USING FAIRNESS INSTRUMENTALLY VERSUS BEING TREATED FAIRLY: A STRUCTURAL RESOLUTION.

by

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ABSTRACT.

Research on justice in social exchange distinguishes between fairness as a goal and fairness as an interpersonal influence strategy. Strategic fairness is considered to be epiphenomenal and explainable by more basic motives, most notably, self-interest; fairness as a goal is based only on Lerner’s (1982) model. Recent findings contribute to a new model which specifies that allocators of resources use fairness strategically while recipients treat justice as a goal by reacting to perceived injustice. This dissertation presents the model along with an experimental test of its predictions, which also addresses an ongoing debate in experimental economics on the role of fairness in ultimatum and dictator games.

The experiment was designed to distinguish between fairness as an interpersonal strategy and fairness as a goal. Participants moved from allocator to recipient roles in various experimental conditions that varied their information and interdependence.

Results show that ultimatum offerers made smaller offers when respondents knew how much they were dividing and larger offers when fairness was salient. Dictators made smaller offers than ultimatum offerers, but did not reduce their offers as much as ultimatum offerers when the respondent did not know how much was being divided. They appeared unaffected by the salience of fairness. Respondents rejected more small offers than large ones and more offers when they knew the amount being divided. The rejection rates of ultimatum and dictator offers did not vary. The results show substantive support for the idea that justice motives are role specific. Unexpected findings led to modifications of the model with respect to the interdependence of the actors.
The results are discussed in terms of their implications for the study of justice in general and for the specific case of fairness concerns in bargaining games.
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CHAPTER 1.

INTRODUCTION

Discussions surrounding the concept of justice have continued since the times of Plato and Socrates. Current research on justice is based on two ancient and implicit assumptions: people are motivated by a desire to be fair and to be treated fairly. Most people would agree with the notion that fairness concerns motivate a variety of behaviours, and there is general consensus among social scientists that justice considerations play a central role in social behaviour (Lerner, 1981). Justice motives are particularly relevant in social exchanges involving resource allocation. Thus, most theories of justice focus on resource exchange, its process and its consequences.

Several theoretical models focus on the role of justice in human behaviour: Equity theory (Adams, 1965) and relative deprivation theory (Crosby, 1976) focus on people’s reactions to inequity; status value theory (Berger, Zelditch, Anderson and Cohen, 1972) and models of comparative outcome judgement (Bazerman, Lowenstein and White, 1992) study how people evaluate the fairness of actions (e.g., distribution of resources) or relationships (e.g., bargaining relationships); other models focus on how people adopt different rules or conventions when distributing resources (Leventhal, 1976), and whether justice considerations are ends in themselves or merely means to other desirable ends (e.g., Lerner, 1981).

While most researchers within these traditions agree on the centrality of justice considerations in social situations, they do not agree on justice’s role in shaping behaviour.
According to Greenberg and Cohen (1982), models of justice can be distinguished on the basis of whether they espouse 'instrumental' or 'normative' roles for justice concerns. According to the normative approach, prevailing social practice dictates which behaviours are appropriate and just. In contrast, the instrumental approach suggests that people behave justly to facilitate the attainment of other goals.

Both the instrumental and the normative approaches suggest that justice considerations are not ends in themselves, but means for other ends, albeit very different ends in the two cases. The instrumental approach suggests that people behave fairly when it is profitable for them, i.e., people are motivated primarily by a desire to maximize their outcomes. The normative approach suggests that the rules of distribution serve a functional purpose for the social unit as a whole, and that society sanctions individuals who act unjustly. For example, the desire for functional distributions suggests that people use the equity rule when productivity is the goal for a social unit and that they use the equality rule when solidarity is the goal (Deutsch, 1975). Both models suggest that people know which rule is appropriate in a given situation and that they tend to adopt the profitable or the acceptable alternative. Simple hedonism or adherence to group norms are expected, both by the models and by most people, to determine individual behaviour. Whatever their differences, the instrumental and normative approaches begin with the assumption that justice, as a social device, is generated in the course of people's using their intelligence to gratify their appetites (Lerner, 1981).

Lerner (1977, 1981) suggests that neither the normative nor the instrumental model (he calls them both instrumental approaches) explain why justice plays a central role in our culture and in many people's lives. According to his justice motive theory, rather than being
an instrumental device to facilitate the acquisition of desired resources, justice acts as a guide for assessing what 'resources' are desirable (Lerner, 1981). More directly, Lerner (1977, 23) says "(justice motive theory) assumes a preeminent guiding principle or motive in the commitment to deserving which serves to organize most goal seeking behaviour." His basic idea is that people are committed to the idea that everyone (including oneself) should always get what they deserve: hence the term 'commitment to deserving'. According to Lerner this commitment to deserving is a fundamental human principle, and people behave according to its dictates. In Lerner's model the commitment to deserving (or justice) is the underlying motive for human behaviour.

For Lerner, justice serves as a goal or end state, by itself. This directly contrasts with the more prevalent conceptualization of justice as a strategy to achieve other goals (the instrumental and normative approaches). The research presented here is pointed toward understanding which of the two aspects of justice (i.e., as a goal or as a strategy) determines people's behaviour. It is important to note that the two aspects of justice are mutually exclusive by definition: if people behave justly to achieve other ends (i.e., justice as a strategy), then justice does not serve as a goal and if justice is a goal, then it is not a means to achieve other ends.

Researchers also disagree on the content of the justice motive. Specifically, they suggest that the 'desire for justice' and the 'desire to avoid injustice' are two distinct motivators (Greenberg, 1980). But little if any research has pursued this distinction. According to Hogan's (Hogan, Johnson and Emel, 1978 and Hogan and Emel, 1981) theory of retributive justice, people are more strongly motivated by a desire to punish those
who do not behave justly than they are by a desire to behave justly. This view is also supported by the research on norms. For instance, Lemert (1951) says, that 'On the whole people are aware of norms only when they are breached, and only projectively, that is, people discuss the action of others after it takes place, from the standpoint of its specific appropriateness and what 'ought to have been done' in the situation... Conformities to societal requirements pass without notice or comment but not so with deviations which intrude upon the consciousness of those who are witnessed to them.' If we view the justice norm as being thoroughly internalized, then people will be concerned about justice only when an injustice is perceived to have occurred (c.f. Utne and Kidd, 1980 for a similar discussion about the salience of inequity in situations). It is not a proactive concern for justice, but a reaction to perceived injustice that motivates behaviour. This also suggests that the desire to avoid injustice and the desire to achieve justice asymmetrically influence behaviour.

Questions about the motivational bases (goal or strategy) and the content (justice or injustice) of justice began at least as far back as the ancient Greeks. Plato questioned the justice motive in humans and suggested that people would try to get away with injustice and would behave fairly (and express a concern for justice) only to acquire a reputation which they could exploit for their own ends. In more recent times, Greenberg (1990) presented an impression management explanation for seemingly just behaviours. Impression management theories begin with the idea that behaviours can be explained on the basis of their contribution to the material benefit of the person enacting the behaviour. The implication is that people behave in a fair manner if it is in their best interest to do so, affirming the primacy of self interest as a motivator and the use of fairness as a strategy.
Greenberg’s position is in contrast to theories that treat the desire for justice as a motive in its own right. For example, procedural justice theories posit non-instrumental bases for justice concerns (e.g., Folger, 1993 and Tyler, 1993). Similarly Leventhal (1980) argues that the concern for justice is not an epiphenomenon that can be stripped away or discarded by reduction to supposedly more basic motives.

While there is substantial empirical evidence that suggests that people behave fairly only if it benefits them (e.g., Greenberg and Leventhal, 1976 and Morse, Gruzen and Reis 1976), there is equally impressive evidence that suggests that people behave fairly even when it is against their self-interest (e.g., Kahneman, Knetsch and Thaler, 1985, Guth and Teitz, 1990). One way of resolving these seemingly contradictory findings is to suggest that some individuals focus on being treated fairly, and others focus on using fairness instrumentally. Another possibility, suggested by Leventhal (1980), is that theories and empirical investigations of justice do not take into account the possibility that concerns for fairness may be aroused in parallel with and produce effects superficially similar to those generated by other motivational forces. So the findings about the non-instrumental bases of fair behaviours may just be a case of investigators paying inadequate attention to alternative self-interest based explanations. But, Leventhal (1980) admits that there are situations where people’s concerns for justice cannot be explained using the self-interest motive. Thus, questions about the importance of perceived fairness necessitate a clearer definition of the theoretical boundaries of the analysis of fairness (Leventhal, 1980).

This suggests that it may be useful to look at the features that distinguish situations where fair behaviours have been explained using self-interest motives from situations where
fair behaviours have not been so explained. The basic assumption of such an approach would then be that certain features of interactional structures make the fairness motive dominant, and it is possible to identify them.

A noteworthy difference characterizes studies that have found support for the strategic nature of just behaviours (e.g., the Reis, 1981, finding that people follow justice rules to create favourable impressions) and those that support the notion that justice serves as a goal (e.g., the Guth and Teitz, 1990, finding that people are willing to sacrifice their own outcomes to restore fairness): while the 'justice as a strategy' studies typically focus on allocators, those that suggest that justice is a desired goal typically focus on recipients of allocations. This suggests that one of the structural, situational determinants of the justice motive is a person's role in allocation decisions: For an allocator the strategic motive may dominate, as a recipient one may seek justice as a goal.

Similarly, research that attributes a justice motive typically focuses on allocators (e.g., Leventhal et al., 1972), while research that attributes an injustice avoidance motive for human action typically focuses on recipients of allocations (e.g., Adams, 1965). This reinforces the notion that the role that people take in an exchange relationship determines their motives, i.e., as allocators they hope that behaving justly would lead to better outcomes for the self and as recipients they hope to avoid injustice. Both the desire to avoid injustice and the envisioned desire for justice could have either strategic or non-strategic bases. We posit here, however, that while both may be instrumental, the desire for justice reflects greater instrumentality.

People who have been shown to pursue justice for strategic reasons [i.e., allocators
in allocation experiments (e.g., Leventhal, Michaels and Sanford 1972) and managers in empirical tests of procedural justice models (Brockner et al., 1990)] are also distinct from those for whom justice has been shown to be a goal [recipients in allocation experiments (Guth et al., 1982), employees in pay equity investigations etc.] : those who use justice for strategic reasons tend to be more powerful than those who look for it as an end in itself (i.e., as a goal). This suggests that power may be another structural determinant of the relative salience of the two motives. Specifically, powerful actors may exhibit fair behaviours only when they facilitate attainment of desirable outcomes, while those without power express genuine concerns for fairness and are willing to sacrifice desirable outcomes in their pursuit of justice. This suggests a model where the two types of fairness concerns- to appear and to be fair- can occur within the same individual and depends on the individuals’ structural power in any given situation.

Similarly, an argument can be made that the content of the motivation for powerful actors is justice and the content for the powerless is injustice. Hogan and Emler (1981 p. 141) argue that 'distributive justice is the unique concern of the power holders, especially those who wish to be regarded as just, fairminded, and equitable'. Further, Hogan and Emler (1981, p. 129) say that those without power are primarily interested in getting their fair share and are interested in distributions only as a way to evaluate the power-holders’ performance in their job. This suggests that the powerless would only react to a perceived injustice, and are thus motivated by a desire to avoid injustice rather than to do justice.

The simple truism that justice motivates behaviour is clearly open to empirical investigation, particularly when and how justice (or injustice) motives influence behaviour,
and what constitutes its limiting conditions. It is possible that Deutsch’s (1975) findings, that different situations evoke different justice rules, are true not only for rules, but also for the underlying motives that drive justice itself. By removing the assumption that people are motivated by a desire for justice, and treating such a concern as a variable that is uniquely determined by the nature and structure of each social interaction, we can determine whether and how much people are motivated by fairness concerns and whether the structure of a social situation affects people’s concerns for fairness.

This position about the role of justice motives is echoed by Leventhal (1980), who argues that writings in the tradition of social justice convey the impression that an individual’s perception of justice is a powerful determinant of social behaviour when the truth is that in many situations many individuals give little thought to questions of fairness. Leventhal (1980) suggests that a concern for justice is just one among many motivational forces that influence social perception and behaviour, and it may often be a weaker force than others.

There are a number of theoretical and practical reasons for resolving the contradictory statements about the motivational status of justice. On the one hand, theories that emphasize its strategic instrumental basis would have difficulty explaining findings that show that people behave fairly and are concerned about fairness even when it is not in their best interests to do so. On the other hand, theories that emphasize that justice considerations are a fundamental human motive would have difficulty explaining findings that show that people cheat when they can get away with it. A broader theoretical framework may be needed to explain these inconsistent observations. Both sets of assumptions -- people see justice as an
end in itself and people see justice as the means to other ends -- may be explanatory for the same individual, depending on the situation. This would imply that all of these theories may be right, but they are limited in their generalizability.

Another contribution of the framework that we propose is that it explicitly includes power. Though most justice researchers recognize the importance of power in justice perceptions and judgments, power does not figure prominently in justice models. Power has traditionally entered discussions about justice only as the ability of different parties to a dispute to enforce the acceptance of a particular justice norm (e.g., Martin, 1993). According to Cook and Hegtved (1986) "there is a curious omission of the topic 'power' in much of the research on equity and distributive justice" and this omission is particularly glaring because one of the principal founders of the field (Homans, 1976) said " I believe power to be the most primitive phenomenon that lies behind distributive justice."

A comprehensive model would be useful both practically and theoretically in negotiation and bargaining. For some time, researchers (e.g., Bazerman, 1993) have commented on the tremendous inefficiencies that arise as a result of disagreements during negotiations. One strong reason for disagreement is that people are concerned about 'fairness' and would rather lose material benefits than agree to an 'unfair' settlement (Lowenstein and Thompson, 1990). Another reason for disagreements is that people do not put themselves in the shoes of the other party in the negotiation (Bazerman and Carroll, 1987). Together, these reasons suggest that strategically, people should expect others to take fairness issues into account: understanding when and how fairness is important to the other party may be critical information in formulating negotiation strategies.
Lamm (1986) suggests that interpersonal conflict will be difficult to resolve when it is based on morally motivated justice considerations. He suggests (p. 60) that when two or more conflicting parties are motivated by genuine moral concerns, and they disagree on which justice principle is applicable in their particular situation, the conflict and its negative effects may be particularly intense. This suggests that it is important to know bargainers’ motivational bases (i.e., strategic/instrumental or a goal), because misattributions may result in treating a genuine concern for justice as a strategic act, thereby engendering negative affect and costly disagreements.

Vidmar (1981) raises another practical reason for studying justice motives. Based on his observation of disputes in small claims courts, he posits that different dispute resolution processes i.e., adjudication, arbitration, and mediation, are differentially effective in satisfying disputants with different motives. Though he agrees that the type of motives will be correlated only imperfectly with legal and sociocultural variables, Vidmar (1981, p 407) says that, ‘it is essential to understand what motives have caused the parties to carry their conflict into a resolution forum before we begin to estimate what type of resolution procedure may be preferable or more effective.’ Thus, an understanding of people’s motives in particular conflicts will help us to predict their choices of dispute resolution forums and also their satisfaction with the chosen procedure.
CHAPTER 2.

FRAMEWORK TO DISTINGUISH BETWEEN GOALS AND STRATEGIES

Research on fairness has been typically guided by the question of 'which norm when?' (Greenberg and Cohen, 1982). To enhance our understanding of the role that justice plays in social behaviour, a different line of investigation might try to identify 'which motive when'. To be effective, this approach must assess justice motives on an a priori basis rather than inferring them post hoc; it would also have to determine the conditions under which various justice motivations are salient (Greenberg and Cohen, 1982). To assess the relative importance of justice as a goal and justice as a strategy as motivators, we must have a measurement procedure that permits both the identification of and the discrimination between justice as a motive and justice as a strategy.

Three approaches that provide us with the tools necessary to discriminate between motives are the research on social motivation (McClintock, 1972), impression management theories (e.g. Reis and Gruzen, 1976), and bargaining experiments (e.g. Straub and Murnighan, 1995).

I. DISTINGUISHING BETWEEN MOTIVES.

Van Avermaet, McClintock and Moskowitz (1978) outlined a strategy to distinguish between equity as a goal and equity as a strategy. They suggest that if equity is a goal, individuals would behave equitably across settings of interdependence. Also, this prediction should hold regardless of whether equitable choices are consistent or inconsistent with
absolute or relative gain motivations. If equity is a goal for people, they will select outcomes to self and other that are most equitable even when the decision has no effect on others' future decisions (Van Avermaet et al., 1978).

In contrast, if equity is a strategy in the service of absolute or relative gain, one would predict that equitable behaviour will occur only when the individual decision makers perceive that equitable behaviour is valuable or expected and they expect that their choices will be scrutinized by others who exert some control over their own future outcomes (Van Avermaet et al., 1978). If behaviour is not consistently equitable- it changes depending on its value the behaviour can be assumed to be under the direct control of an own or relative gain maximization motive, i.e., a strategy. Leventhal (1980) makes a similar argument to distinguish between fairness and what he calls quasi fairness.

Van Avermaet et al (1978) see the presence or absence of an experimenter, anonymity and the relationship between the two people in the exchange relationship as some of the variables that affect a persons' perception of a situation as one calling for equitable behaviour. They argue that by systematically varying these factors and studying behaviour across these variations, one can infer whether equity is a goal or an interpersonal strategy. If we substitute the word 'justice' for the word 'equity' in the Van Avermaet et al., conceptualization, then we have a basis for discriminating between justice as a goal and justice as a strategy.

The variables identified by Van Avermaet et al., (1978) are also those studied by researchers in the impression management tradition. Researchers on bargaining games study information asymmetry as a means to distinguish between justice and self-interest motives
Finally, the idea that outcome interdependence is crucial for distinguishing goals from strategy is the basis for many studies in the social motivation theory tradition. We thus draw on these traditions to formulate methods for discriminating between motives by observing behaviour.

i. Social Motivation. The research on social values (e.g. Messick and McClintock, 1968) provides a useful starting point for discriminating underlying motives in resource allocation processes. According to McClintock and Van Avermaet (1982), social values can be assessed by ascertaining an actor's choices between their own and other's outcomes, in various distributions.

Early attempts to assess social values generally involved observing actors make choices in two-person, two-choice matrix games, that is, in games where on any given trial, the actors outcomes were determined by both their own as well as others outcomes (McClintock and Van Avermaet, 1982). Messick and McClintock (1968) identified three value orientations-- cooperation, individualism and competition-- that may underlie actors' choices in game settings: they generated six possible game classes which placed the values in conflict with each other. By making people play these six classes of games repeatedly, they suggested that an observer could infer the players' predisposition toward cooperation, individualism or competition.

Social value researchers distinguish between social values as goals or as interpersonal strategies (e.g. Messick and McClintock, 1968). They suggest that using decomposed games (i.e., a game in which a player is given a choice between two alternatives, each of which
specifies the payoffs to the player and the simulated other) reduces the joint interdependence between actors since choosers can completely determine both their and their counterparts’ outcomes and lessens the opportunity to make choices for the strategic reason of modifying other’s behaviour. Many empirical tests of social values have used decomposed games and riskless choices, where outcomes do not depend on the other’s acceptance or rejection. McClintock and his colleagues (e.g., McClintock and Van Avermaet, 1982, McClintock and Keil, 1982 etc.) have extended their theory of social values to the study of justice by showing that the rules of fairness (e.g., equity and equality) are themselves social values, and hence the framework could distinguish between and identify people’s predisposition to adopt a particular rule.

The idea that decomposed games assess values (justice) as goals because they minimize the need for the use of values (justice) as strategies suggests that comparing these games with regular two-person, two-choice matrix games might reveal whether values (justice) are used strategically. Extending Van Avermaet et al.’s (1978) argument (that if equity were a socially valued goal as opposed to an interpersonal strategy, then it would be followed regardless of situational factors), we suggest that if justice were a goal and not a strategy then there should be no difference in behaviour in interactive and decomposed games. Stable just behaviour, irrespective of the level of interdependence in the relationship would indicate that justice is an end in itself; just behaviours in the case of high interdependence only would suggest that justice is used as an interpersonal strategy.

We now turn to a brief review of the impression management literature.
ii. Impression Management. Researchers from the impression management tradition have also distinguished between motives using various methods, including anonymity conditions and manipulation of self-awareness and the salience of fairness.

Different subject anonymity conditions. Subjects’ allocation decisions when both recipients and experimenters know their identities are compared to allocation decisions when only the experimenter knows their identity and to allocations made under total anonymity. The difference in allocation behaviours is attributed to the impression management objectives (motives) of allocators. The logic is that behaviours designed to impress others would occur only when people believe that others can observe them (Tetlock and Manstead, 1985). Some examples of such experiments include those by Morse, Gruzen and Reis (1976) and Lane and Messe (1971). Morse et al., (1976) asked participants to perform a computer-check coding task in the presence of an experimenter, in the absence of an experimenter but where they were asked to leave a note indicating how much work they had done (suggesting that their performance could be evaluated later), and in the absence of an experimenter and where there was no possibility that their performance could be evaluated. Participants finished less coding with more errors in the condition where the experimenter was not present and their performance could not be evaluated than in the other two conditions. Lane and Messe (1976) found similar effects in allocation situations, but in their experiment the person who was or was not aware of the participant behaviour was the recipient in the allocation situation. Participants allocated less money to recipients when they were told that the recipient would not know who made the allocation as opposed to conditions where they were told that they would be introduced to the recipient. Thus, anonymity from the experimenter
and other participants (especially those who are affected by participants' behaviour) had strong effects on behaviour, suggesting that people were trying to manage others' impressions of them.

Raising the salience of fairness. Impression management motives are also distinguished by studying peoples' decisions when the issue of fairness has been made experimentally salient and contrasting these decisions with decisions made in conditions where fairness is not made salient. Fairness salience is typically raised by making participants believe that an audience who will learn of their decisions either prefer fairness or do not prefer fairness. The audience can be the experimenter. For example, Mikula (1973, referenced in Reis 1981), asked participants to make just allocations and allocations that gave them satisfaction. Participants made larger allocations to others when given justice instructions, presumably because they believed that their audience (the experimenter) valued justice.

Raising self awareness. People become more self aware when they must confront their own reflection in a mirror (Greenberg, 1990). The theory of objective self awareness (Duval and Wickland, 1972) states that self focused attention heightens self critical judgements. As a result people become more aware of the discrepancies between their own behaviour and ideal standards (Greenberg, 1990). Results show that people who are placed in front of mirrors behave more equitably than those who are not placed in front of mirrors (e.g., Reis and Burn, 1982).

iii. Information Asymmetry. Some scholars have argued recently that by comparing
behaviour in asymmetric information conditions with behaviour in information symmetric conditions, we can identity the underlying motives of behaviours (Straub and Murnighan, 1995). Specifically, they suggest that if people use an information advantage to obtain better outcomes for themselves, then the salient underlying motive is self-interest rather than true concerns for fairness. In their experiment, Straub and Murnighan found that participants who were asked to divide a sum of money between themselves and recipients, offered more money to recipients when the recipients knew the amount that the offerer was dividing, than when the recipients did not have this information.

All these approaches suggest people are instrumental and strategic when they are powerful actors and that justice may not be their goal. They also show that, to distinguish between instrumental and actual motives for fair behaviour, an empirical examination might systematically vary the degree of interdependence between two parties in an exchange. Ultimatum and dictatorship games provide such contexts. As will be clear in the following discussion of the two games, outcome interdependence is high in ultimatum games and low in dictator games. By systematically varying the salience of fairness in the exchange situation and creating differing levels of information asymmetry, this investigation also provides a broad set of experimental conditions for assessing the presence of different types of justice motives.

II. ULTIMATUM AND DICTATORSHIP GAMES

Ultimatums are a basic element in the endgame of negotiations (and other interpersonal interactions that have competitive elements). In an ultimatum game, one party
is the offerer and the other is the respondent. In most experimental research on ultimatums, the offerer controls a specific amount of money (e.g., $10) and must offer some portion of it (say, $3) to the respondent, who can either accept or reject the offer. Both players know the amount being divided and the simple rules for their negotiation. An acceptance leads to the respondent receiving the offered amount ($3) and the offerer receiving the rest ($7). A rejection means that both players receive nothing. The offerer in this game has tremendous power: once the offer has been made, it cannot be changed, and the respondent can only accept or reject it.

Early empirical investigation of ultimatum bargaining tested the predictions of game theory's models of subgame perfect equilibrium (Selten, 1965) which analyze ultimatum games from the respondent's perspective, at the end of the game, and work backward to the beginning. Since something is better than nothing, the respondent should accept almost any offer, even if it is very small. In turn, offerers should make extremely small ultimatum offers-- and these should be accepted. Early results found larger than minimal offers and some rejections of offers, counter to theoretical prediction. Guth, Schmittberger and Schwarze (1982) attributed the results to fairness concerns. More recently considerable theoretical and empirical controversy has arisen around whether genuine concerns for fairness or strategic considerations explain the results (e.g., Straub and Murnighan, 1994).

To test whether observed ultimatum offers were due to a true desire to be fair, or whether they were an interpersonal strategy aimed at reducing the likelihood that respondents would reject offers, Forsythe et. al. (1994) modified the ultimatum game to eliminate the dependence of the offerer on the respondent and called these games dictatorship games. In
the dictatorship game an offerer divided an initial endowment and his/her payoff (the initial endowment less the offer) did not depend on the respondents' acceptance: even a rejection resulted in offerers getting what they asked for.

We differentiate between ultimatum and dictatorship games on the basis of their interdependence: dictator games are to ultimatum games as decomposed games are to strategic interactions. As noted earlier, Messick and McClintock (1968) suggested that decomposed forms of two-person, two-choice games, measure goals as opposed to strategies because outcome interdependence is reduced in the decomposed games. Dictator and ultimatum games may be better equipped than two-person, two-choice games and their decomposed counterparts to discriminate between the instrumental and moral bases of justice motives because there is no outcome interdependence at all in dictator games: some outcome interdependence remains in decomposed games.

Since offerers get their outcome without the necessity of a respondent's agreement in a dictator game it models the decomposed game. The ultimatum game requires that the respondent agree to the offerer's proposal before the offerer gets any outcome. There is no need for offerers to behave fairly for strategic purposes in dictator games, since rejection by the respondent does not affect the offerer's outcome. In ultimatum games, however, offerers must take into account the possibility of rejection by the respondents. Adopting Van Avermaet et al.'s. (1978) distinction between justice as a goal, and justice as an interpersonal strategy, any difference in the size of offers between dictatorship and ultimatum games would indicate that offerers are using justice as an interpersonal strategy.

These games also permit us to study the effects of various power levels (the offerer
in dictatorship games is more powerful than the offerer in the ultimatum games) and the actions of allocators (offerers) and recipients (respondents). We do not study the case where the allocator has no power and the recipient has all the power because such cases may be logically impossible (and rarely occur in real life). This may lead to the question that if the role as allocator or recipient determines one's situational power, then there is no need for power as an independent explanatory variable. But the two games with differing levels of interdependence allow power levels within the role of allocator to be varied independent of the role, as dictator-allocators have more power than ultimatum allocators. [Note that power as defined here is inversely proportional to dependence: A definition consistent with Emerson (1964), Cook and Hegtved (1986), Deutsch (1982) etc.]

In addition to providing a context for discriminating between the goal oriented and strategic aspects of justice, ultimatum and dictator game behaviours are of interest in their own right. Thus, this study uses past research on justice in exchange situations that suggests that allocators (or people with power) are concerned about the strategic use of justice while recipients seek to avoid injustice to explain behaviour in ultimatum and dictatorship games. By doing so it also attempts to address a recent controversy in experimental economics concerning whether justice and fairness concerns explain large ultimatum offers and rejection of small ultimatum offers.
CHAPTER 3.

JUSTICE MOTIVES: THE EFFECTS OF ROLES AND POWER.

The study of justice has generated a number of classificatory schemes. Greenberg and Cohen (1982), distinguished between normative and instrumental theories of justice. McClintock and Van Avermaet (1982) based their typology on whether rules of fairness were goals, accommodative strategies or social norms. Greenberg (1982) organized theories of justice according to their underlying assumptions of human motivation: with the reactive approach, behaviour is motivated by an attempt to escape from or avoid inequitable conditions: with the proactive approach, behaviour is motivated by attempts to actively secure or approach equitable conditions. Greenberg (1987) organized theories of justice based on whether they emphasized the process, i.e., the procedural or the distributive aspects of justice. We adopt two dimensions to organize the literature: The strategy/goal dimension to depict the underlying motives and the justice/injustice dimension to depict the content of the motives. These dimensions have been chosen for the following reasons: The focus of this study (i.e., to distinguish justice behaviours motivated by strategic considerations from those enacted to achieve the goal of justice) requires that we compare and contrast studies espousing the strategic aspects of justice from those that emphasize the goal aspect. Similarly, the argument that 'justice' and 'injustice' are separate motivators and not simply negatives of each other (Hogan and Emler, 1981) suggests that a systematic evaluation of theories which give 'justice' or 'injustice' a preeminent position in human motivation would reveal the boundary conditions within which each of these motives operate.
Crossing the two dimensions results in four cells. Most extant theories of justice fall in the injustice (avoidance) as a goal cell or justice as a strategy cell. We also group justice models on the basis of whether the focus of their theoretical and empirical investigations are allocators or recipients. (See figure 1).

We restrict the following review to only those approaches that directly refer to the role of justice concerns in actual individual behaviour.

I. (AVOIDANCE OF) INJUSTICE AS A GOAL.

These theories assume that people are motivated by a desire to avoid injustice. Equity theory (Adams, 1963 and 1965), on the one hand, says little about 'justice' except to use the concept to identify inequitable states and people's reactions to inequity. On the other hand, the model of retributive justice (Hogan and Emler, 1981) suggests that justice plays little or no role at all in human behaviour and that people are motivated by a desire to avoid experiencing or doing injustice. Similarity in the assumptions about the moral role of injustice (i.e., seeking to end injustice as an end in itself) logically places the two models in this category. Distributive justice theory (Homans, 1961) and status value theory (Berger et al. 1982) are also among the theories that focus on avoiding injustice as a goal.

i. Distributive Justice Theory. Homans (1961; 1974) proposed that in an exchange relationship people form expectations about the rewards that they deserve. Violations of these expectations lead people to perceive injustice and feel anger toward, 'the source or beneficiary of the injustice' (Homans, 1974, p. 257). Expectations are expected to be
determined by equity considerations, i.e., the rule of proportionality will be followed, and each person's rewards are commensurate with their investments. While disagreements are likely over what constitutes investments and how much each party in the exchange relationship has contributed (in terms of the identified investments), disagreements over the rule of proportionality are assumed to be rare (Homans, 1974).

Thus, Homans suggests that people look for justice, and in its absence react with anger and aggression toward the perpetrator of the injustice when the beneficiary is the allocator and toward the beneficiary in the case of third party allocation. Later researchers (e.g., Leventhal) extended Homans' work to include allocation decisions, but the original theoretical statement clearly identified the absence of justice as a motivator.

ii. Equity Theory. Adams' (1963) work explains the causes and consequences of the absence of equity in human exchange. The purpose of his 1963 paper, in his own words, was (p.422) '... to present a theory of inequity, leading toward and understanding the phenomenon and, hopefully resulting in its control.' Adams' theory was a special case of cognitive dissonance theory (1963, p.422), and was stimulated by Homans (1961) work on distributive justice. The theory is set within the context of an exchange, whether the exchange is between husband and wife, football teammates, teacher and student, or even, people and God (Adams, 1963 p.422).

The key concepts in the theory are inputs, defined as what a person perceives to be his/her contribution to an exchange, and outcomes, defined as an individual's perceived rewards from the exchange. The key factor in the definition of inputs and outcomes are that
they are the perceptions of the focal actor and need not correspond with the perceptions of other actors in or observers of the exchange. Further, Adams (1963, p.423) suggests that classifying variables as inputs or outcomes does not imply their independence (except conceptually).

People compare the ratios of their inputs and outcomes with the ratios of similar others: The other could be a person with whom the focal person is in a direct exchange, or a co-recipient where the allocator is a third party. When the ratios are equal, equity prevails; when they are not, inequity results and people strive to reduce it. Adams identified nine possible measures that people can adopt to reduce perceived inequity (1963, p.427-429): increase or decrease their inputs, increase or decrease their outcomes, leave the field, psychologically distort their or others’ outcomes/inputs, force them to leave the field, or change their referent other.

Most of the empirical work that followed Adams’ theoretical statement about the nature and consequence of inequity focused on creating inequitable situations and studying how people altered their inputs to avoid the inequity. Although a considerable number of studies support the models’ predictions, it has also been the target of much conceptual debate. Very little of this controversy however disagrees with equity theory’s basic assumption that perceived inequity will generate a motivation to restore equity.

iii. Status Value Theory. Berger et al (1972) suggested that a major problem with equity theory was that it could not distinguish between: 1) over and under reward, 2) individual and collective injustice, or 3) an unjust outcome for self and an unjust outcome
for the other. They argued that local comparisons did not result in inequity and postulated that people use a stable referential structure to judge the fairness of their rewards [e.g., A professor in a law school usually compares herself with people in the legal and academic professions]. Local comparisons result in 'anomie' while comparison to the referential structure result in perceptions of justice or injustice. According to Berger et al. (1972, p. 133), a referential structure has the following four components: a) Generalized individuals, b) who possess given states of given characteristics, c) to which are associated given states of given goal objects, d) where the characteristics and goal-objects are all status-valued.

Examples of 'generalized individuals' are airline mechanic, professor of law, etc., as opposed to a particular Mr. Smith or Dr. Jones. A 'characteristic' is any feature or aspect of a person that can be used to describe him/her, such as height, education, etc. A 'goal object' is anything tangible that a person may want, or that may satisfy some need, such as shelter, income, or a title. A state of a characteristic, say education, may be high or low; a state of a goal-object, say income, may be big or small. State is different from status value in that the status value evaluates whether the state is good or bad. Thus, in a given situation, a person may see high education as a positive and someone else might evaluate it as a negative.

Berger et al (1972, p. 144-145) summarize their theory as follows, "In the theory of status value, comparisons are formulated in terms of referential structures. A distinction is made between particular social objects such as the actor himself or other actors with whom he interacts, and generalized objects of orientation, of whom an actor holds stereotyped, unitary conceptions. Among other things, referential structures contain information about
rewards, or more exactly, goal objects, typically associated with generalized objects. Referential structures determine, first, the status significance of characteristics and goal-objects possessed by particular actors, and second, the expectations actors come to hold about the manner in which goal objects may legitimately be allocated. In the context of the status significance and normative expectations created by the referential structure, actual allocations either coincide with expectations or do not. Those that coincide with expectations are defined as just; those that do not are unjust. A state of justice is always a balanced status situation, while injustice is always an imbalanced status situation. Balanced status situations are stable, imbalanced status situations produce tensions and pressures for change.

Though the focus of this stream of research is the selection of the relevant comparison standard, the model assumes, like equity theory, that people are motivated by a desire to avoid injustice. An important difference from Adams' equity theory is that it is more general and assumes that people react negatively when either their own or others' rankings of various status dimensions are dissimilar.

iv. Retributive Justice Theory. Hogan and Emler (1981, p. 131) argue that theories that emphasize the positive side of justice processes (i.e., on allocating and exchanging benefits on a just basis) ignore the older, more primitive, and socially more significant process of retribution. According to this theory, people do not behave justly because they benefit by it, or because they have a genuine concern for justice. They do so because they would like to avoid the social sanctions which result from behaving unjustly.

Hogan and Emler support their position by arguing first that while society is slow in
rewarding conformity to social rules, it is quick to punish deviance. Second, there are elaborate and institutionalized social mechanisms to deal with inequity and injustice, but no comparable mechanism exists to reward justice. Third, even in the administration of justice, while the wrong doer is punished, the victim is rarely compensated, therefore making retributive justice even more salient.

While Hogan and Emler (1981, p.131) argue that "retribution is not a 'natural' concept like sympathy, jealousy, or aggression; that there is no reason to believe that its sources are rooted in human biology". They also make it clear that they think that (p. 136) "calculations of self-interest strike us as too cool to explain the passion with which people react to perceptions of injustice". Instead Hogan and Emler (1981, p.136) present retribution as non instrumental, " perceptions of injustice (defined as other's getting more than their fair share, or not getting their just desserts after misbehaving) are followed by aggressive reactions that may serve one's selfish best interests but are not prompted by considerations of self-interest."

All of these theories -distributive justice, equity, status value and retributive justice theory- are primarily concerned with people's reactions to injustice. An implicit assumption (and in some cases, Hogan and Emler's case, an explicit statement) is that people are motivated by a desire to avoid injustice. These theories do not suggest that the primary motivation is self-interest. According to equity theory (Adams, 1965), people are motivated to resist inequity even if the inequity is to their benefit e.g., in the case of overcompensation. These theories suggest that avoiding injustice is not used as an instrumental measure for other ends.
Most of these theories have been empirically tested in situations where the observed participants were recipients of allocation decisions, suggesting that these theories implicitly address the recipient rather than the offerer side of exchange interactions.

II. INJUSTICE AS A STRATEGY.

Models describing injustice as a strategy are infrequently studied and are not of central interest in this project. Technically theories that view injustice as a strategy cover two broad classes: Those that suggest that people react to injustice because it serves their self-interest to do so and those that suggest that injustice can be used as a strategy to motivate people.

i. (Avoidance of) Injustice. In this case, the goal-strategy distinction is not easily identified, especially in cases of disadvantageous injustice, because any action to restore justice by a recipient who is the target of an unjust allocation decision is consistent with the self-interest motive. The idea that people object to bad outcomes is consistent with the notion of outcome maximization, which is almost axiomatic in most economic models of humans, but the difficulty is determining whether their objections are either principled or strategic. Economic theories that emphasize the value of reputation (e.g., Frank, 1988), and evolutionary fitness (e.g., Skyrms, 1993) suggest that people avoid injustice because it is in their long term interest to do so. Specifically, Frank (1988) argues that if people lose current rewards by reacting to injustice, it may be beneficial to them in the long run: people will not take advantage of them because their past behaviour indicates that they are not
willing to put up with injustice. Thus, by giving up some current benefits, people may be able to increase the likelihood that they will get fair treatment later.

In the case of overcompensation, it is possible to distinguish between the goal and strategic aspect of a behavioral reaction to perceived injustice. Rivera and Tedeschi (1976) studied people who were overcompensated (i.e., an advantageous inequity situation): Participants were first asked to rate their satisfaction with the allocation. Overcompensated participants reported feelings of guilt and dissatisfaction. Then, they were told that they would be hooked up to a lie detector and had to report their true feelings. In the presence of the lie detector (i.e., the bogus pipeline procedure), participants reported less guilt and dissatisfaction than when a lie detector was absent. Rivera and Tedeschi concluded that participants reported guilt when they were overpaid because it was normatively appropriate to do so, but when forced to tell the truth, they revealed that they were actually pleased to be overpaid. These results suggest that overpaid recipients express a reaction to advantageous injustice only because it is expected, and not because of any genuine desire to avoid injustice.

Other models also state explicitly that creating injustice (for others) can lead to better outcomes (for self).

ii. Overreward as a Motivator. Leventhal (1976) suggested that people may use the tactic of providing others with greater outcomes than they might ordinarily expect (i.e., create injustice for instrumental purposes) to create obligations on the part of poor performers to reciprocate allocators’ generosity by improving their subsequent performance.
This was demonstrated empirically in Greenberg and Leventhal (1976) where participants who were given explicit instructions to allocate rewards to motivate recipients tended to over-reward poor performers compared to participants who had been given instructions to allocate rewards equitably. A follow up questionnaire revealed that this was because subjects believed that over-reward was a better motivator than under-reward.

According to Greenberg (1982), this tactic would only work for short term goals, because over time people’s aspiration levels may rise to keep up with the overreward. Also, others may begin to suspect that the overreward is deliberate and react unfavourably to what they perceive to be a manipulative tactic. Further, people tend to use inequity as a motivational tactic only for poor performers (i.e., people do not under-reward good performance). Finally Greenberg (1982) suggests that allocators may refrain from over rewarding a worker if they fear repercussions from others. People who compare themselves with overrewarded workers might begin to feel inequitably paid.

An important point here is that the perpetrator of injustice (e.g., the allocator) is motivated by strategic considerations, but the technique (of injustice as a motivator) only works if the target of the injustice (the recipient) is motivated by a desire to avoid injustice as a goal rather than for strategic reasons. If the targets are motivated only by instrumental concerns, then they would not react to advantageous injustice by working more or by increasing inputs. Instead they would reap the over-reward and hope it continues.

III. JUSTICE AS A GOAL.

According to Lerner (1981) justice is a basic human motive and cannot be explained
away by suggesting that it is a strategically formulated social and personal device used to facilitate the acquisition of other desired resources (Lerner, 1981). Lerner (1981, p. 22-23) stated his position directly: "the most important step in developing an adequate theory of justice is to recognize that the traditional assumption that people are continually and centrally concerned with the process of maximizing their outcomes (call it drive reduction, or profit maximizing, or pleasure enhancing, or pain avoidance) must inevitably lead to a model that fails to capture the unique qualities associated with justice in human affairs." His is the only model that fits this category.

i. Justice Motive Theory. According to Lerner (1981, p.21), "there is no doubt that people wish to maintain a positive self-image and pursue their self-interest in the most effective manner; however what is also true is that these goals are framed within the more general commitment to deserving and justice." The justice motive theory assumes, along with all other approaches, that people are self-interested in the sense that they are born with and generate desires and goals. However, self-interested, outcome-maximization motives are assumed to be radically altered very early in the developmental process (Lerner, 1981, p.27). This occurs because from very early in life children learn that by delaying immediate gratification, they can assure themselves of greater rewards in the future. Also, they learn that the rule of deserving (i.e., everyone should get what they deserve) is the best mechanism to ensure the stability and predictability of their own rewards. Note that even Lerner’s justice motive, at a very fundamental level, is also based on self-interest. But, the difference is that it becomes an internalized principle that people use in all choice situations,
and does not vary according to context.

Justice motive theory assumes that people organize their experience to maintain continuity and stability. Based in developmental psychology, the theory suggests that people learn to make sense of their interactions by organizing them along two dimensions: the similarity of others (the relation component) and the interdependence of the acquisition process. In encounters with others, people attend to and process cues of who they are in terms of 'same', 'similar', or 'different' (termed the relational element), as well as the kinds of activities required to accomplish their goals (termed the acquisition process) i.e., people must either experience their goals vicariously through the other, or have convergent goals, or have divergent goals requiring competitive acts (Lerner, 1981). In any situation, either the relational element or the acquisition process is salient; to illustrate, consider the example of a work team where team members are in a unit relationship (i.e., they view each other as being similar) and their goals are divergent. The relationship is salient when it is necessary to maintain the perception of being in a unit relationship. When a limited resource (e.g., a promotion) is the focus, then the acquisition process becomes salient. Lerner (1981) suggests that people construct problem solving sets [i.e., a three by three matrix with the three relational elements, same, similar, and different, crossed with the three acquisition processes, vicarious, convergent, and divergent] as a template for action.

Depending on which set of considerations is most important in a given situation (the relation to the others or the gaining of the resource), a person will perceive others and respond to them within the problem solving set, viewing them in relatively impersonal terms as occupants of positions in an acquisition process (when the acquisition process is salient),
or as 'kinds' of people who merit certain kinds of outcomes regardless of the particular acquisition activity in which they happen to be engaged (when the relational element is salient) (Lerner, 1981). Thus, the repertoire of behaviours is not just the nine cells of the three by three matrix: each cell is further divided into two depending on the relative salience of the relational element and the acquisition process.

The combination of the perceptions of relationships and acquisition processes determines what is fair and just in a given situation and determines how people act. To illustrate, when others are perceived as similar and the two parties have divergent goals, fair behaviour can be a formal contest for resources when the relational element is salient or behaviour reflecting justified self-interest when the acquisition process is salient. When others are perceived as similar and the goals are convergent, appropriate behaviour is team effort and equal sharing of resources when the relational element is salient and cooperation and proportionate sharing of resources when the acquisition process is salient.

According to Lerner, people behave according to what they consider to be appropriate behaviour in any context, based on this template. The most important aspect of this theory is that people are capable of viewing everyone as the 'same' (in doing so they are more likely to behave in a fair manner). Economic and institutional arrangements minimize this tendency and promote self-interest as the dominant motive when, according to the model, altruism and cooperation are equally important motives.

In sum, justice motive theory is the only model that suggests that people behave in a fair manner because justice is strictly a goal for them. Seemingly strategic behaviours occur because people see these behaviours as fair. The theory explains seemingly strategic
behaviours within the frame of fairness, while other approaches explain seemingly fair
behaviours within the frame of self-interest.

Most empirical studies of justice motive theory have focused on third party reactions
to allocation decisions. Lerner (1982) also suggests that allocators’ behaviours in other
experiments (e.g., Leventhal, 1976) correspond with the predictions of justice motive theory.
Thus, this theory implicitly addresses the allocators’ side of exchange interactions.

IV. JUSTICE AS A STRATEGY.

Models of justice as a strategy emphasize the normative (defined as rule following
behaviour) and the instrumental (narrowly defined as the maximization of own outcomes)
aspects of justice (e.g., Deutsch, 1975; Leventhal, 1976). Normative theories emphasize that
people behave fairly because of the existence of a norm (though they are instrumental to the
extent that they include a functional purpose, for society or the social unit, and only
indirectly for individuals, for fair behaviours), while instrumental theories suggest that self-
interest (not adherence to a norm) is the direct motivator of fair behaviours. Though the
instrumental and normative models differ in their explanation of the basis of fair behaviours,
they are similar to the extent that both assume that fair behaviours are not enacted due to a
desire for justice by itself. According to the normative view, society has developed norms
to ensure its own smooth functioning and people follow the norms because it benefits them
in the long run if society functions smoothly. According to the instrumental view, people
attempt to maximize their outcomes and behave in a manner (sometimes in an ostensibly just
manner) that helps them attain this goal.
Though impression management theory is not exactly a theory of justice, it has been used to explain just behaviours (e.g., Reis, 1981), and thus falls within this domain.

i. Normative Theories. Models of people following socially determined rules that are appropriate to their particular situation are defined as normative. They exemplify justice as a strategy category because they suggest that self or society maximization are normatively appropriate (e.g., Deutsch, 1975). For instance, just behaviours are functional for the society, and if people do not follow them they are sanctioned. Thus, it is in the best interest of the individual that he/she follows the appropriate justice rule.

a. Justice judgement theory. Leventhal (1976) suggests that the impact of any allocation norm does not rest solely upon the allocators’s desire for justice as an end in itself, but also upon the predictability and expected benefits of a particular norm. Leventhal focused on allocators and suggested that their justice judgements are based on what they perceive to be appropriate distribution rules. These judgements do not necessarily correspond to actions or behaviours to create or remove injustice, because in some cases justice may be inimical to the desire to increase productivity or stimulate performance and enhanced productivity and performance may be the preferred goal of the allocator. For example, Greenberg and Leventhal (1976) report an experiment where participants who were told that their main goal was to motivate failing performers, displayed no concerns for fairness, and over-rewarded bad performance. Leventhal (1980) suggests that justice considerations coexist with other more pragmatic considerations such as increasing productivity, minimizing wastage of scarce resources, and preserving group harmony among
others, and the relative salience of these considerations is situation specific.

Deutsch's (1975) model is similar, except that he allows for a social motive in addition to the individual desire to maximize outcomes, i.e., the social unit adopts a particular rule because it is the intelligent way to solve a distribution problem. Thus, a unit with the goal of economic productivity typically adopts the equity rule; a unit with good interpersonal relations as the goal generally adopts an equality rule.

**ii. Instrumental Theories.** These theories also suggest that justice rules serve ends other than justice. For example, Walster et al., (1978) note that people "soon learn that the most profitable way to be selfish is to be fair". In fact, according to Walster and Walster's (1975) version of equity theory, people behave in a manner consistent with the maximization of their outcomes, and if behaving equitably maximizes their outcomes, they do so.

**iii. Impression Management Theories.** Impression management models have also been introduced into justice research. Greenberg's (1990) comprehensive review finds that people adopt just behaviours for the sake of looking fair. Within this framework, people are motivated by a desire to acquire a favourable reputation, so they behave fairly in public situations. But when they can cheat and get away with it, they do so.

Impression management theorists distinguish between pragmatic and principled motives behind impression management behaviours. Behaviours enacted to impress oneself are termed principled and those that are enacted to impress others are termed pragmatic. According to Greenberg (1990) people behave fairly to maintain self-images as fair persons
(principled) or to convey an impression to others that they are fair (pragmatic). The models that suggest pragmatic reasons for impression management are very similar to instrumental theories of justice in that they suggest that justice is not the goal, but a strategy adopted by people to acquire favourable reputations. A number of empirical studies have shown that people allocate resources equally only when others (including recipients, observers, experimenters, etc.) are aware of their decisions (Reis and Gruzen, 1976), when they expect to meet the recipients (e.g., Austin and McGinn, 1975) and when the recipients are those whose impressions are valued (e.g., one’s spouse in Schoeinger and Wood, 1969, or one’s friends in Austin, 1980). These results support the impression management implications of just behaviours.

In some cases, conflict arises between internal standards of justice (i.e., principled self-image maintenance efforts) and the pressure to present oneself favourably to others (pragmatic). Kernis and Reis (1984) created such conflict and studied how an individual difference variable (public or private self-consciousness) predicted justice behaviours. They had participants allocate rewards after performing a task on which they were led to believe that they were more productive than others. They also emphasized that equality was normatively appropriate for the situation. Participants who followed the equity norm would be trying to impress others that they were fair, while those who followed the equality norm would be trying to impress themselves that they were fair. The results indicated that highly private, self-conscious participants followed the equality norm and the highly public, self-conscious participants followed the equity norm. Individual differences predicted whether the self or others would be the target of impression management.
Most impression management studies and models focus on allocators, although we have noted in an earlier section that some studies have looked at recipients. Impression management studies have traditionally looked at cases where recipients are overcompensated. The models have not been used to study cases of disadvantageous injustice.

Most theories of justice as a strategy have been empirically tested in situations where the observed participants were allocators in allocation decisions, therefore suggesting that these theories tend to address the allocation side of exchange situations. In studies of recipients, allocations are typically over- rather than undercompensations, which also puts recipients in a relatively high status situation. These results may not generalize to cases of perceived under-compensation (i.e., people expressing dissatisfaction with being under-compensated because it is normatively appropriate and not because they are genuinely concerned about it), which is arguably the more common case.

Based on the above review, one or more of the following statements may be true about the content (justice or injustice) and nature (goal or strategy) of the motivation behind people’s behaviour. For clarity, we separate the statements that have been made about the motivations of allocators from those of recipients.

Allocators:

People allocate resources justly because it is in their best interest to do so. (Justice as a strategy).

People allocate resources unjustly because it is in their best interest to do so.
People avoid unjust allocations, because it is in their best interest to do so. (Injustice as a strategy).

People allocate resources justly, because they care about justice. (Justice as a goal).

Recipients:

People react negatively to unjust allocations because it is in their best interest to do so. (Injustice as a strategy).

People react negatively to unjust allocations because they care about injustice. (Injustice as a goal).

People react positively to just allocations because they care about justice. (Justice as a goal).

People react positively to just allocations because they are well compensated (Justice as an instrumental strategic motivation).

These statements do not exhaust all possible combinations of the content and nature of justice motivations for allocators and recipients. They are a summary of what justice theories (and empirical studies) actually say about allocators and recipients.

The theories tend to emphasize the self-interest motive for allocators and the justice motive for recipients. Even allowing for Leventhal’s (1980) argument that justice is just one of the many motives underlying behaviour and that situational factors affect the salience of particular motives (e.g., justice or self-interest), it is an intriguing thought that in the same
exchange situation different motives may be salient depending on whether an individual is the allocator or the recipient. The possibility that roles will determine motives (and actions) is not new: The most notable example is Zimbardo's prison study at Stanford, where students were randomly assigned to "guards" or "inmates" for a week long experiment (Haney, Banks and Zimbardo, 1973) The extremity of their role-related behaviours forced Zimbardo and his colleagues to end the experiment. The current research is much less forceful and investigates whether considerably weaker role assignments nevertheless have strong effect.

In the allocation situations studied here, the objective situation is the same for both allocators and recipients. Although any feature of the situation which makes justice a salient issue for recipients should make the issue salient for allocators too, evidence suggests that this does not happen. Instead, the roles seem to elicit different motives. In this study, we place people in the two roles of respondent and allocator sequentially (i.e., almost immediate role reversal). These roles must be very powerful if they determine people's motives in this context.

Theories that focus on recipients (e.g., equity theory and distributive justice theory) suggest that injustice is a motivator. Theories that focus on allocators (e.g., justice judgement theory and impression management theories) suggest that justice (albeit an instrumental form of justice) is the motivator.

If the motive (goal or strategy) and content (justice or injustice) were universal, then both allocators and recipients should exhibit corresponding behaviours. For example, if the motive was strategic and the content was injustice, then allocators would behave unjustly if it were in their best interest to do so, and recipients would react to unjust allocations if it
were in their best interest to do so. In reality, however, the motive and the content may not be applicable to all people in all situations: Some people may be motivated by a desire to be fair, and others may behave fairly only when it is in their best interest to do so. Similarly, some may be motivated by a desire for justice and others by a desire to avoid injustice. This review provides the basis for the prediction of a systematic difference in the nature and content of the justice motive: Allocators seem to be interested in justice if it maximizes their outcomes; recipients appear to be centrally interested in avoiding injustice and this interest seems to be independent of instrumental concerns.

Part of the problem that was outlined in the introduction, namely the role specific nature of justice motives and content, seems to be borne out in this review of relevant literature. We turn now to an examination of the effects of power on the elicitation of the justice or the self-interest motive.

The theories that we have reviewed thus far are fairly easily classified as either referring to an allocator or a recipient; these are usually well specified roles. They are not as easily classifiable as referring to either powerful or powerless actors, since a person's power may depend on social judgements or frames of reference. Further, with the exception of retributive justice theory, they do not explicitly include power in their conceptual framework. If we assume that allocators are powerful, and recipients are not so powerful, then the same arguments that we made about justice for allocators and recipients can also be made for actors with and without power. But this does not address the issue of the effects of power on the content and motives of actors independent of their role of actors in an exchange. To understand the effects of power on motives and content, we turn to some
empirical and conceptual work on power that relates to justice motives.

V. POWER.

In this study, we use Emerson’s (1962) definition of power as dependence i.e., power capabilities are based on the dependencies or inter-dependencies within a network of two or more actors. Specifically, in a two actor system, the power of A is based on the dependence of B on A and vice versa. There is an implicit assumption here that A (or B) can gain more power only at the expense of B (or A). Bacharach and Lawler (1981) argued that this is not always the case, and thus suggested that it may be useful to conceptualize social relations as varying on two dimensions of power, total power (mutual dependence) and relative power (dependence difference). They suggest that this approach avoids the implicit assumption in Emerson’s work about the zero sum nature of power.

Deutsch’s (1982) model of interdependence and psychological orientation is one of the few theoretical approaches that uses this definition of power to describe its effects on motives. Deutsch suggests that a number of dimensions can be used to characterize interpersonal relationships. Among them are cooperation-competition, power distribution, task oriented versus socio-emotional, formal versus informal etc., These dimensions determine the nature of social relationships and affect the psychological (i.e., cognitive, moral and motivational) orientations of individuals in social relationships. Cognitive orientations refer to scripts, schemas and frames that people use to make sense of a relationship. Motivational orientation refers to situationally relevant motives and need-dispositions. Moral orientation refers to mutual obligations, rights, and entitlement of the
people involved in the relationship.

At the risk of great simplification, we look only at the effects of the power and competition-cooperation dimensions of Deutsch's model. [It seems a valid simplification because Deutsch (1982) himself discusses the effects of power in conjunction with the competition-cooperation dimension.] According to the model, the cognitive orientation pertaining to power concerns the relative power of the participants in a relationship to benefit, harm, or persuade one another. In the competitive branch of the unequal power schema the roles of 'victor' and 'vanquished' are highlighted; the equal power schema is oriented more to continuing struggle. When the two actors have congruent interests, the less powerful member is more likely to engage in ingratiation. The cooperative branch of the unequal power schema emphasizes responsibility for the high power person and respectful compliance for the lower power person. The equal power schema emphasizes mutual responsibility and respect.

The motivational orientations underlying power are based on self esteem and self respect. The powerful may have a need for dominance and the powerless a need for deference or abasement depending on whether the context is cooperative or competitive.

The moral orientation underlying an equal power relationship tends toward egalitarianism in the case of cooperative relationships and toward equality of opportunity, but unequal outcomes in the case of competitive relationships. In unequal power cooperative contexts, the moral orientation suggests that the powerful will reward the less powerful and the less powerful will show their appreciation. In the case of unequal power in a competitive context, the moral orientation of the strong and the weak support an exploitative relationship.
Other treatments of the effects of power on motives considers how people change when they gain power (e.g., Haroutunian, 1949 and Sampson, 1965). They suggest that power induces individuals to act inequitably and exploitatively toward the less powerful. As the old saying goes, power corrupts and absolute power corrupts absolutely. Kipnis (1972 and 1976) describes the metamorphic effects of power: those who gain power begin to devalue the worth of the less powerful and view themselves as special and deserving of better outcomes than the powerless.

Other empirical studies that look at the role of power in exchange suggest that powerful actors are governed by the norm of social responsibility and come to feel a sense of obligation toward the less powerful: they tend to avoid exploiting the powerless (e.g., Dorris, 1972).

There is mixed evidence about the effect of power on motives in general, and justice motives in particular making it is difficult to extend these findings. Further, not much empirical work (with the exception of relative deprivation) has considered the motives of the less powerful actors. Deutsch’s (1982) model does suggest that power’s effects on motives is moderated by actors’ definition of the context as either cooperative or competitive.

We now turn to an unambiguously competitive context i.e., the experimental study of bargaining games, and extend the ideas developed in this chapter on the effect of roles and power to the motives of players who participate in these games.
CHAPTER 4.
ULTIMATUM AND DICTATOR GAMES.

Fairness or justice has been of central interest in many recent bargaining experiments, particularly in experimental economics. Though concerns for fairness were used to describe empirical results that deviated from early theoretical predictions (Guth et. al., 1982), social-psychological theories of justice have rarely entered into the discussion. (See Eckel, 1995 and Guth, 1988 for two exceptions.)

I. ULTIMATUM BARGAINING.

As mentioned earlier, game theoretic predictions for ultimatum games have not been supported empirically (e.g., Guth, Schmittberger and Schwarze, 1982; Guth and Tietz, 1990). In particular, average offers typically approach 50-50 divisions of the payoff and, as the value of an offer drops, rejections become more frequent. As a result, several authors have suggested that fairness drives the results of these experiments and, by extension, other ultimatum interactions. These explanations, however, were post hoc, rarely well defined, and had not been tested experimentally until Pillutla and Murnighan (1995a), described below. In particular, fairness explanations could be applied either to ultimatum offerers (who tend to offer much more than was predicted) or to ultimatum respondents (who reject some offers, again counter to prediction).

i. Offerers. Recent research suggests fairness concerns cannot explain the repeated
observation of large ultimatum offers. Harrison and McCabe (1992) and Prasnikar and Roth (1992) concluded that relatively large offers seem to be motivated not by fairness concerns but by fears that small offers will be rejected. Prasnikar and Roth (1992) also noted that making small offers may be costly, since a rejection results in the offerer receiving a zero payoff: All these findings were also the conclusions of Straub and Murnighan (1995).

In most early ultimatum research, information about the money being divided was known to both offerers and respondents. Several recent studies (Croson, 1993; Kagel, et al, 1993, and Straub and Murnighan, 1995) have also investigated partial information conditions, where respondents did not know how much was being divided. Straub and Murnighan (1995) used the different information conditions to operationally define fairness: They suggested that offerers who did not take advantage of information asymmetry and did not make smaller offers when the respondent does not know the amount being divided were truly fair, while those who took advantage of their information advantage by reducing the size of their offers when respondents did not know how much they were dividing were strategic. Guth and Van Damme (1994) use a similar definition. Their data showed that a large majority of respondents used an information advantage strategically, reducing their offers when they knew that respondents did not know how much they were dividing.

These experiments suggest that expectations of rejection and simple attempts to maximize outcomes can explain the incidence of large ultimatum offers as well or better than fairness norms. In a more pointed study to address this issue, Pillutla and Murnighan (1995a) gave offerers the opportunity to add fairness statements (e.g., "this is a fair offer") to their offers; in other conditions offerers were informed that an independent third party
would evaluate their offers and add statements that the offer was either fair or unfair to them before presenting them to respondents. The different experimental conditions (i.e., partial and complete information, presence or absence of fairness statements, and presence or absence of third party evaluation) were designed to provoke fairness concerns in the minds of the offerers and in essence, manipulate fairness concerns directly. Pillutla and Murnighan (1995a) suggested that fair offerers would not take advantage of information asymmetry, not be affected by the presence of third party evaluation, and would not make different offers when they could add fairness statements. If people made larger offers in the third party evaluation or complete information conditions than in the non-evaluation or partial information conditions, then their ostensibly fair behaviour could be seen as an impression management strategy. The results indicated that offerers were predominantly concerned with impression management: almost all of them made small offers when no one (except they themselves) could evaluate the fairness of their offers. The most interesting result was that, when offerers were allowed to add fairness statements to their offers, they reduced the size of their offers, suggesting that they based their offers on strategies designed to increase self-gain rather than due to a genuine concern for fairness. All these results thus suggest that almost any view which suggests that fairness concerns drive ultimatum offers can be understood as instrumental (i.e., fear of rejection, impression management, etc.).

ii. Rejection of Small offers. The fact that from 15 to 20% of the participants in ultimatum experiments reject ultimatum offers (Ochs and Roth, 1989) is also counter to game theoretic predictions and suggests that respondents are influenced by factors other than
maximizing gains. Several variations of fairness have been presented as reasons for this behaviour, including (1) the fact that insultingly low offers have negative utility (Ochs and Roth, 1989); (2) that people may require a payoff that exceeds some exogenously determined minimum (Ochs and Roth, 1989); and (3) that rejections may be emotionally rather than cognitively or normatively based (e.g., due to wounded pride; Straub and Murnighan, 1995). The Straub and Murnighan (1995) experiments tested the first two hypotheses and found no support for either of them.

Pillutla and Murnighan (1995a & b) were the first to test the wounded pride hypothesis. In their first study, they provided respondents with large and small offers (ostensibly originating from actual offerers, but actually determined by the experimenters) labelled as fair or unfair. Respondents were also led to believe that 'This is fair', or 'This is unfair' labels were either those of third parties or those of the offerers themselves. Partial and complete information conditions were also included. Pillutla and Murnighan (1995a) hypothesized that respondents would be influenced by third party labels especially when they could not evaluate the fairness of the offers themselves (i.e., in the partial information conditions). Further, they hypothesized that respondents would be particularly angry with offers that were clearly unfair (i.e., small offers in complete information conditions), but were labelled fair by offerers. This condition provided a test of the wounded pride hypothesis. Their results indicated that people were concerned about fairness: third party labels did influence their accept or reject decisions. But large offers were accepted irrespective of third party labels, indicating that the absolute size of offers may have overwhelmed their concerns for fairness. Pillutla and Murnighan (1995a) also found no
support for the wounded pride hypothesis: Instead, respondents seemed to ignore any fairness claims made by offerers.

A second study (Pillutla and Murnighan, 1995b) was designed to create a more direct test of the hypothesis. Pillutla and Murnighan (1995b) hypothesized that respondents would be most angry in situations where they could blame offerers for small offers, compared to conditions where they could not attribute responsibility to the offerer. They asked participants to respond to small offers (ostensibly originating from students in other classes, but in fact determined by the experimenters) in partial and complete information conditions. They also provided respondents with different outside options (i.e., if they rejected the offer they could get the amount specified as the outside option) that were greater than the offer in one condition, equal to the offer in the another, and less than the offer in the third. The offers and outside options were very small (5 to 10% of the amount being divided) and in the range that earlier ultimatum respondents had judged to be unfair. Pillutla and Murnighan (1995b) informed one set of respondents that the offerer knew that they had outside options (and knew the value of the outside option: the common knowledge condition) and informed another set that the offerer did not know that they had outside options (the not common knowledge condition). The common knowledge-complete information condition was hypothesized to produce the most anger, because the respondent could evaluate the fairness of the offer and ascribe responsibility to the offerer (i.e., the offerer knew the value of their outside option and could be seen as taking advantage of this information). The experiment was designed to study the causes of ultimatum rejection and hence created conditions where the possibility of rejections was great.
The results indicated that rejections were higher in the condition where respondents could blame offerers for the unfair offers compared to conditions where subjects had reasons to believe that, though the offerer made an unfair offer, they did so unintentionally. Thus, the results supported the wounded pride hypothesis. Since the perceptions of unfairness are necessary precursors to actions based on wounded pride, the data indicate that feelings of unfairness coupled with anger and wounded pride account for many of the rejections observed in ultimatum experiments.

These results (i.e., respondents reacting on account of wounded pride, anger etc.) along with Lamm's (1986) suggestion that negative emotions are engendered most when people are morally committed to justice (and not in conditions where they use justice for instrumental purposes) suggest that respondents are genuinely concerned about fairness.

The context of ultimatum bargaining provides a fertile ground for the study of the instrumental means- injustice avoidance asymmetry. These previous findings suggest that offerers use justice to maximize their outcomes, while respondents look for justice as an end in itself. By looking at people who fulfil both roles, one after the other, we can determine whether a movement from one role to another would result in the transformation of motives or the adoption of the motives that have been found to exist in that role in the past.

II. Dictator Games.

To address the issue of whether people make large offers because of strategic reasons or because of fairness concerns, Forsythe, et al, (1994) compared ultimatum and dictator offers. In dictator games offerers divide the endowment any way they want and the
respondents have no opportunity to reject offers. Forsythe et al., (1994) hypothesised that if the distribution of offers in ultimatum and dictator games was the same, then they could infer support for the 'fairness hypothesis'.

Their results show that while 21 to 36% make the smallest possible offer in dictator games no one does so in ultimatum games. Similarly, only about 21% of the offerers make equal offers in dictator games compared to 65 to 75% in ultimatum games. They concluded that a taste for fairness alone cannot explain large ultimatum offers.

Forsythe et al., (1994) suggested that it may be useful to conceptualize the ultimatum game as a game with incomplete information. They suggest that in such an incomplete information game, "some proposers are pure gamesmen, and others are concerned (to varying degrees) with fairness and some respondents are pure gamesmen, whereas others have 'spite' components in their utility functions and reject proposals that offer them too little". The difficulty is not knowing which proposers are gamesmen and which respondent value spite. Thus, the probability that a respondent is spiteful makes non-trivial offers optimal in ultimatum games. Forsythe et al., (1994) posit, however, that non-trivial offers in dictator games are evidence of fairness.

This conceptualization would lose some of its appeal if it can be found that dictator offerers make larger offers for reasons other than fairness. In this case a satisfactory explanation for ultimatum games depends on a satisfactory account for dictator games (Forsythe et al., 1994).

Other studies on dictator games provide conflicting evidence about the behaviour of dictator offerers. Hoffman, McCabe, Shachat, and Smith (1994) reported that more
participants made equilibrium offers (i.e., zero offers) in completely anonymous conditions than in conditions which replicated the Forsythe et al., (1994) study. This suggests that large dictator offers also cannot be interpreted as evidence of fairness concerns. But, Bolton, Katok and Zwick (1993) reported that participant anonymity (from the experimenter) does not have a major effect on dictator game behaviour. Thus, it is not clear what the motivations of dictator offers are.

Some observers (e.g., Roth, 1995) have questioned the comparison of ultimatum and dictator game behaviour because of the differing sequence of moves in the two games; i.e., there is no need for a respondent to accept or reject offers in the dictator game. Bolton and Zwick (1991) designed a game called the 'impunity' game, where the offerer may offer any part of their endowment, the respondent can accept or reject, but the respondent's decision has no effect on the offerer's outcomes. The offerer gets whatever/he demands. This game has the same move sequence as the ultimatum game and the same incentive structure as the dictator game. Bolton and Zwick (1991) found that a large percentage of the offerers made equilibrium offers. Although dictator and impunity offers are closer to game theoretic predictions, there are still some non-trivial offers and it is not clear why.

If the conclusion in the previous chapter is correct that the role (and situational power) in an exchange situation determines whether justice is a goal or is used as a strategy, then justice may not be the goal of dictatorship offerers either. Injustice avoidance, however, may still be the goal of the respondent. Unfortunately the ambiguous nature of the findings about the effects of power does not allow us to make predictions about the motives and behaviour of dictator offers relative to ultimatum offerers.
CHAPTER 5.

APPLYING THE JUSTICE MODEL TO ULTIMATUM AND DICTATOR GAMES

Based on our reading of the literature, we proposed a simple justice model in an allocation situation. Allocators use justice for strategic purposes. Recipients react to perceived injustice and use its avoidance as a goal. We also proposed that relative power within the allocator or recipient roles would have an effect on the content of the justice motive, though the exact relationship between power and motives is not as clear as the relationship between roles and motives.

Past research suggests that this model may hold for offerers and respondents in ultimatum (e.g. Pillutla and Murnighan, 1995a) and for offerers in dictator games (Forsythe, 1995). Not much work has been done on respondents in dictator games. A simple extension of the model suggests that offerers will be strategic and respondents will react negatively to perceived injustice in both dictatorship and ultimatum games.

Ultimatum and dictator games provide a context where we can distinguish between the goal and strategic aspects of justice by varying the degree of interdependence between offerers and respondents. These games also provide a forum for testing the difference between the motives of allocators and recipients. We infer and contrast motives by creating situations where the pattern of behaviour indicates the underlying motive. By juxtaposing partial and complete information conditions and the experimental manipulation of salience of fairness within ultimatum and dictator games, we create the necessary conditions to observe patterns of behaviour indicating either a justice or a strategic motive. Also, studying
people as both offerers and respondents allows us to contrast their behaviours and their motives. Finally, as noted earlier, ultimatum and dictator offerers differ in power: comparing the two will provide information about the effects of power on justice motives.

The reason we experimentally manipulate the salience of fairness is that some observers (e.g., Lerner, 1981 with his model of justified self-interest) point out that taking advantage of information asymmetry may be seen as fair (by participants). Similarly, participants may think it is fair to take advantage of their power and make smaller offers in dictator games than in ultimatum games. Thus, concluding that people do not value justice as a goal on the basis of different offers in various conditions of information and interdependence, though valid, may require further corroboration.

This corroboration can provided by the experimental manipulation of fairness. Starting with the idea that strategic behaviour can be inferred if we can demonstrate that people use fairness to manage impressions, we designed an experiment where it is possible to distinguish between behaviours intended to manage impressions and behaviours motivated by other considerations.

Greenberg (1990) suggests that people attempt to convince themselves and others that they are fair. The need for self-impression management provides the opportunity to create conditions where we can distinguish between behaviours motivated by justice and behaviours motivated by other goals. People use normatively appropriate justice norms when they are made more self-aware (e.g., when they are made to sit in front of a mirror in Greenberg, 1983). Similarly, raising the salience of justice as an important issue in the decision making process, prior to making a decision, should lead to behaviours reflecting a justice motive.
If justice were a preeminent guiding principle, as per Lerner (1981) (i.e., a goal in our terminology), then increasing or decreasing the salience of justice concerns should make no difference to the subsequent decision. In this experiment we manipulated the salience of justice by asking people to define what they thought was a fair offer prior to making an allocation or a response in one condition and after making an allocation or response in the other. Any difference in behaviour on account of the manipulation of salience of justice indicates that justice was not the salient motive behind the behaviour. Asking people to define a fair offer, not only manipulates the salience of fairness by raising the issue of fairness in their cognitions, it also provides fairness estimates which can be used to predict their subsequent behaviours.

Independent evidence, about the validity of this manipulation leads us to believe that this is an appropriate manipulation for our purposes. Wyer and Hartwick (1980) presented considerable evidence that suggests that people do not carry out an exhaustive search of long term memory for all relevant information prior to making a judgement. Rather, they base their judgement on a relatively small subset of available information. Also, Nisbett and Ross (1980) argue that people are often unsure of their beliefs and values and simply adopt the most cognitively available response in the immediate situation. Tetlock and Manstead (1985) extend this argument to suggest that providing people with information prior to the task at hand influences their subsequent behaviour because it makes a particular (e.g., justice concerns) part of their memory salient. Thus, asking people to make fairness ratings will prime their fairness concerns, if they have not been primed already by the task. If the manipulation does not result in any change in behaviour, we may infer that fairness was
already part of the cognitions preceding the task. If it results in changed behaviour, on the other hand, we may infer that fairness concerns were not in the cognitions immediately preceding the task, and were primed by the manipulation.

An important aspect of our model hypothesizes that few people are consistently fair. Instead, we argue that fairness is one of the many goals that motivate behaviour and the salience of the justice motive is situation and role specific. By hypothesizing that some roles evoke strategic behaviour, we imply that self-interest is more salient than fairness and that fairness concerns, if raised at all, are typically used for strategic purposes. Specifically, in the case of ultimatum and dictator games we expect that the roles of offerer or respondent determine whether justice is used as a strategy or as a goal. To test whether the asymmetric motives, i.e., justice as a strategy as an allocator and justice as a goal for recipients, are present in the same individual, participants take on the role of both offerers and respondents in the experiment. The order in which they take the roles is systematically varied.

Though we argue that the asymmetric motives are present in the same individual, varying the roles of people from respondents to offerers and from offerers to respondents should have differential effects on the motivations and consequently their behaviour. Mischel (1968) argued that, though people learn from different situations, how they perform depends on the stimulus in the current situation and the perceived consequences of their behaviours. We would expect that being a respondent first should make participants make larger offers, because they learn (from their own behaviour) that small offers are rejected (i.e., the strategic motive). Also Lamm (1986) argues that people are more likely to be committed to justice if it is a goal rather than a strategy. Thus, being a respondent first, with its
hypothesized commitment to justice as a goal, should result in larger offers when people become offerers later if their concern for justice (i.e., justice as a goal) spills over.

On the other hand, Lamm's (1986) observation and the hypothesis that people are more likely to look for justice when they are respondents suggests that the strong justice concerns that are evoked by the weaker respondent role may overpower any spill over of learned behaviours (i.e., strategic behaviours) from the role of offerers. In other words, being a respondent before being an offerer should have more impact on behaviour than being an offerer before being a respondent. Thus, offerers who have been respondents first will be less strategic than offerers who have not been respondents, but respondents who have been offerers first will not be any less concerned with avoiding injustice.

In sum, the experimental design includes ultimatum and dictator offers and responses, systematic variation of the ordering of offers, responses, and the activation of fairness concerns. We compare offer and response behaviour in ultimatum and dictator games, offer and response behaviour before and after the salience of fairness has been raised, offer behaviour before and after people have been respondents, and response behaviour before and after people have been offerers.

Before proceeding to make any inferences about the goal or strategic nature of justice in ultimatum and dictator games, a caveat is in order. Greenberg (1990) has warned that allocation decisions that look like they have been used to manage impressions of fairness may have been motivated by any number of other reasons, such as avoidance of conflict, minimization of cost incurred in experimental situations etc. For people to use justice strategically (e.g., as an impression management technique) there has to be some recognition
that justice matters and that people should at least appear fair (if not be fair). If people do not recognize that justice is a desirable identity, then there is no reason to hypothesize that they use justice for strategic purposes. Thus, it is possible (if not probable) that fairness concerns do not matter at all to ultimatum and dictator bargainers, either as a goal or as a strategy. As a first step then we analyze the correlation between participants ratings of what they think are fair offers with actual offers and responses to see if they covary. Positive correlations suggest that fairness concerns play some role in ultimatum offers and behaviours, although they would not tell us whether the use was strategic or that justice was the goal.

Our conceptualization of strategic behaviour includes behaviours that reflect impression management efforts and those that take advantage of power differences and information asymmetries. The definition is clear about what can be construed as strategic behaviour on the part of offerers: taking advantage of information asymmetries and power differences and making larger offers when the salience of fairness is raised. In the ultimatum and dictator games, this means making larger complete than partial information offers, making larger ultimatum than dictator offers and making larger offers when the salience of fairness is raised.

Similar conclusions cannot be drawn about respondent behaviour. Different responses in partial and complete information conditions do not indicate strategic behaviour. Instead, different reactions may be consistent with the fairness motive because participants can evaluate the fairness of offers when they are provided with information about relative payoffs but they cannot when they do not have this information. Furthermore, participants may also
consider smaller offers to be fair in dictator than ultimatum games, leading to more rejections in ultimatum games. This possibility is tested by assessing people's fairness estimates in both ultimatum and dictator games. The only respondent behaviour that can be construed as indicative of strategic behaviour is if respondents reject more 'unfair' offers when the salience of fairness has been raised, i.e. after they have indicated what a fair offer is. Because we expect fairness to already be a salient motive in the respondents' behaviour, we do not expect that this experimental manipulation will have an effect. No difference in the response behaviour due to the fairness manipulation indicates no support for strategic behaviour by respondents.

Our logic combined with previous findings paint the following picture of the dynamics of ultimatum and dictator games and their potential for revealing whether justice is a goal or a strategy. First, we assume that offerers are strategic. They take advantage of information and power asymmetries. But offerers may have desires also to be known as fair people. Asking them to make fairness estimates and then asking them to make offers may prompt them to be consistent. Thus, we predict that they will make offers that match or approximate their fairness estimates. Fairness does not exist in their cognitions immediately preceding offer behaviour except as it affects their strategies (i.e., their calculations of what respondents might expect). Asking offerers to make fairness estimates after making offers again raises the issue of consistency. Thus, we predict that they will make estimates that match their offers. Differences will be observed in the size of offers and the fairness estimates in the conditions where people make offers prior to fairness estimates or make estimates prior to offers.
In contrast, we assume that respondents are looking for fairness. They will reject more offers when they have knowledge of relative outcomes. Fairness already exists in their cognitions, so asking them to make fairness ratings after responding to offers or making fairness estimates prior to responding to offers should not result in differing fairness estimates or response behaviour.

Also, responding to offers before making them should reduce (but not completely eliminate) the strategic behaviour of offerers. We expect that being offerers before responding to offers will not reduce the concern to avoid injustice on the part of respondents.

In addition to using sociological and psychological models of justice to explain ultimatum bargaining behaviours, this study will add to previous research on ultimatums by testing whether people who alternate from the role of offerers to the role of respondents (and vice versa) continue to support the emergence of asymmetric motivations within each of these roles or are consistent from one role to another.
CHAPTER 6

HYPOTHESES.

In the previous chapter we developed a number of propositions regarding the behaviour of participants in ultimatum and dictator games. In this section, we transform these propositions into empirically testable hypotheses. In other words, we identify the results that would obtain if allocators are interested in justice as an interpersonal strategy and recipients are primarily interested in avoiding injustice.

Offerers. Based on our definition of strategic behaviour, any difference in the size of offers between dictatorship and ultimatum games would indicate that people are using justice as an interpersonal strategy. This is exactly the result reported by Forsythe et al. Similarly any difference in the size of offers between complete and partial information conditions indicates that people are using justice as an interpersonal strategy. This is the result reported by Straub and Murnighan (1995).

Neither of these studies addressed the argument that subjects may think it is fair to take advantage of their power or information advantage. The differential ordering of offers and fairness ratings allow us to determine whether offerers report that they are motivated by a desire to be fair and whether fairness concerns are consistent across conditions (between participants). If people make different offers (and fairness estimates) based on whether they were asked to make the fairness estimates before or after their offer, we can say with some certainty that they are using fairness as an impression management technique (i.e., it's
instrumental). The manipulation of the order of the tasks does not affect the structure of interdependence and should not alter the offerers' strategic considerations, so any effort to increase offers to approach fairness estimates also indicates an impression management strategy.

**Respondents.** If respondents are motivated by a desire to avoid injustice then we should not see any difference in their responses in the ultimatum and dictatorship games. More importantly we should not see any difference in their responses (and fairness estimates) whether they rate what is fair either before or after responding. If the order of their fairness estimates has no effect, it suggests that their fairness concerns are true and not based on an impression management motive.

The specific hypotheses include:

If offers are constructed to appear fair for instrumental purposes, then

1) Offers made after the fairness ratings will be larger than those made before. (From impression management theory but against justice motive theory).

2) Offers will be significantly larger in ultimatum games than in dictatorship games, (Justice as an interpersonal strategy)

3) Offers will be larger in complete information than in the partial information condition.

4) Offers rated as fair in dictatorship games will be smaller than those in ultimatum games. (Against equity theory).
If justice is the goal for offerers, then

2a) Offers will be the same in ultimatum games and in dictatorship games.

3a) Offers will be the same in complete and partial information conditions.

If justice is neither a goal nor an interpersonal strategy for offerers, then

1b) Offers made after the fairness ratings will not be different from those made before (Against impression management theory), and

5) Ratings of fairness and offers will not be correlated.

If the goal of respondents is to avoid injustice, then the following should hold true.

6) Fairness ratings before responding to offers will equal fairness ratings after responding to offers (Against Impression Management Theory).

7) Fairness ratings will not differ in ultimatum and dictatorship games when the subject is a respondent first.

8) Respondents' acceptances will be predicted by their fairness estimates.

9) Acceptance rates will not differ when people give fairness ratings before they respond to an offer versus after responding to offers.

If respondents are reacting to injustice for strategic reasons (i.e., it is normatively expected of them) then

9a) They will reject more small offers in the condition where they respond after having rated the fairness of offers than in the condition where they have responded to offers.
first. (Impression management theory).

If respondents are not concerned about justice either as a strategy or as a goal then

8 b) Respondents' acceptances will not correspond to their fairness ratings.

Finally, if the idea that the injustice of the current situation overwhelms the strategic intent of people or the strategic intent in the current situation is dampened by injustice of a previous situation is true then

10) Offerers will make larger offers in the conditions where they have been respondents first.

11) Responses of participants who have been offerers first will not differ from those of respondents who have not been offerers first.
CHAPTER 7.

PROCEDURES.

This study was conducted as an in-class exercise. Participants were 225 undergraduate students enrolled in six sections of an introductory organizational behaviour course. The task was presented as a negotiation exercise where participants had a chance to earn real money.

All participants made offers, responded to offers and made fairness ratings. The ordering of these three tasks was varied to get six experimental groups in ultimatum games and six experimental groups in dictator games. (See tables 1 and 2). We will describe the procedures for one group that played the ultimatum game. The procedures were similar in other ultimatum conditions except for the ordering of the three tasks. In the six dictator conditions, dictator game instructions replaced ultimatum game instructions; everything else remained the same.

In one of the ultimatum conditions, participants were asked to make eight ultimatum offers to people in another class, two for each of four different amounts; $10, $20, $30 and $400. (Note: the inclusion of $400 is rare in previous ultimatum research. It was included here to determine whether very large stakes made a difference to people’s behaviour, particularly, offerers’.) Offerers were told that for four of the offers, respondents would not be told how much they were dividing (the partial information condition); for the other four offers respondents would be told how much they were dividing (the complete information condition). Partial information offers always preceded complete information: the four
amounts were randomly arranged in each of the two information conditions. After people had made the offers they were asked to specify what they thought were fair offers in the complete information conditions for each of these four amounts. The fairness questions were of a general nature: They did not ask participants to take on the role of either a respondent or an offerer. For example, the question posed for $10 was: When $10 is the amount that another person is dividing, what is the lowest possible amount for an offer that you would still regard as fair. We did not want to increase the complexity of the exercise by asking about fairness in partial information conditions: By doing so, the availability of information might lead them to view the exercise from the point of view of the offerer, because in partial information conditions only the offerer would know the amount being divided.

After making offers and fairness ratings, participants took the role of respondents and responded to a set of ultimatum offers ostensibly made by students from another class. To obtain people’s reactions to a wide range of offer sizes, we gave respondents two small and two large offers (predetermined by us, based on past research) in the partial information condition, and two large and two small offers in the complete information condition for a total of eight offers. Partial information offers always preceded complete information offers. The small and large offers were randomly ordered in each information condition. The amount being divided was always $10. Based on past research, the following set of offers was constructed: 40, 50, 55, and 60 cents, and $2.35, $2.50, $2.55, and $2.75. Offers between 40 and 60 cents were considered small offers and those between $2.35 and $2.75 were considered large offers. The offers presented to respondents were randomly selected from this set subject to the following constraints: 1) There were to be two small and two
large offers in each information condition and 2) No person could receive the same offer twice. Thus, though everyone responded to all eight offers, a specific offer was not necessarily in the same information condition or in the same position within the information condition for everyone.

After the participants responded to all the offers they were asked the following question: Under the conditions in the previous section would you accept any amount? If not, what is the lowest amount that you would accept? This was the main dependent variable for respondents.

Participants were then requested to fill out a form that solicited demographic data such as age, gender, ethnicity, work experience if any, average weekly wages and the profession of their parents. Examples of the experimental materials used for this particular condition in the experiment are included in Appendix i.

The offer-rate-respond condition was one of the six conditions in the design. For other conditions the sequencing of offer, rate, and respond were systematically varied, yielding six different orderings (see table 1). The design for dictator games was similar with dictator offers replacing ultimatum offers, responses to dictator offers replacing responses to ultimatum offers, and ratings of dictator offers replacing ratings of ultimatum offers (see table 2). The study included twelve conditions in all.

We ran the experiment two conditions at a time, with conditions having similar first tasks were run together. For example, the offer-rate-respond and the offer-respond-rate conditions were run together. Similarly the rate-offer-respond and the rate-respond-offer conditions were run together. Ultimatum and dictator sessions were run separately. There
were 35 to 40 participants in each experimental session. In each experimental session participants were told that five people would be chosen by lottery to be paid. One of their offers or responses would be chosen by lottery to determine their actual payoffs.

At the end of each experimental session, five people were chosen by lottery for payoffs. Once the five winners were selected, another lottery was conducted to determine which of their actual decisions (offer or responses) would determine their payoff. For example, if the decision chosen for payoff was the offer when the amount being divided was $10 in partial information, and the participant made an offer of $2, then we did the following: We took the actual offer ($2) and presented it to a person from another class, explained the rules of the game (we also told them that they would not know the amount being divided, because it was partial information) and asked them to either accept or reject the offer. If they accepted the offer we gave them $2 and later gave the offerer $8. If they rejected the offer, then we did not pay them and later informed the offerer that their offer had been rejected; they would not get anything. If the decision chosen for payoff was a response to an offer of $2.45 and the participant had accepted the offer, then we paid them the $2.45 immediately. In two out of the three ultimatum sessions, offers with $400 as the amount being divided were selected; In one of the dictator sessions two offers with $400 as the amount being divided were selected. The two ultimatum offers, both in the complete information condition, were both for $200. The two dictator offers were $100 and $1.

After the exercise the lotteries were conducted, the participants were thoroughly debriefed, and the winners were informed about where to collect their payments.
Design. Task Sequence (6) and the type of game (2) were between subject factors. Information (2) and Amounts (4) were within subject factors. The order of presentation of amounts was randomized. Partial information offers and responses always preceded complete information offers and responses. Please see tables 1 and 2.

This design made it possible to distinguish between different types of strategic offer behaviour. By comparing ultimatum and dictator offers we could demonstrate the effects of the desire to avoid rejections on offer sizes. By comparing ultimatum offers in partial and complete information conditions we could empirically demonstrate the effects of a desire to avoid rejections combined with a desire to appear fair on offer behaviour. By comparing dictator offers in the partial and complete information conditions, we could see the effects of a desire to appear fair on offer behaviour. Similarly, the design made it possible to see the effects of the desire for punishment and the desire for fairness. By comparing the rejections in ultimatum games with those in dictator games we could see the effects of the desire to inflict punishment and by comparing the rejections in the partial with the complete information conditions, we could demonstrate the effects of social comparison processes on response behaviour. Another advantage with this design is that we allowed participants to define what constitutes fairness, and then saw whether their definition of fairness predicted their behaviour, as well as whether their behaviours predicted fairness estimates.

Analyses. There are three sets of dependent measures in this experiment: offers, responses, and ratings. Tests of the hypotheses used multivariate comparison procedures for the means of offers and ratings and frequencies of acceptances for responses for the different
Several of the hypotheses predicted no difference between experimental conditions. To conduct a conservative test and maximize the possibility of detecting differences we set alpha levels at .25 for these hypotheses. For the hypotheses that predicted differences between experimental conditions, we used conventional alpha levels (.05, unless otherwise noted).
CHAPTER 8.

RESULTS AND DISCUSSION.

Tables 3 through 8 report the means of offers, fairness ratings, and acceptance frequencies in the ultimatum and dictatorship games. Before reporting the results of the statistical analyses, discussion of some of the striking features of these data is in order. We report the results for ultimatum and dictator games separately; since the pattern of results for ultimatum and dictator games were similar, we discuss them in combination later.

The means of the ultimatum offers presented in Table 3 clearly show that participants made larger offers in complete than in partial information conditions: On average they offered 28.1% of the amount being divided in partial information and 40.6% in complete information. Offer sizes increased with the amounts being divided both in complete and partial information conditions, though offer size as a percentage of the amount being divided dropped with increasing amounts. Over all complete information offers, participants offered 44.3% when they were dividing $10, and 37.6% when they were dividing $400. Average offers made after fairness ratings were larger, at 36.9% than offers made prior to fairness ratings at 31.0% (see the first and third rows in Table 3.). Offerers who had acted as a respondent prior to being an offerer made considerably smaller offers than offerers who had not previously been a respondent. On average people offered 25.3% of the amount being divided after they had responded to ultimatum offers compared to 31.0% when they made offers first. This drop was mitigated to some extent when people made fairness ratings after responding but prior to making offers; then, the overall average was 26.3% (see row 4).
Table 4 shows the frequencies (and percentages) of acceptances of small (40 to 60 cents) and large ultimatum offers (average of $2.50) in the different conditions. Many more of the large offers were accepted, 81.2% compared to 29.8% of the small offers. Similarly, more partial (60.7%) than complete information (50.8%) offers were accepted. Participants who had made fairness ratings, made offers, and finally responded to offers were, on average, the most frequent rejectors, in each of the four conditions. This was also the condition that led to the largest offers (see Table 3). In all other conditions the acceptance rates of large offers varied little, ranging from 81.3% to 92.2%.

Table 5 shows the means of the fairness ratings in the ultimatum games. They were fairly stable across the experimental conditions, ranging from 30.1% to 42.6% of the amount being divided; the overall mean was 35.5%. The average fairness perceptions were stable, in percentage terms, for $10, $20, and $30; for $400, people indicated that a somewhat lower percentage was fair.

Table 6 shows the means of the dictator offers. The pattern and size of the offers are similar to those of ultimatum offers. These offers are considerably larger than the dictator offers reported by Forsythe et al. (1994). Participants continued to make smaller offers in partial (26.6%) than in complete information conditions (35.9%). Though the offers increased with increasing amounts, their size as a percentage of the amount being divided declined: Offers averaged 38.8% when $10 was divided and 31.6% when $400 was divided. Similar to ultimatums, offerers in dictator games made smaller offers (21.7%) after they responded to offers, compared to the conditions where they made offers first (30.9%).

Table 7 reports the frequencies of acceptances of dictator offers. As with ultimatums,
more partial information offers (61.3%) were accepted compared to complete information offers (55.15%). Similarly more large (79.9%) than small offers (36.52%) were accepted. Acceptances were consistently lower when people responded to offers after making fairness ratings and after making offers.

Table 8 reports the means of the fairness ratings in the dictator games. They are stable across the different experimental conditions and across the varying amounts. They are remarkably high, ranging from 30.8% to 39.1% and almost as high as those in the ultimatum games.

Overall, ultimatum offers were larger than dictator offers and more ultimatum offers were rejected than dictator offers. But the pattern of offers, rejections and ratings were similar across the two games. Complete information led to larger offers and more rejections. Raising the salience of fairness, i.e., asking people to make fairness ratings, resulted in larger offers. People made considerably smaller offers if they had acted as respondents before acting as offerers.

We report tests of the hypotheses on offers first, on ratings second, on responses third and on those that pertain to their interrelationships last.

I. HYPOTHESES TESTS.

We tested six groups of hypotheses; those that support the assumption that offers are constructed to appear fair for instrumental purposes, those that follow from the assumption that justice is a goal for offerers, those that support the assumption that the goal of respondents is to avoid injustice, those that follow from the assumption that respondents react
to injustice for strategic reasons, and those that follow from the assumption that justice is neither a goal for nor a strategy of offerers or respondents. We report the tests for each group of hypotheses separately.

i. Tests for the assumption that offers are constructed to appear fair for instrumental purposes.

We first conducted an overall multivariate analysis of variance test for ultimatum and dictator offers using the amount being divided as a covariate and information as a within subject variable. Between subject variables included sequence of the three tasks, and the game they played (ultimatum or dictator). The MANOVA yielded significant main effects for information, sequence, and game. Larger offers were made in complete information as compared to partial information conditions ($F(1, 863) = 127.42, p < .01$) and ultimatum offers were larger than dictator offers ($F(1, 863) = 3.92, p < .05$). These findings support hypotheses 2 and 3. The game by sequence interaction and the game by information interactions were significant, suggesting that sequence and information had different effects in the two types of games. We thus performed MANOVAS for both games separately; the results are shown in Tables 9 and 10. In both games information and sequence were significant and their interaction was not.

Hypothesis 1 states that offers made after fairness ratings will be larger than those made before; hypothesis 10 states that offerers will make larger offers in the conditions where they have been respondents first. To test these hypotheses we tested the following contrasts for both ultimatum and dictator games: 1) A comparison between offers that were
made first and offers made after the fairness rating; 2) A comparison between offers made first and offers made after responding to offers; 3) A comparison between offers made after responding to offers and offers made after responding to and rating offers; and 4) A comparison between offers made after rating offers and offers made after rating and responding to offers.

In ultimatum games contrast 1 tested hypothesis 1; contrast 2 tested hypothesis 10; both were both significant [F (1, 211) = 3.52, p < .06 for contrast 1 and F (1,222) = 4.18, p < .04 for contrast 2]. The significant result for contrast 2 was in the opposite direction to that suggested by hypothesis 10. Offerers reduced offers after they responded to offers compared to the sequences where they made offers first. We expected them to increase their offers in this condition.

In dictator games contrast 1 was not significant, failing to support hypothesis 1. Contrast 2 was significant but, as in the ultimatum games, it was exactly opposite to the direction predicted.

Hypothesis 2 was supported [F (1, 863) = 3.92, p < .05]: ultimatum offers were larger than dictator offers. Hypothesis 3 was supported [F (1, 864) = 127.42, p < .01]; complete information offers were larger than partial information offers.

An analysis of variance for fairness ratings using game and sequence as between subject variables showed no significant effects for game or for sequence. An ANOVA on a subset of the sample of sequences where offers were made before ratings or responses led to a marginal difference between the fair ratings in ultimatum and dictator games [F (1, 121) = 2.82: p < .1]. These results offer almost no support for hypothesis 4 which predicted
that fairness ratings would be larger in ultimatum games than those in dictator games. They also attest to the stability of feelings of fairness in a variety of contexts.

Of the four hypotheses in this group, hypotheses 2 and 3 were strongly supported, hypothesis 1 which predicted an increase in offer size following fairness rating was supported only for ultimatum games and hypothesis 4 was not supported at all. We may conclude that ultimatum offerers, and to a lesser degree dictator offerers, used fairness as a strategic device.

ii. Tests for the assumption that justice is a goal for offerers.

As reported earlier, ultimatum offers were larger than dictator offers and complete information offers were larger than partial information offers. Thus, hypotheses 2a and 3a were clearly not supported. Clearly, justice is not a goal for offerers.

iii. Tests for the assumption that justice is neither a goal nor a strategy for offerers.

Complete information offers and fairness ratings were highly correlated ($r = .859$, $p < .01$ for ultimatum games and $r = .802$, $p < .01$ for dictator games) indicating no support for hypothesis 5, which stated that offers and fairness ratings would not be correlated. We cannot conclude that fairness was neither a goal nor a strategy for offerers.

iv. Tests for the assumption that the goal of respondents is to avoid injustice.

One of the contrasts in the ANOVA of the fairness ratings was the difference between
fairness ratings prior to responding and after responding to offers. Hypothesis 6 posits no
difference in the fairness ratings between the two conditions; it was supported ( t = -0.35,
p < 0.73).

Hypothesis 7 suggests that fairness ratings will not differ in ultimatum and dictator
games when participants are respondents first; it was tested by comparing the ultimatum and
dictator ratings where respondents gave their fairness ratings after they had responded to
offers. Although the results are weak [ F (1, 453) = 1.93 p <= 0.17] they do not
support hypothesis 7.

To test hypothesis 8, that respondents' acceptance will be predicted by their fairness
estimates, we performed a factor analysis for the fairness ratings of different amounts and
used the factor scores to predict acceptance of offers in the different conditions. The
principal components analysis extracted one factor in ultimatum games and one in dictator
games. In ultimatum games the ratings for all amounts were highly correlated with the
factor (the lowest r = .84); it explained 82% of the variance. Similarly for dictator games
the ratings for all the amounts were highly correlated with the factor (the lowest r = .71);
it explained 81.4% of the variance. Table 12 shows the results of the logistic regression
which used the factor scores as predictors and the response as the dependent variable.4 The
results were consistent for both large offers, i.e., if the beta value was significant for the
offer randomly numbered one, then it was also significant for the one randomly numbered
two. The results show that the beta coefficients were significant for the rating factor for
large offers in the complete information condition. Results were not consistent for the small
offers: one beta was significant and three were not. This partially supports hypothesis 8,
which makes a prediction only in complete information because respondents cannot make fairness judgements in partial information.

We performed a CATMOD ANOVA using the sequence of tasks, amount offered, information and the type of game as independent variables and the response as the dependent variable. The results are shown in Table 11. Significantly more large than small offers were accepted \( (X^2 (1) = 788.3, p < .01) \) and significantly fewer complete information than partial information offers were accepted \( (X^2 (1) = 40.8, p < .01) \). Rejection of offers was not significantly different in the two games \( (X^2 (1) = .04, \text{ ns}) \), though the pattern of rejections appeared different. The sequence main effect was also not significant \( (X^2 (5) = 6.3, \text{ ns}) \).

Hypothesis 9 states that there will be no difference between respondents' behaviours for those who give fairness ratings and then responded to offers and participants who responded to offers first. A logistic regression supported this prediction, showing no significant difference between the reactions of participants who responded to offers first and the reactions of participants who responded after making fairness ratings \( (b = -0.07 p < .33) \).

Hypothesis 11 was also supported: A logistic regression analysis revealed that the acceptances of offers by respondents before they took the role of offerer were not significantly different from the acceptances of those who had been offerers \( (b = 0.046 p < 0.53) \).

Of the four hypotheses in this group hypotheses 6 and 9 were strongly supported. Hypotheses 8 which stated that respondent's acceptances will be predicted by their fairness
ratings was true only for large offers, i.e., fairness ratings only predicted responses to large offers. Hypotheses 7 that stated that fairness ratings after responses will not differ in ultimatum and dictator games was not supported. On balance, we may infer support for the assumption that the goal of respondents is injustice avoidance.

v. Tests for the assumption that respondents are reacting to injustice for strategic reasons.

Respondents’ rejections in the conditions when they responded to offers after making fairness ratings did not differ from the rejections in the conditions when they responded to offers first. Thus, hypotheses 9a was not supported and we may infer that respondents were not reacting to justice for strategic reasons (or more accurately because it is normatively expected of them).

vi. Tests for the assumption that respondents are not concerned about justice either as a goal or as a strategy.

As pointed out earlier, respondents’ acceptances of large offers was predicted by fairness ratings. This does not support the notion that respondents are not concerned about justice.

Overall the results provide moderate support for the role specific model of justice: Offerers seem to be interested in justice for strategic purposes, and respondents are concerned with avoiding injustice. Most of the hypotheses motivated by competing justice
theories were not supported. Some hypotheses based on our model were not supported and we examine them in the next section.

II. A NOTE ON UNSUPPORTED HYPOTHESES.

Of the hypotheses that did not find support, hypotheses 4 and 7 are derived directly from the proposed model of justice. Both refer to the difference between fairness ratings in ultimatum and dictator games; hypothesis 4 posits a difference in the two ratings for participants who make ratings following offers and hypothesis 7 posits no difference in the two ratings for participants who make ratings following their response to offers. We inferred no support for both hypotheses because the test was significant at an alpha level of .10 for hypothesis 4 (more than the conventional .05 level) and at an alpha level of .17 for hypothesis 7 (less than the .25 level that we set for hypotheses of no difference). Though we did not find support for the hypothesis of difference and for the hypothesis of no difference, the data suggests that there was stability in fairness ratings across different experimental conditions. We will discuss the implications of this point in some detail in the next section.

Hypotheses 1 and 8 which were partially supported also follow directly from our model of justice. Hypothesis 1 which refers to the effect of the fairness manipulation on offer size was supported only for ultimatum games. The lack of support for dictator games suggests that we may have to modify our justice model and we discuss the modification in some detail in the next chapter. Hypothesis 8 which predicted a relationship between fairness ratings and response behaviour was significant only for larger offers (i.e., those
around $2.50) indicating that the small offers that participants had to respond to may have been too small. This suggests that a new study with larger offers may be necessary to get a clearer understanding of response behaviour. We outline such a study in chapter 10.

The other hypotheses that did not find support, i.e., hypotheses 2a, 3a, 5, 8b and 9a were based on other theoretical approaches and were in direct opposition to the predictions of our model.

III. DISCUSSION.

The self-interest (or strategic) explanations for fair behaviours are based on the idea that actors work to enhance their own benefits (either in the short or long run). For example, people do not violate norms when they believe that they will be sanctioned but do violate norms when they believe that they will not, or if people behave more fairly with others on whom their outcomes are dependent compared with those on whom their outcomes are not dependent, or if people express concerns for fairness only to appear fair to third parties or exchange partners (i.e., they behave unfairly in the absence of public scrutiny) then it is assumed that their motive is one of self-interest and that they are using fairness strategically. Stable behaviour across these conditions, in contrast, may reflect that the underlying motive is not self-interest. This experiment was designed to provide a context where motives can be distinguished from strategies; it is based on the assumption that motives and strategies can be inferred from patterns of behaviour. The hypotheses reflect the pattern of behaviour we may expect if people are guided by either the strategic or the justice motive.
Most of the hypotheses concerning the strategic motives of offerers were supported. Offerers took advantage of information asymmetry and increased their offers when the salience of fairness was increased, that is, when they were asked to make fairness ratings. Ultimatum offers were larger than dictator offers even though participants considered similar offers to be fair in both ultimatum and dictator games. That ultimatum offers were larger than dictator offers also suggests that ultimatum offerers were concerned about potential rejections. This conclusion is strengthened by the observation that people made larger offers in complete information rather than in partial information conditions. This fits the findings of previous research (e.g., Straub and Murnighan, 1995).

Most people reduced their offers after they had responded to several previous offers. According to our model, the fairness motive is dominant for people who are respondents in an allocation situation. We expected that once this motive was evoked by asking people to be respondents, it would spill over and influence their behaviours when they were asked to make offers. This rationale led to a hypothesis that was the same as that for offerers who made offers after making fairness ratings. This did not happen, however; instead, people made lower offers after they had acted as a respondent. Though this result still supports the hypothesis that those who take on the role of offerers are strategic, it does not provide evidence that respondents' concerns for fairness spill over to make them more likely to make more equal offers. Though the offers made by participants who were respondents first were smaller than in all other conditions, they were still not as small as the offers that they received as respondents: On average they offered $3.35 when dividing $10 compared to the average predetermined (large) offer of $2.50. This behaviour, lowering offers after having
been respondents, may have been caused, at least in part, by the low offers that they received. The large offers they received were smaller than their estimates of fair offers and smaller than their own offers would have been had they not responded to offers. The results may have been different if the predetermined offers were closer to 50% of the amount being divided.

These unexpectedly lowered offers were the most robust finding in this experiment and warrant further explanation. One possible explanation is that people learn through their experience as a respondent that even low offers have a chance of acceptance (especially if they themselves accepted such small offers). Another possibility is that people were angered by low offers and made low offers when they had a chance to do so, as some kind of a general reciprocity norm.

Though we cannot distinguish between these two explanations with certainty, we searched for systematic patterns in the data that would favour one explanation over the other. If people who rejected offers made smaller offers than those who accepted, then we might infer that anger was the driving force behind small offers. In contrast, if lower offers were made by people who had accepted offers as respondents, then we might infer support for the learning explanation. Since participants responded to four offers, we categorized them based on whether they rejected none, one, two, three or four offers, and compared the mean offers in each of these five groups of offerers. No one rejected only one small offer; if they rejected one small offer, they also rejected the other. Also, no one rejected large offers and accepted small offers. Thus, no one rejected only one offer. Some respondents did reject two small and one large offer. As a result there were four categories i.e., no rejections,
two, three and four rejections. A MANOVA using these categories as a between subject independent variable and information as a within subject variable and the eight offers (4 amounts X 2 information conditions) as independent variable revealed no significant differences for the categorization (F = 1.13 p < .36). An examination of the means suggests that the lowest offers were made by people who rejected one large offer ($2.88, $5.75, $10.25 and $100 when dividing $10, $20, $30 and $400 respectively in the complete information condition), the next lowest by people who rejected only the small offers ($4.25, $7.50, $11.50 and $147.50 when dividing $10, $20, $30 and $400 respectively in the complete information condition), and the largest by those who rejected both large offers ($4.75, $8.75, $11.50 and $125.50 when dividing $10, $20, $30 and $400 respectively in the complete information condition). Note that the people who rejected one or both large offers also rejected the small offers. Thus, we cannot conclude whether lower offers suggest anger or learning.

People did not lower their offers after being respondents as much in the dictator game. This may be explained by assuming that dictator respondents were not as angered by small offers as ultimatum respondents. Dictator respondents may have been resigned to their fate because the power imbalance was so great, and therefore may not have regarded a small offer as a reason to be angry. While this suggests that ultimatum respondents might be angered by small offers but dictator respondents were not, ultimatum offerers also had a greater incentive to learn that small offers were effective while dictator offerers had no such incentive. Thus, dictator offerers not reducing their offers after being respondents as much as ultimatum offerers is also consistent with the notion that dictator offerers did not learn
Another unexpected finding is that ultimatum offerers were affected by the manipulation of fairness salience but dictator offerers were not. We had expected offerers to increase the size of their offers when the salience of fairness was increased. When they made offers after fairness ratings, we expected offers to be larger that when they made offers without being asked about fairness. This was true for ultimatum but not for dictator offers. Also, in almost half of the cases (46.5%), ultimatum offers exceeded offerers' fairness ratings. This implies that the offerers made offers that they felt were more than fair. For dictator games, in contrast, offers exceeded fairness ratings in only 29.9% of the cases. This may be because dictator offerers did not feel the pressure to justify their offers in terms of fairness. The lack of an effect for the manipulation of fairness salience suggests that either dictator offerers were not concerned about fairness or that a concern for fairness was already part of their decision making process and they therefore needed no priming to make fair offers. (We will return to this issue in the next chapter.)

There was remarkable stability in the fairness ratings. No differences were significant across any of the conditions. We had expected offerers to attempt to make their fairness ratings congruent with their offers and thus make lower fairness ratings after making an offer. This did not happen. The nature of the question that elicited the fairness rating may have contributed to this result. Participants did not take on the role of offerer or respondent when they made fairness ratings; they simply were asked what they thought was fair in the given circumstances. The often apparent ego centric biases (Lowenstein and Thompson, 1992) were not apparent here. We expected that the desire to appear fair would
force participants who had made lower offers to suggest that these lower offers were fair. The idealized nature of the question may have led to more objective fairness assessments. We had expected differences in the ratings when they were made prior to or after making offers: This would have suggested that people claim that the offer that they have already made (which would presumably have been less than 'a fair offer') is a fair offer, thus lowering their fairness ratings. Though ratings were related to and affected offerers (offers increased after ratings in ultimatum games), offer behaviour had no effect on rating.

Most of the hypotheses concerning the injustice avoidance aspects of responses were supported. The presence of fairness salience did not lead to more rejections of small offers, suggesting that fairness was already salient for respondents. Almost the same proportion of small offers were rejected in dictator and ultimatum games. While this could mean that the offers had no meaningful value for the participants in this sample, the differential response rate in partial and complete information conditions suggests that some elements of fairness (or social comparison) entered the decision making process. Respondents' fairness ratings were predictors of acceptance rates only for large offers. Small offers may have been too small; they were frequently rejected. There was greater variability in the acceptance rates of larger offers, and here fairness concerns may have pushed people to reject operationally large (but still relatively small) offers.

We suggested that if fairness ratings did not correlate with both responses and offers then we could conclude that fairness had no role to play in the decision making process of participants in these games. Further, we suggested that if fairness was the goal of offerers, then they would make similar dictator and ultimatum offers, similar partial and complete
information offers and similar offers whether fairness was made salient or not. We also suggested that if respondents rejected more offers after they had made fairness ratings then it implies that fairness was not part of their decision making schema and needs to be activated before it has an effect. None of these results transpired, suggesting that fairness was an issue in ultimatum and dictator decisions and that it was not a goal for offerers or a strategic device for respondents. In essence, the observed pattern of results supports our model that offerers are strategic and respondents look for fairness.

Overall, our results suggest that fairness is an important component of the decision making apparatus of respondents and dictator offerers. Fairness becomes an important part of ultimatum offerers' decision sets when its salience is raised. Impression management can explain the behaviour of both ultimatum and dictator offerers though more effectively in the case of ultimatum offerers. Concerns for fairness can explain the behaviour of these respondents.

Our motivation for conducting this study was to empirically demonstrate that a situational model of justice motives is a better predictor of behaviour than either a model that assumes that justice is an interpersonal strategy or a model that assumes that justice is a goal. Based on a review of the literature we suggested that theories which emphasize either fairness as a strategic device or fairness as a fundamental human motive may both be correct, depending on the situation. A model which incorporated the specific conditions which determine the salience of either motive would be more comprehensive and a better predictor of behaviour.

We noted that the roles that people take in an allocation situation seem to determine
the primacy of either the self-interest or the justice motive. Specifically, we found that allocators were motivated by a desire to maximize their outcomes, and hence used strategies that conveyed the illusion that they were behaving fairly. Recipients looked for fair distributions, and in its absence, reacted negatively. We call this the Role Model of Justice Motives. Our results demonstrate that it is valid in the specific case of ultimatum and dictator games.

Power was another situational variable that we had identified as having some bearing on justice motives. We found that powerful allocators (dictators) made smaller offers than less powerful allocators (ultimatum offerers) though they were less strategic with information and were less affected by the fairness salience manipulation. Their power did not, however, affect the behaviour of respondents. Thus, power seems to interact with roles in its effects on behaviour, at least in these games. We will consider this point in some detail in the next chapter.
CHAPTER 9.

CONCLUSIONS AND IMPLICATIONS.

In this chapter, we outline the implications of the results of this study in the specific case of ultimatum and dictator games, and more generally for the study of justice. In light of some unexpected results a revised model of justice is also proposed.

We first turn to a discussion of the impact of these results on explanations of behaviour in ultimatum games.

I. RESEARCH ON ULTIMATUM AND DICTATOR GAMES.

Forsythe et al., (1994) suggested that the key to a convincing explanation of the ultimatum game lay in an explanation of the dictator game. For example, large offers in dictator games would suggest that fear of rejections is not the only motive driving large ultimatum offers. But the difference in offer sizes in the two games gave an estimate of the extent to which fear of rejections stimulate larger offers.

Dictator offers in this study were smaller than ultimatum offers. Thus, fear of rejections played some part in increasing ultimatum offer sizes. But dictator offers were still considerably larger than zero. Also, though dictators shaded their partial information offers less than ultimatum offerers, there was still a significant difference between their partial and complete information offers. This is interesting and somewhat unexpected. Though fear of rejections cannot explain this effect, larger complete information offers are consistent with the notion that people want to be evaluated as fair. Where respondents can evaluate the
fairness of offers, in complete information conditions, dictator offerers made larger offers. This suggests that advertising a fair self-identity holds value for them. A fair identity is also of value to ultimatum offerers since offers formulated by fair people may be less likely to be rejected. In the past we suggested that impression management efforts were directed toward influencing the respondent to accept offers (e.g., Pillutla and Murnighan, 1995a). This may not be totally accurate. The current results suggest that high ultimatum offer strategies may be based on the fear of rejection and impression management.

Another interesting finding was the similarity of the rejections in ultimatum and dictator games. Dictator rejections did not affect the payoffs to offerers; they cannot be explained in terms of equity restoration. Researchers have explained rejection of ultimatum offers as efforts to punish offerers’ unfair behaviours (Guth and Van Damme, 1995), especially if administering this punishment did not cost much (Pillutla and Murnighan, 1995b). But punishment cannot explain the rejection of dictator offers. Possibly they were too small to matter. They may have insulted respondents.

The rejection of so many of the small offers and a substantial minority of larger offers might suggest that the offers were not large enough for our participants and that the rejections can be explained in terms of their lack of value. This non-emotional explanation, however, does not match previous data (Pillutla and Murnighan, 1995b). Further, if the offers held no value for respondents, they should have also rejected the partial information offers. This did not happen. Thus, it seems more likely that small offers insulted dictator respondents whose only recourse for reestablishing their wounded pride was rejection.

This suggests that viewing ultimatum rejections as equity restoration may also be too
narrow. In both ultimatums and dictator games, rejections of small offers may be a way for respondents' to affirm their self-worth and dignity.

In addition to providing a model that can be used to organize the empirical data on ultimatum and dictator games (and the fairness explanations that go along with them), this study provides some information about the nature of the learning mechanisms that are becoming the focus of some recent work in game theory (e.g., Gale, Binmore and Samuelson, 1995). Some scholars have suggested that since game theoretic assumptions of perfect rationality are merely a shorthand for the learning process that social systems and individuals go through when interacting, it may be useful to incorporate learning mechanisms in game theory's models (Gale, Binmore and Samuelson, 1995; Roth and Erev, 1995). Simulations of ultimatum bargaining games have revealed that over several rounds, behaviours begin to resemble theoretical predictions, though not necessarily subgame perfect equilibrium behaviour (Gale, Binmore, and Samuelson, 1995), although these results are sensitive to initial conditions (Roth and Erev, 1995). Our ultimatum bargaining results suggest that these new models' assumptions about learning i.e., players are stimulus-response mechanisms who are more likely to repeat behaviours that have got them good outcomes in the past, may be correct. Also, Gale et al., 1995, conclude that ultimatum bargaining behaviour may not approach subgame perfect equilibrium even in the long run because the pressure to refrain from rejecting small offers is less than the pressure on offerers to make large offers. The assumption is that the cost of rejecting a small offer is less than the cost of making a small offer that is rejected. The validity of this assumption seems to be borne out by our data. In addition to the cost of possible rejection there is a also a limit on how
small an offer can realistically be, due to social norms. People almost never make epsilon offers. In fact, positively valued offers by dictators and the rejection of small dictator offers suggest that game theoretic assumptions of strict maximization of outcomes are unrealistic.

In sum, the results of this study show that large offers in ultimatum bargaining may be due to fears of rejection and impression management. Dictators also make larger offers for impression management reasons. Respondents’ rejections may be due to a desire to punish offerers and to affirm their own dignity.

The findings from ultimatum and dictator games have important implications for the study of justice. People’s rejections of offers that could not affect the outcomes of the offerers, but nevertheless insulted them, raises an important issue for the study of justice: How do those affected by an injustice who have no control on the outcomes of the perpetrator of an injustice react? Any conceptualization of justice restoration that requires some effect on the perpetrators of an injustice (e.g., the retributive justice theory of Hogan and Emler, 1981) needs to be broadened. Also, the idea that impression management and fear of rejections (or more generally fear of retaliation) are conceptually distinct suggests that impression management based explanations of justice (e.g., Jellison 1981; Jellison and Gentry, 1978) need not assume that people seek fair (or more generally any other favourable) identities only because of the material rewards associated with them.

We now turn to a discussion of the implications of these results for the model that was proposed originally.
II. MODELS OF JUSTICE.

Most of the theoretical underpinnings of this research assume that people are motivated by self-interest and that their seemingly fair behaviours can be explained in terms of self-interest. Lerner’s model presented a contrasting view, suggesting that a concern for justice is the preeminent motive that guides behaviour. We argued that both positions were correct by differentiating between the motives of actors who were in different roles in these allocation situations. We also suggested that these roles were associated with different amounts of relative power, and that power in an allocation relationship may determine motives. We defined behaviour that appeared fair as strategic when the salience of fairness or personal dependence influenced behaviour. Behaviour that was consistent across all these situations (i.e., information, fairness salience and outcome interdependence) was defined as truly fair behaviour, i.e., due to an underlying motive for fairness. We then designed an experiment to distinguish between the strategic use of fairness and fairness as an underlying motive. We also considered the possibility that stable behaviour or systematic variations may have nothing to do with fairness at all. Thus, as a first step we established that fairness plays some role in the decision making process by establishing that people’s offers and responses had a strong relationship with their fairness ratings.

People who felt that offers needed to be large before they could be considered fair were more likely to make larger offers and more likely to reject small offers. This suggests that fairness, either as a motive or as a strategy, was part of the decision making set of our participants.

The first major conclusion of the study, that offerers use fairness strategically and
respondents are concerned about avoiding injustice, directly supports the role model of justice motives. Our data suggests that people's motives did depend on the roles that they took in these interactions. Future research may test whether these findings (and the model) generalize to other allocators and recipients.

Power also led to a number of interesting patterns of behaviour. Since power was not the central focus of this research, the findings are only suggestive and inferential. They do provide a number of ideas for future research.

The first analyses of variance comparing offers made in the partial and complete information conditions, before and after fairness ratings, and before and after responses indicated that offers depended on the game, i.e., whether it was an ultimatum or dictator game. Dictator offerers did not shade their partial information offers as much as ultimatum offerers; their offers were not much smaller after they had first been a respondent; and they did not increase their offers if they had made fairness ratings prior to making offers. This suggests that ultimatum offerers may be more strategic than dictator offerers.

Dictators had no monetary incentive to be strategic, instead they could entertain concerns for fairness in any of the experiment's conditions. This implies that outcome interdependence may be a crucial explanatory variable in allocation situations: outcome interdependence may lead people to be concerned about their own payoffs, and to strategic behaviour to maximize those outcomes. Self-interest then becomes dominant. Without outcome interdependence, however, strategy is unnecessary, outcomes to self are always assured, and other possibly, altruistic motives, may surface. People may then seek to establish an identity as a fair person, weakening their inclinations to take advantage of
information asymmetry and act strategically.

Thus, the second conclusion of this study, that powerful allocators may not be as strategic, in the absence of outcome interdependence, as they are when they face outcome interdependence, suggests that we may have to revise our model of justice motives. The results reported by Tjosvold (1981) also support the need for revision. He has shown that in a dyad where two parties have unequal power, the effects of power on mutual trust, generosity, and liking depends on whether the situation is defined as cooperative or competitive. In cooperative contexts with large power differences, the powerful actors attempt to maximize joint gain. In competitive contexts they try to maximize their own gains. In dictator games the absence of outcome interdependence may have resulted in the powerful actor (the offerer) not defining the context as competitive; interdependence may have led the less powerful ultimatum offerer to define the situation more competitively, warranting the use strategic action to maximize their outcomes. This suggests the possibility of an information processing or cognitive explanation to the difference in motives. The ultimatum game may evoke a competitive or strategic script and the dictator game may evoke a less competitive script. Though it appears that dictator offerers are less strategic than ultimatum offerers, they still made lower offers than ultimatum offerers, even when their ideas about fair offers (i.e., the fairness ratings) were about the same as those of ultimatum offerers. Though the lack of interdependence may have resulted in dictator offers not being strategic, they were apparently still self-interested.

The conclusions about the non-strategic behaviour of dictator offerers suggests that in addition to roles, the other important determinant of the salience of a motive may be
power (interdependence). A revised justice model would then suggest that the relative salience of the fairness or the self-interest motive would depend on both roles and interdependence. For actors in weak recipient roles, the fairness motive is very salient. For allocators, outcome interdependence (power) may determine their motives: when their outcomes depend on another person, they may define the situation competitively and therefore act strategically to maximize their own outcomes. When their outcomes do not depend on another person, they may behave less strategically.

The idea that the ultimatum bargaining exercise evokes a strategic script can be tested by asking people to make dictator offers after they have made a series of ultimatum offers; these offers can be compared to conditions where people make only dictator offers. If ultimatum games induce strategic scripts, dictators who have just been ultimatum offerers should act more strategically and offer recipients less.

Only two levels of interdependence were present in this study: dictator and ultimatum offerers were at the two extremes of interdependence, making generalization to other intermediate levels of dependence difficult. The absence of interdependence may result in some discontinuity in offerers' strategic behaviour i.e., strategic behaviour may be present at all levels of interdependence and absent only in the total absence of interdependence. On the other hand, it is also conceivable that non-strategic behaviour is present at all levels except in conditions of total dependence. To get a better understanding of the effects of power, it may be necessary to create settings of intermediate interdependence.

The restrictive nature of our definition of power must also be noted. The definition of power as the inverse of dependence would suggest that ultimatum offerers have almost as
much power as ultimatum respondents. Viewed this way, offerers and respondents should obtain close to the same payoffs. This is clearly not the case. Even participants’ ratings of fairness are biased in the direction of offerers. Participants seem to recognize that offerers have more power in these games. It may thus be useful to consider Stevens’ (1963) definition of negotiation power. According to Stevens (1963), negotiation power refers to the advantages gained through tactical moves of the game (e.g., making credible commitments or bluffing). Bargaining power, according to this conceptualization, refers to the advantage based on a priori outcome values in the game structure. From this perspective, in both ultimatum and dictator games, offerers have much more negotiation power (because the credible commitment has already been built into the structure of the game by making the offer irrevocable) than respondents and dictators have more bargaining power (because of lack of interdependence) than ultimatum offerers. Using this conceptualization of power to organize our data, we can conclude that those with the most bargaining power (i.e., dictator offerers) use less strategic power than those with less bargaining power (i.e., the ultimatum offerers).

While we have been focusing on the relative size of offers in different experimental conditions, we have not addressed the issue of why sizable offers are made at all in the partial information conditions, particularly in dictator games, or why partial information offers increase as the amount being divided increases, both in ultimatum and dictator games. While the observations are consistent with the notion that people are concerned about how their behaviour is perceived, i.e., impression management, positive partial information offers also imply the presence of fairness in the decision making process of offerers. Positively
valued partial information offers might be interpreted as the base rate of a fairness standard that is internalized by participants; any offer exceeding that standard, due to the experimental conditions, is indicative of impression management and strategies for maximizing one's own outcomes. Similarly, the fact that respondents accepted operationally defined large offers that were still smaller than their fairness estimates but rejected most operationally defined small offers suggests that the absolute value of the offer does matter, independent of fairness concerns. If a concern for fairness was the only motive driving responses, respondents would have rejected even the larger offers (which were unfair by their own definitions). The rejection of small offers may signify that, for these respondents, an acceptable threshold exists between 50 cents and $2.50. Below the threshold avoiding unfairness overwhelms the self-interest motive; above the threshold self-interest overwhelms the concern to avoid unfairness. This threshold may vary across people or populations.

This suggests that both fairness and self-interest motives are present for offerer and respondent. The relative importance, not presence, of the motive as a determinant of behaviour seems to depend on the person's role, the structure of the game and their potential economic benefits.

Several broad theoretical issues have emerged from this study. First, distinguishing between underlying causes of fair behaviours seems to be both possible and theoretically useful. Second, structural factors such as roles and interdependence have a large impact on motives and behaviours, thus leading to the conclusion that past studies that have found one or the other motive to be dominant can be now be integrated within a framework that includes both self-interest and fairness concerns and others, such as the competitive or
cooperative nature of the task. Third, while studying the impression management aspects of apparently fair behaviours, it may be useful to study whether people value having a fair identity independent of instrumental purposes. Fourth, when studying reactions to injustice, traditional explanations such as equity restoration need to augmented by explanations that focus on the dignity, self worth and emotions of injustice recipients.

Finally, it may be more useful to study the boundaries of the justice and self-interest motive rather than try to establish that one motive is more basic than the other. For example, according to our model, the self-interest motive is salient for allocators of resources and the justice motive is salient for the recipients of these allocations. Similarly, Deutsch (1982) identified structural features such as the competitive versus cooperative or the formal vs. informal nature of the context as affecting the salience of motives. This is also the position advocated by Leventhal (1980) who has identified roles that people take (e.g., judge or juror, labour mediator etc.), the importance of other goals, and the monolithic or pluralist structure of the social system as factors affecting the salience of the justice motive.

Delineating the boundaries within which the justice motive is salient has implications for organizational justice theories too. A situational model of justice, like the one we propose, would also represent managers' allocation behaviours and their effects on subordinates better than any position that states that justice is either a goal for or a strategy of the manager. In organizations where managers must allocate resources, justice is just one of the many issues that they may take into account. Other motives may also be salient and justice may be used as a strategic device used for attaining the objectives of other salient
motives. But when people are at the receiving end of an allocation, justice is invariably a central concern, at least for themselves.

Turning to some of the more practical implications of this study, we can suggest from our observation of the behaviour of dictator offerers that the structurally advantaged may temper their strategic behaviour if they do not define the situation as competitive. If the structurally advantaged are assured of their outcomes, more altruistic or less strategic motives may influence their behaviour. For example, in a collective bargaining scenario a weak labour union may declare that they will not exercise their right to strike. Then employers' outcomes are not as dependent on the actions of the union and this may result in the employer defining the situation as cooperative. Employers may then behave less strategically and the weak union may actually reap larger benefits than they might from more traditional, adversarial bargaining.

From the observation that offerers make smaller offers after they have responded to small (unfair) offers, we can suggest that negotiators best avoid bargaining with powerful parties who have had bad outcomes in their prior negotiations. Though we do not know for certain whether their reactions depend on learning or anger, they do seem to lower their subsequent offers. This alone is enough to suggest that it may be wise to avoid those who have been treated unfairly earlier in a similar activity.

If negotiators are informed about the effects of roles, or more generally the interactional structure of motives, they may be less likely to misunderstand others' positions and preferences in bargaining situations. Also, they may better understand their own motives. Together, this may reduce costly disagreements.
We chose a stark scenario to show the presence of asymmetric motives in an allocation exercise. In the fairly simple case of ultimatum and dictator games, the offerers gauged the motives of respondents fairly accurately and behaved accordingly. In real world situations it may not be as easy to gauge negotiators' motives. In such cases it is possible that people may conclude that others in the situation have similar motives. Our model suggests that this is not the case. Thus, it would be essential to have information about the general structural conditions within which the justice motive arises. Our model can be seen as the first step in providing such information.
CHAPTER 10.

PROPOSAL AND DESIGN FOR FUTURE STUDIES.

A number of issues have come up during the course of this study that might be examined in future research. Some have arisen because of unexpected results. Others are due to the factors that were deliberately ignored to keep the experimental design simple. We discuss a few proposed studies which might investigate some of these issues.

The studies follow from the idea that the salience of the justice motive is situation specific and that it is possible to identify the conditions in which the justice motive is likely to be salient. As in the current study we use ultimatum and dictator games to check some of the predictions. We first discuss studies that test whether the explanations given for the unexpected results are empirically valid.

I. UNEXPECTED RESULTS.

a. Offers following responses were less than the offers in any other condition. We explained this result by focusing on the fact that the offers to respondents were smaller than their perception of what constituted a fair offer. If respondents saw larger offers, they might also make larger offers. A design that varies the offers to respondents could also provide some insight into whether it is anger or strategic learning that drives offer behaviour following responses.

The stable fairness ratings in this study could be used to predetermine a set of offers that are systematically above and below fairness estimates. The offers could range from one
standard deviation above and one standard deviation below the average fair offer. People could respond to offers when the amount being divided is $10, $20, $30 and $400; then they would make offers dividing these four amounts. The small offers would be $2, $4.35, $6.65 and $64.04 when $10, $20, $30, and $400 was being divided respectively. The large offers would be $5.40, $11.27, $15.8, and $203.34 when $10, $20, $30 and $400 were being divided. The design would include four groups, as follows:

Group 1  Respond to small offers, then offer
Group 2  Respond to large offers, then offer
Group 3  Respond to both large and small offers, then offer
Control  Offer.

The learning hypothesis would be supported if people accepted the small offers and made smaller offers when it was their turn to make offers and accepted the large offers and made larger offers when it was their turn to make offers. We can infer strong support for this hypothesis if the participants in group 3 accept all offers and make small offers. All the comparisons are with the control group.

The anger hypothesis would be supported if people rejected the small offers and made small offers. Large offers should not cause anger, should be accepted, but should have no explanatory power in the formulation of subsequent offers. It is not clear what the participants in group 3 would do if they were angered by the small offers. Presumably, this anger would be muted by the presence of the larger offers.
This study would also be the first to provide information about whether the ultimatum findings about rejections of offers (that are unfair) applies to large sums.

b. The fairness ratings did not differ in any of the experimental condition. We expected people to rate the offers they had made as fair and to make offers that they had rated as fair. Thus, we expected smaller offers to be rated as fair if ratings followed making offers. This did not happen. Participants provided stable fairness estimates, indicating that there may be a stable norm for what constitutes fairness in these contexts. The literature on ego-centric biases in fairness judgements (e.g., Messick and Sentis, 1978 and Lowenstein and Thompson, 1992) indicates that people make fairness judgments that overestimate their inputs and underestimate the inputs of referent others. (This bias is also linked to inefficient outcomes in negotiations.) Asking people to make fairness judgements from their position as offerers or respondents might have led to more ego-centrically biased estimates: offerers might have claimed that smaller amounts were fair and respondents might have claimed that offers needed to be larger to be fair. These speculations can be tested in a study where we systematically vary the role that people take when making fairness estimates. The design would be as follows:

Fairness ratings A refers to ratings made in the role of the respondent. Fairness ratings B refer to the ratings made in the role of the offerer.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Fairness ratings A</th>
<th>Offer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>Offer</td>
<td>Fairness Ratings A</td>
</tr>
</tbody>
</table>
Specific predictions in this design include: fairness ratings in the role of respondents will be higher than fairness ratings in the role of offerers, offers that follow ratings made in the role of respondents will be larger than offers made after ratings made in the role of offerers, and fairness ratings made in the role of respondents before making offers will be larger than fairness ratings made in the role of the respondents after making offers.

The predicted ordering of offer sizes would be:

Group 1 > Group 3 ≥ Group 2 = Group 4.

For ratings:

Group 1 > Group 3 ≥ Group 2 ≥ Group 4.

c. Ultimatum offerers are more strategic than dictator offerers. We speculated that ultimatum offerers may have defined the situation as competitive while the dictator offerers did not. If the competitive script is evoked for dictator offerers then they may be strategic too. To test this hypothesis we could ask participants to make ultimatum and dictator offers when the amount to be divided is $10, $20, $30 and $400. The design for the study would be as follows:
To control for learning effects, participants in group 2 would make as many dictator offers as group 1 ultimatum and dictator offers.

The hypothesis is that dictator offers following ultimatum offers would be lower than only dictator offers.

II. EXTENSION TO OTHER CONTEXTS.

A number of key situational variables were ignored in the current study to make the role model of justice motives simple and easily testable. Some of the key variables include the relative resource level of participants prior to the allocation process and the number of people involved in the allocation exercise. We outline tests for these variables in this section.

a. A contextual variable that has been shown to have an effect on social motives is relative resource advantage or disadvantage. For instance, MacCrimmon (1973) found that people who were at a relative resource advantage with their partners displayed cooperative or altruistic motives and less self-interested behaviour when they liked their partners. They displayed self-interested behaviours when they were at a relative resource disadvantage even when they liked their partners. Relative wealth may have a similar effect on justice motives.
Offerers with relative resource advantage may be less strategic than offerers who are disadvantaged in terms of relative resources.

In the context of ultimatum games, we can operationalize different levels of relative resources by asking all participants (who will be asked to take on the role of offerers) to perform a task that is not relevant to ultimatum bargaining, and paying one subgroup of people of a sum of money (say $5). These people would be in the relative resource advantage group. Those who have not been given the money would be the group without relative resource advantage; they will be disadvantaged compared to other offerers, but will not be at a relative resource disadvantage compared to respondents.

We define strategic behaviour similar to the current study: Smaller partial information than complete information offers and larger offers fairness has been made salient. (i.e., after fairness ratings).

Offerers would make offers when the amount to be divided is $10, $20, $30, and $400. They would also make fairness ratings for these amounts. The ordering of offer and rating would be systematically varied. All offerers would make partial followed by complete information offers.

The design would be as follows.

Group 1 (Offerer with relative resource advantage)  Offer  Rating.
Group 2 (Offerer with relative resource advantage)  Rating  Offer.
Group 3 (Offerer without relative resource advantage)  Offer  Rating.
Group 4 (Offerer without relative resource advantage)  Rating  Offer.
We expect that offerers who are advantaged with respect to resources will not be as strategic as the offerer who is not advantaged. Similarly, there would be no effect of the rating on the offer and the offer on the rating for the advantaged, but these effects will be seen for those who are disadvantaged. Note, that we do not expect relative resource advantaged offerers to take less for themselves (i.e., in terms of the initial endowment plus the amount - their offer). We only hypothesize that the difference between partial and complete information offers will be greater for those who are not resource advantaged, and that only those who are not resource advantaged will make larger offers when fairness is made salient for them.

b. Generalization to an n-person situation. The current study looked at the motivational processes underlying justice behaviour in two person exchanges. The motives underlying n-person allocations can be more complex. Most of the strategic motives that we imputed to offerers in the current study were based on self-interest. In n-person allocation situations, strategic considerations may be also be based on wanting to boost group productivity, increase group solidarity and avoid revolt, or other motives.

The distinction we have to make here is justice as a goal versus justice as a norm that needs to be followed versus justice as an interpersonal strategic device. A number of studies have shown that allocators in n-person situations make allocations depending on whether the group goal is solidarity or productivity (e.g., Deutsch, 1975), or to stimulate performance (e.g., Greenberg and Leventhal, 1976). None of these studies reported the reactions of the recipients of these allocations. Nor do they consider that the allocator may be motivated
purely by self-interest. The imputed motives of the allocators are consistent with our role model of justice motives. We would further argue that the motives of recipients in these contexts will be to avoid injustice.

Note that the distinction that we made in the current study, i.e., justice as a goal versus self-interest as a goal, enabled us to design an experiment which could distinguish between fairness as a goal and fairness as a strategy. In an n-person allocation exercise, it may also be possible to distinguish strategic behaviour due to self-interest from strategic behaviour due to norms (which is only indirectly self-interested). We focus only on the former and distinguish it from a fairness as a goal. This is partly because, the distinction between behaviour motivated by norms and by a concern for justice as a goal has been investigated in past research (e.g., Greenberg and Leventhal, 1976).

Again, we hypothesize that justice will be a strategy for the allocator, while injustice avoidance will be a goal for the recipient.

We give below a description of games that are n-person analogues of ultimatum and dictator games i.e., interdependence between allocators and recipients vary over the different games.

Game 1. (Ultimatum analogue). An offerer is given a sum of money (say $10). S/he can offer the money to two respondents (say $3 to each of the respondents). The two respondents can either accept or reject the offers. They cannot negotiate for more. If both accept the offers, they get their offers and the offerer gets the remainder (10 - (2 x 3) = 4). Even if one respondent rejects the offer, no one gets anything.

Game 2. (Dictator analogue). An offerer is give a sum of money (say $10). S/he can offer
the money to two respondents. The two respondents can either accept or reject the offers. They cannot negotiate for more. The offerer gets the remainder (i.e., the initial money minus the offers) even when one or both respondents reject the offer.

Game 3. (Hybrid game). It is the same as game 1 except that only one respondent needs to agree for the offerer to get his/her payoff.

The three games differ in terms of the dependence of the offerer on the respondents. Guth and Van Damme (1994) studied a restricted version of game three. In their game, the respondent whose accept or reject decision affected the allocators’ outcomes were predetermined i.e., one respondent knew that only s/he could accept or reject the offer, and if s/he rejected it all three players received nothing. Their results showed that respondents rejected any offer that gave them a small payoff. The payoff to the other respondent did not matter. Thus, the motive of the respondent seemed to be to avoid injustice to self and to not bother about the injustice to the other respondent.

In the proposed study, participants would make offers dividing $10, $20, $30 and $400 in both partial and complete information. All participants would know the amounts being divided in the complete information conditions. Neither respondent would not know how much was being divided in partial information conditions. Partial information conditions would always precede complete information offers. Unlike the current study, we would not predetermine the offers that respondents receive, because we do not know what the typical offers are in these kinds of games. Also, allocator and recipient roles and the games would be between subject variables. People would be asked to make fairness ratings
and this would serve as the experimental manipulation of fairness.

We define strategic behaviour similar to the current study: Smaller partial information than complete information offers, larger offers when fairness salience has been raised (i.e., after fairness ratings) and larger offers when offerers are dependent on respondents for their outcomes. Similarly, any increase in rejection of offers on account of the increased fairness salience will indicate that fairness was not a central concern of respondents.

The design is shown in Table 13.

Some hypotheses are-

1) Allocations to both respondents after the fairness ratings will be larger than those made before.

1a) The increase in offer-size after fairness ratings will be larger for the game with interdependence (game 1) than for the game without interdependence (game 2)

2) Allocations will be smallest in cases where the respondents have no control over the allocators outcomes (game 2), and largest in the condition where the respondents have control over the offerers outcome (game 1).

3) Complete information offers will be larger than partial information offers.

3a) Allocators will take more advantage of information asymmetry when they are dependent on respondents for their outcomes (game 1), than when they are not (game 2).

4) Respondents will reject more complete than partial information offers.

5) Respondents’ rejections will not be different in the condition where they respond to offers after fairness rating compared to conditions where they respond to offers
In this experiment, the intermediate dependence condition (i.e., game 3) will provide more information about the role of power on motives. For example, we can see whether the allocators are more or less strategic with information than allocators in game 1, and whether they increase their offers more or less than those in game 1. More pointedly, we will be able to see whether the two respondents are dealt with differently.

The dissertation was motivated in part by our observation of offerers and respondents in ultimatum games (Pillutla and Murnighan, 1995a and 1995b). When we debriefed participants in these studies, both offerers and respondents raised issues of fairness. But offerers actions were often inconsistent with our views of fairness as consistent behaviour across situations. For example, they made smaller offers when the respondent did not know how much was being divided. Respondents, on the other hand seemed to get emotional when they rejected small (unfair) offers. It seemed as though there was an asymmetry in the motives of offerers and respondents. We turned to the literature on justice to seek an explanation for this asymmetry and found that this asymmetry may be true for allocators and recipients in general. We then formulated a model of justice that took into account the role of actors in explaining their motives and tested it out with ultimatum and dictator games. Our results indicated support for the model.

The proposed studies outlined here expand the model by adding other structural features such as relative resource levels and interdependence to explain the salience of justice
motives. One study attempts to extend the model to n-person allocation situations, which is arguably the more common situation in society in general and organizations in particular. The core assumption of the model, however, remains the same- various roles and contexts evoke different cognitive scripts which are then used as a basis for action. Justice motives are a class of cognitive scripts and are thus role and context specific.
1. In a decomposed game, the interdependence is reduced only perceptually. One player can determine the payoffs to himself/herself and to the other person at the time of the decision. But, a similar choice is made by the other person. Thus, the decomposed game is a presentation strategy that leads a player to believe that s/he has complete control over the outcomes to himself/herself and the other with whom s/he is in the exchange. Objectively, the two persons’ choices will determine their payoffs, just like in two person, two choice matrix games.

2. Although, offers increased as the amount being divided increased, such an effect held little interest. Thus, we partialed out the effects of these increases by including the amounts being divided as a covariate in the analyses. As they were independently manipulated, using amounts as covariates is feasible (Maxwell and Delany, 1990). This analysis also avoids the heterogeneity of variance that would have resulted if the amounts had been included as a variable. Of course, the assumption for the analysis is that all the regression coefficients of the amounts (covariate) with the offers (dependent variable) are equal.

3. When using amounts as covariates in the MANOVA analysis, we make an assumption that all within group slopes are equal (i.e., the homogeneity of regression assumption). When this assumption is violated, as is the case for the current sample, the power of the MANOVA to detect differences is reduced. This is because the error term is larger than the error term
that will result if the assumption of homogeneous regression slopes is relaxed (Maxwell and Delany, 1990, p. 416). Thus, for the purposes of this study, we will consider alpha levels less than .1 as indicating that the null hypotheses can be rejected.

4. There were two large and two small offers in both the partial and complete information conditions. The logistic regression procedure, which is the appropriate procedure to use if the dependent measure is categorical and the independent variable is continuous, does not allow for the specification of multiple dependent measures. So we randomly numbered one of the small offers as small offer 1 and the other as small offer 2. Large offers were also randomly numbered as large offer 1 and large offer 2.

5. CATMOD is a procedure for categorical data modelling. It fits linear models to functions of response frequencies. We used the weighted least squares method for the estimation of parameters. This method minimizes the weighted residual sum of squares for the linear model. CATMOD computes a statistic that is approximately distributed as chi-square for testing hypotheses about linear combinations of the estimated parameters. This method is particularly appropriate for repeated measure designs where the dependent variable is categorical (SAS Users' Guide, 1985, 172-174).
References


Brockner, J., DeWitt, R., Grover, S. and Reed, T. 1990. When it is Especially Important to Explain Why: Factors Affecting the Relationship Between Managers’ Explanations


Greenberg, J. 1982. Approaching Equity and Avoiding Inequity in Groups and


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### TABLE 4: FREQUENCIES OF RESPONDENTS' ACCEPTANCES OF ULTIMATUM OFFERS IN THE VARIOUS EXPERIMENTAL CONDITIONS:

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<td>Freq  %</td>
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<td>37.95</td>
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TABLE 6: MEAN DICTATOR OFFERS IN THE VARIOUS EXPERIMENTAL CONDITIONS.

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129
TABLE 7: FREQUENCIES OF RESPONDENTS' ACCEPTANCES OF DICTATOR OFFERS IN THE VARIOUS EXPERIMENTAL CONDITIONS:

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### TABLE 8: MEANS OF FAIRNESS RATINGS IN DICTATOR GAMES IN THE VARIOUS EXPERIMENTAL CONDITIONS.

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<td>DF</td>
<td>F</td>
<td>SIGNIFICANCE</td>
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<td>127.42</td>
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1 Information includes partial and complete information.

2 Sequence includes the six different ordering of the three tasks: Offer, Response, Rating.

3 Ultimatum & Dictator games.
**TABLE 10: MANOVA TABLE FOR ULTIMATUM OFFERS IN ALL EXPERIMENTAL CONDITIONS.**

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<td></td>
<td></td>
</tr>
<tr>
<td>INFORMATION$^1$</td>
<td>1, 462</td>
<td>79.31</td>
<td>.000</td>
<td>1, 402</td>
</tr>
<tr>
<td>SEQUENCE$^2$</td>
<td>5, 461</td>
<td>3.11</td>
<td>.009</td>
<td>5, 401</td>
</tr>
<tr>
<td>CONTRAST 1$^3$</td>
<td>1, 211</td>
<td>3.52</td>
<td>.062</td>
<td>1, 197</td>
</tr>
<tr>
<td>CONTRAST 2$^4$</td>
<td>1, 222</td>
<td>4.18</td>
<td>.042</td>
<td>1, 197</td>
</tr>
<tr>
<td>INFORMATION BY SEQUENCE</td>
<td>5, 462</td>
<td>0.69</td>
<td>.634</td>
<td>5, 402</td>
</tr>
</tbody>
</table>

1. Information includes partial and complete information.
2. Sequence includes the six different ordering of the three tasks: Offer, Response, Rating.
3. The contrast between the groups where offers were made prior to rating and those in which offers were made after rating.
4. The contrast between the groups where offers were made prior to responding and those in which offers were made after responding.
TABLE 11: CATMOD ANOVA TABLE FOR ACCEPTANCE/REJECTION OF SMALL AND LARGE OFFERS IN ALL EXPERIMENTAL CONDITIONS.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>DF</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION</td>
<td>1</td>
<td>40.80</td>
<td>.00</td>
</tr>
<tr>
<td>OFFER SIZE</td>
<td>1</td>
<td>788.31</td>
<td>.00</td>
</tr>
<tr>
<td>SEQUENCE</td>
<td>5</td>
<td>6.37</td>
<td>.28</td>
</tr>
<tr>
<td>GAME</td>
<td>1</td>
<td>0.04</td>
<td>.84</td>
</tr>
<tr>
<td>INFORMATION BY OFFER SIZE</td>
<td>1</td>
<td>15.57</td>
<td>.00</td>
</tr>
<tr>
<td>GAME BY SEQUENCE</td>
<td>5</td>
<td>3.30</td>
<td>.59</td>
</tr>
</tbody>
</table>
TABLE 12: RESULTS OF THE LOGISTIC REGRESSION ANALYSIS USING THE FACTOR SCORES OF FAIRNESS RATINGS AS PREDICTORS OF RESPONSES OF LARGE AND SMALL COMPLETE INFORMATION ULTIMATUM AND DICTATOR OFFERS.

Ultimatum.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Beta</th>
<th>Std. Error</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Offer 1</td>
<td>-0.229</td>
<td>0.225</td>
<td>.309</td>
</tr>
<tr>
<td>Small offer 2</td>
<td>-0.525</td>
<td>0.228</td>
<td>.021</td>
</tr>
<tr>
<td>Large Offer 1</td>
<td>-0.738</td>
<td>0.276</td>
<td>.008</td>
</tr>
<tr>
<td>Large Offer 2</td>
<td>-0.709</td>
<td>0.298</td>
<td>.018</td>
</tr>
</tbody>
</table>

Dictator.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Beta</th>
<th>Std. Error</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Offer 1</td>
<td>-0.409</td>
<td>0.225</td>
<td>.069</td>
</tr>
<tr>
<td>Small Offer 2</td>
<td>-0.372</td>
<td>0.222</td>
<td>.094</td>
</tr>
<tr>
<td>Large Offer 1</td>
<td>-0.707</td>
<td>0.321</td>
<td>.027</td>
</tr>
<tr>
<td>Large Offer 2</td>
<td>-0.621</td>
<td>0.292</td>
<td>.034</td>
</tr>
<tr>
<td>Amount</td>
<td>Information</td>
<td>Game 1</td>
<td>Game 2</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ultimatum Analogue</td>
<td>Dictator Analogue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Offer/Resp after Rate</td>
<td>Rate after Offer/Resp</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10</td>
<td>Partial</td>
<td>Divided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20</td>
<td>Partial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$30</td>
<td>Partial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$400</td>
<td>Partial</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. The theories in the upper half of each quadrant refer to allocators and the ones in the lower half to recipients.
Appendix.

An Exercise in Negotiation.

This exercise is meant to study how people make decisions in negotiations. You will make a series of choices. There are no right or wrong answers here: we are merely interested in studying how people like you make these kinds of decisions. The time necessary for completion of the exercise is at most one hour.

Please remember that your participation in this exercise is strictly voluntary. You may withdraw any time you wish. If you complete the exercise we will assume that you have consented to participate and consented to our use of your anonymous choices. There is no need to put your names or ID on any part of the exercise.

Six people in today's group will be chosen by lottery to receive monetary payments. The payments will depend on your decisions and those of other people participating in the experiment. We will pay you immediately after the exercise. **THUS, THERE IS NO NEED FOR YOU TO PUT YOUR NAME ANYWHERE ON THE FORMS.** All your choices will be anonymous and will be coded and analyzed anonymously.

If you have questions at any time during or after the exercise please ask the experimenter or call either of us.

Prof. J. Keith Murnighan. (604) 822 8427
Madan Pillutla (604) 669 7498
In this exercise we would like you to make a series of choices.

**PART I**

Your task will be to make a real monetary offer to another person. You will divide a fixed amount of money any way you like, offering this other person part of the fixed amount of money in different conditions. There will be four different amounts in Part I and you will be making offers to four different people. We won’t be telling you who the other persons are going to be. We will not tell the other persons who you are. We will also not tell them how much money we gave each of you.

You will never meet them or see them or ever find out who they are. If they accept your offer, you may both get the money, as it’s been divided. If they reject it, you get nothing and the other person gets nothing. We will recruit a volunteer who will choose whether to accept or reject one of your offers. S/he will never know who you are. You will never know who s/he is.

Please make each of your offers as if it will actually be given to some other person. Why? Because we will choose one of you to be the winner, at random, and will also randomly choose one of your offers to determine how much money you will receive. We will use a lottery to select six people from today’s group to receive monetary payoffs. The offers you make, then, may determine whether and how much real money you will win.

The task is to divide the money, offering any part of it to another person. If this other person accepts your offer, he or she will get what you offered them (in cash) and we will return to you and pay you the remaining portion of the fixed amount. If the other person rejects your offer, you both get nothing. That’s it. It’s very simple. Make an offer, dividing the money any way you like. If you are the winner, one of your offers will be delivered to someone, and your monetary outcome will depend on whether they accept or reject your offer.

There will be other choices in Parts II and III that may also determine how much money you will receive. If you have any questions anytime, please ask—we’d like to be sure that everyone is clear about everything.

When you finish Part I, please stop and wait for everyone else. You’ll hit a page marked STOP. When everyone is finished, we’ll go over the instructions for the other parts.
Choice #1

The other person does not know the amount you are dividing.

You are dividing $10.

How much do you keep for yourself? _____

How much do you offer for the other person? _____

(These should add up to $10.)
Choice #2

The other person does not know the amount you are dividing.

You are dividing $20.

How much do you keep for yourself? ________

How much do you offer for the other person? ________

(These should add up to $20.)
Choice #3

The other person does not know the amount you are dividing.

You are dividing $30.

How much do you keep for yourself? ______

How much do you offer for the other person? ______

(These should add up to $30.)
Choice #4

The other person does not know the amount you are dividing.

You are dividing $400.

How much do you keep for yourself? _____

How much do you offer for the other person? _____

(These should add up to $400.)

STOP HERE

WAIT UNTIL EVERYONE ELSE IS FINISHED AND YOU ARE TOLD TO GO ON TO PART I A.
Part I A

This time when you divide the money, the other person will know how much you are dividing.

As before, the other person will never know who you are.

Choice #5

The other person knows the amount you are dividing.

You are dividing $10.

How much do you keep for yourself? _____

How much do you offer for the other person? _____

(These should add up to $10.)
Choice #6

The other person knows the amount you are dividing.

You are dividing $20.

How much do you keep for yourself? ______

How much do you offer for the other person? ______

(These should add up to $20.)
Choice #7

The other person knows the amount you are dividing.

You are dividing $30.

How much do you keep for yourself? __________

How much do you offer for the other person? __________

(These should add up to $30.)
Choice #8

The other person knows the amount you are dividing.

You are dividing $400.

How much do you keep for yourself? ______

How much do you offer for the other person? ______

(These should add up to $400.)

STOP HERE

WAIT UNTIL EVERYONE ELSE IS FINISHED AND YOU ARE TOLD TO GO ON TO PART II.
PART II

Now it's your turn to Accept or Reject offers.

We gave another person fixed amounts of money. We won't tell you who they are. You also won't know how much money we gave each of them. They were asked to divide the money between you and them. They will never know who you are. You can accept or reject their offers. If you accept the offer, you may both get the money as it has been divided. If you reject the offer, you and the other person get nothing.

In each case, you will not know the amount the other person is dividing.

Choice #9

S/he offered you 40 cents

Do you Accept or Reject?
Choice #10

S/he offered you 50 cents

Do you Accept or Reject?
Choice #11

S/he offered you $2.35

Do you Accept or Reject?
Choice #12

S/he offered you $2.55

Do you Accept or Reject?

STOP HERE

WAIT UNTIL EVERYONE ELSE IS FINISHED AND YOU ARE TOLD TO GO ON TO PART II A.

THERE WILL BE FURTHER INSTRUCTIONS BEFORE YOU BEGIN PART II A.
Part II A

For your next choices, we will be telling you the amount that the other person was given to divide—as well as what they are offering you if you accept.

Everything else remains the same. Each offer was made by a different person. None of the people making offers in Part II are the same as the people making offers in Part II A.

Choice #13

The other person was given $10 to divide.

S/he offered you $2.50

Do you Accept or Reject?
Choice #14

The other person was given $10 to divide.

S/he offered you $2.75

Do you Accept or Reject?
Choice #15

The other person was given $10 to divide.

S/he offered you 55 cents.

Do you Accept or Reject?
Choice #16

The other person was given $10 to divide.

S/he offered you 60 cents

Do you Accept or Reject?
Under the conditions of Part II, would you accept any amount?

Yes or No

If not, what is the lowest amount you would accept?

(Note: Please take this seriously. Your answer indicates that you would reject any offer less than the amount you specify. Would you really reject less? If you must say, "No, I would still take it," then you should specify a lower amount.)

$__________

Stop Here

Wait until everyone else is finished and you are told to go on to Part III.
PART III

For the following decisions, we have indicated how much another person is dividing. In each case, you should indicate the amount that you think is fair. Everything else remains the same as in Parts I and II. If the offer is accepted then both get the money as it has been divided. If the offer is rejected, both get nothing.

Choice #17

When $10 is the amount that the other person was dividing, what is the lowest possible amount for an offer that you would still regard as fair?

$________
Choice #18

When $20 is the amount that the other person was dividing, what is the lowest possible amount for an offer that you would still regard as fair?

$__________
Choice #19

When $30 is the amount that the other person was dividing, what is the lowest possible amount for an offer that you would still regard as fair?

$__________
Choice #20

When $400 is the amount that the other person was dividing, what is the lowest possible amount for an offer that you would still regard as fair?

$_________
BEFORE WE FINISH WE WOULD LIKE YOU TO GIVE US A FEW DETAILS ABOUT YOURSELF.

1) GENDER

2) ETHNIC ORIGIN

3) AGE

4) OCCUPATION OF PARENTS

5) ARE YOU EMPLOYED?

IF YES TO THE ABOVE THEN,

A) HOW MANY HOURS ON AN AVERAGE IN A WEEK

B) NATURE OF JOB

C) AVERAGE EARNINGS/WEEK

THANK YOU VERY MUCH FOR PARTICIPATING IN THE EXERCISE.