmation of equity and inequity. *J. Pers. Soc. Psychol.* 30: 208–16
- Walster, E., Berscheid, E., Walster, G. W. 1973. New directions in equity research. *J. Pers. Soc. Psychol.* 25:151–76
- Webster, M. Jr., Smith, L. R. F. 1978. Justice and revolutionary coalitions: a test of two theories. *Am. J. Sociol.* 84:267–92
- Wiener, Y. 1970. The effects of “task-” and “ego-oriented” performance on two kinds of overcompensation inequity. *Organ. Behav. Hum. Perf.* 5:191–208
- Wilke, H., Steur, T. 1972. Overpayment: perceived qualifications and financial compensation. *Eur. J. Soc. Psychol.* 2:273–84
- Williamson, O. 1975. *Markets and Hierarchies*. NY: Free Press
- Wittig, M. A., Marks, G., Jones, G. A. 1981. Luck vs effort attributions: effect on reward allocations to self and other. *Pers. Soc. Psychol. Bull.* 7:71–78