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How Self-Conception May Lead to Inequality

EFFECT OF HIERARCHICAL ROLES ON THE EQUALITY RULE IN ORGANIZATIONAL RESOURCE-SHARING TASKS

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This research examined the influence of role (leader or follower) within a group on the use of the equality rule (dividing resources equally) in allocation decisions. Different positions in the organizational hierarchy may activate different role schemas on how individuals should behave. Role schemas for leaders communicate that they should act responsibly, but also that they deserve certain privileges relevant to the allocation situation. It was predicted that leaders would allocate more resources to themselves than to their followers. The results of three studies (two scenario studies and one experimental study) revealed that leaders violated the equality rule by allocating more than a fair share of resources to themselves. Results also showed that leaders used the equality rule more for identifiable decisions (high accountability) than for unidentifiable decisions (low accountability). Findings are discussed in terms of leadership and social decision theories. Practical implications are outlined.

Keywords: equality; resource task; accountability; leader; follower

Within organizations, many problems arise when common, but mostly finite resources have to be allocated to both individuals and subgroups (Aquino & Reed, 1998). Organizational resources may take the form of money, personnel, time, effort, and information (Bonacich, 1987; Sniezek, May, & Sawyer, 1990; Thorn & Connolly, 1987). Thus, organizations can be described as large pools of scarce shared resources for which both individuals and groups compete (Kramer, 1991; Mannix, 1993). Resource allocation decisions influence both own and other's outcomes, as interdependence is

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very high (Kelley & Thibaut, 1978; Wageman, 1995). Because of this interdependence, it might be expected that the decision to allocate resources requires a great deal of cognitive activity, so that decision makers must approach these decisions in a cautious manner. However, real-life experiences and empirical evidence suggest that individual decision makers often use quick and cognitively less complex decision rules when distributing resources (e.g. Allison & Messick, 1990).

This research examines the use of decision rules, which require less cognitive activity (i.e., social heuristics), for an individual's decision to distribute resources. The type of social heuristic examined is people's tendency to distribute resources according to an equality rule. In doing this, this research aims to complement and extend previous research on social heuristics by examining the impact of social factors on the use of these cognitively less complex decision rules. The two situational factors examined are the role one has within the group (i.e., leader or follower) and the effect of accountability (i.e., whether decisions are identifiable; Tetlock, 1992).

ALLOCATION DECISIONS AND SOCIAL HEURISTICS

In organizations, allocations of limited resources happen on a regular basis (Langholtz, Gettys, & Foote, 1993). To understand the specific dynamics of such decisions, it is important to know how individuals approach and process these decision situations.

From an economic or game-theoretic perspective, one might expect that people act rationally and thus try to maximize their own self-interest when allocating resources (Luce & Raiffa, 1957). However, recent critiques have suggested that people seem to frequently depart from game-theoretic rationality in their decision making. Indeed, research on games simulating the distribution of scarce resources, such as ultimatum games, has demonstrated that game-theoretic assumptions seem limited in predicting choice behavior. For example, in ultimatum games (e.g., Guth, Schmittberger, & Schwarze, 1982), two players have to divide a fixed amount of money. One player (Player 1) has to make an offer and the other player (Player 2) has to decide to accept or reject the offer. Following game-theoretic predictions, Player 1 should offer Player 2 the smallest possible amount and keep the remainder. However, these predictions fail because people's decision behavior seems to be guided by concerns about fairness (i.e., mostly a 50-50 split is preferred; for a review, see Camerer & Thaler, 1995).

These findings suggest that in such interdependence situations a fairness norm rather than a payoff-maximizing norm is used as a decision heuristic to

determine allocation choices.¹ Decision heuristics can be defined as rules of thumb that are derived from the experience of social decision makers and facilitate decision making. Thus, such heuristics are not the result of careful considerations, as they represent a specific cognitive mechanism that does not process all possible alternatives and their consequences. The question to be asked, then, is which fairness heuristic is most likely to be used when distributing resources. That is, depending on the decision context, what people consider fair can be defined differently (e.g., Blount, 1995).

A vast amount of research, both experimental and field studies, has demonstrated that in allocation situations, *equality* is the distribution heuristic that most decision makers prefer (e.g., De Cremer, 2001; Deutsch, 1975; Harris & Joyce, 1980; Kahneman, Knetsch, & Thaler, 1986). The use of this decision heuristic is likely to be activated when the degree of uncertainty is high, as when no information about other's wealth or interest in the resource exists (Van Dijk & Grodzka, 1992). Another advantage is that it can be applied easily because of its simplicity (Messick & Schell, 1992; Sniezek, May, & Sawyer, 1990). Moreover, equality seems to be used so frequently because it provides a profound sense of fairness when allocating resources. That is, when taking from a resource, decision makers are often focused on the final outcomes and therefore, by following a fairness norm, people wish to minimize differences in these final outcomes (Van Dijk & Wilke, 1994). Furthermore, research shows that an *equity rule* (i.e., outcomes are evaluated in terms of where they fall relative to alternatives; Adams, 1965) is not preferred in an uncertain allocation context in which no information exists about other's interests and allocation choices. Equity seems more likely to direct decision behavior when known differences exist in wealth or performance or the energy one has put into the organization (e.g., Folger & Konovsky, 1989; Van Dijk & Wilke, 1994).

However, when no such differences exist or are known, the equality rule is most likely to direct decision behavior. Indeed, Allison and Messick (1990) showed that when individuals in a six-person group were told that they were the first group member to take points out of a common resource, allocation decisions were close to the equality rule (see also Rutte, Wilke, & Messick, 1987; and Samuelson & Allison, 1994). Furthermore, they also showed that certain situational factors (i.e., resource size not divisible by all group members, last group member being able to punish the previous members) influenced decision makers in such a way that the equality rule was violated. This assumption about situational impact was also made by Samuelson and Allison (1994), who demonstrated that the position one occupies within the group (e.g., supervisor, guide, or leader) influences individuals' requests

from a common resource. How can this situational effect of roles on the use of the equality rule be explained?

ROLE ASSIGNMENT AND SOCIAL HEURISTICS

In most organizational settings, it is often those who occupy a position higher up in the hierarchy who make resource allocation decisions (Yukl, 1994). It is expected that these persons will live up to their position and act responsibly and make fair decisions (Lord, Foti, & DeVader, 1984). Although use of the equality rule is aimed at promoting fairness and obtaining a quick and efficient solution, some evidence exists that leaders do not always apply this decision rule (Messick et al., 1983). A reason for this may be that occupying the role of a leader activates certain cognitive frameworks, referred to as role schemas (Fiske, 1993), which violate the use of the equality rule.

In organizational groups (e.g., teams, workgroups; Ancona, 1990), most individuals perceive themselves in terms of their role within the group. How one perceives his or her role activates certain cognitive schemas, which in turn exert a significant influence on how social information is processed and how decisions are made. In the social-cognitive literature, it is assumed that once role schemas are activated, decision makers have an organized set of knowledge about the roles, expectations, and privileges attached to that role (Fiske, 1993; Fiske & Taylor, 1991). More specifically, these organized sets of knowledge direct and guide people's behavior in a variety of social settings and affects the impact of heuristics on the process of decision making (Fiske & Taylor, 1991; Tversky & Kahneman, 1974, 1981). Therefore, the question becomes: How can this reasoning be applied to organizational roles as leaders and followers?

In light of the above, it is suggested that role schemas communicate to both leader and follower how to act and, importantly, what they are entitled to. According to leadership theories (Lord et al., 1984; Yukl, 1994), people expect leaders to be fair, effective, responsible, and able to acquire important information. As a consequence, people may create a belief that their leaders deserve specific privileges that are associated with their responsible function, for example, the right to have a larger share of group resources. In turn, the activation of role schemas makes leaders believe that these expectations of privileges are valid, leading them to act on it (Fiske, 1996). More specifically, as leaders are motivated by what they perceive to be acceptable and by their own self-concepts (influenced by role schemas), they will allow these feelings of being privileged to influence their allocation decisions.

Thus, if individuals are assigned to a role, their decisions will be processed in such a way that they are consistent with the expectations activated by the different role schemas. Therefore, if leaders perceive themselves as more privileged, they are expected to allocate more resources to themselves than the equality heuristic predicts. In contrast, if one is assigned the role of a follower, allocations will be close to predictions given by the equality rule (see also Samuelson & Allison, 1994). Because leaders are expected to be trustworthy and fair individuals, these predictions seem worrying. Therefore, it is necessary to identify situational factors that may influence this role assignment effect. One such situational effect may be how accountable or identifiable the actions of decision makers are.

MODERATING EFFECT OF ACCOUNTABILITY

Organizations are generally considered to be complex social systems (Pfeffer, 1997). Because of this complexity, strong norms may exist for employees (ranging from top managers to first-line employees) to provide justifications for their actions (Staw, 1980). That is, in general, allocation decisions are often made identifiable to others within the organization; in other words, organizational decision makers are often accountable for their actions and decisions (Tetlock, 1992). Indeed, the most important decisions are made within a dynamic social context in which the social consequences of one's decisions influence behavior. In organizational life, it is particularly leaders or top managers who are assumed to be responsible for what they do, that is, are accountable for their actions. Therefore, research on decision-making rules should take into account the possible social consequences of an individual's behavior. How may accountability moderate the effect of role assignment on the use of the equality rule?

Research on accountability has provided strong evidence that being accountable influences decision makers' behavior and goals (Lerner & Tetlock, 1999). When individuals feel accountable to the person they are involved with in an allocation situation, they may be more concerned about how the other person views their actions (e.g., not being cooperative). That is, accountability implies that people's behavior may be constrained to some degree because they expect that their behavior may be linked to the person they are seen as, activating concerns about how they are viewed by others. More specifically, people seek approval and respect from others for many reasons (e.g., self-esteem maintenance, standing within the organization; Tyler & Lind, 1992), and therefore accountability is assumed to activate self-presentational concerns (Baumeister & Hutton, 1987). In turn, these

concerns influence decision behavior, and, for example, can increase cooperation (De Cremer, Snyder, & Dewitte, 2001).

Because leaders occupy responsible positions, particularly these individuals will be worried about self-presentation. Thus, if accountability is high, self-presentational and reputational concerns will come into play and make leaders aware of their need to act responsibly. Consequently, they will be motivated to act cooperatively. As a result, it may be expected that under these situations leaders will make more use of the equality rule, as this provides an image of being a fair and responsible person. In contrast, followers do seem to use this equality rule when distributing resources anyway, and therefore no effect of accountability is expected.

OVERVIEW OF THE RESEARCH

This research consisted of two scenario studies and one experiment. The first scenario study was conducted to determine whether differences exist between leaders and followers when allocating resources. The second scenario study was conducted to examine whether accountability moderates the effect of role assignment on the use of the equality rule. Finally, the experimental study tested whether the results of the scenario studies and the outlined assumptions are valid in actual groups, that is, when individuals are really dependent on one another and actually occupy the role of a leader or follower.

STUDY 1

The purpose of the first scenario study was to examine whether role differences within groups (simulated in this study) reveal differences in allocation decisions. In light of the discussion in the introduction, it was predicted that leaders would take more from a common resource than followers (Hypothesis 1). Furthermore, leaders were expected to evaluate their role more as a part of finding justification for their actions than followers (Hypothesis 2).

Method

Participants. Forty undergraduates at a Dutch business school participated voluntarily in the study. The independent variable was the role students occupied within the group.

Procedure. The study was introduced as a classroom exercise. Undergraduates were asked whether they were willing to participate in a small study regarding group decisions. All students agreed. When the students were seated, they were presented with a scenario in which they were asked to imagine that they were members of a board consisting of six persons. They were told that this board was responsible for making decisions with respect to the welfare of their organization (e.g., maximizing organizational profits, obtaining higher dividends for shareholders, and distributing organizational resources). One important task this board was required to do this financial quarter was to allocate organizational resources. It was explained that in this company the board members decided how to allocate resources. Participants were informed that this organizational resource was represented as a resource pool of 90 points, to which all board members had free access. Furthermore, each participant was told that he or she was appointed to be the first board member to take from the resource. None of the participants knew that the others were also told that they were the first to take from the resource. It was emphasized that they could take as much from the resource as they wished (with a maximum of 90 points).

After this, the manipulation of role was introduced. Participants were told that in organizations, members differ in their position in the hierarchy and therefore some board members have different positions than others. Half of the participants were instructed to imagine that they occupied the role of the board leader, whereas the other half were told that they occupied the role of a follower. Thus, each participant played this resource-sharing task either as leader or as follower. Then, participants made their allocation choice. Finally, participants were asked to what extent they agreed with the following statement: "The role I have in this group justifies my decision" (ranging from 1 = *very strongly disagree* to 7 = *very strongly agree*).

Results

Allocation decisions. Applying the equality heuristic to this study predicts that each participant would take 15 points ($90/6 = 15$ points). To examine whether the role description made a difference in allocating decisions, a one-way ANOVA was conducted on participants' allocation score. This analysis revealed a significant main effect for role assignment, $F(1, 38) = 6.10, p < .05$, indicating that followers' requests were smaller than those of leaders ($M_s = 15.77$ vs. 23.95 , respectively). In fact, followers' requests were similar to the amount predicted by the equality rule.

Furthermore, a one-way ANOVA was conducted on the justification score. ANOVA revealed a significant main effect for role, $F(1, 38) = 6.27$, $p < .05$, showing that leaders used their role within the group more than followers to justify their actions ($M_s = 4.63$ vs. 3.77 , respectively). This finding illustrates that having the role of a leader leads people to evaluate their behavior in terms of the existing role schema.

Discussion

The results of the first scenario study illustrate that occupying the role of a leader influences one's allocation decisions. In line with recent social cognition research, it seems that the role schema of a leader communicates that leaders are responsible, but also that they deserve certain privileges relevant to the decision situation. As a result, individuals acting as leaders allocated more resources to themselves than those acting as followers. Furthermore, these results also revealed evidence that leaders assume that their role within the group justifies their actions.

These results seem to contradict the assumption that leaders have to be installed if cooperative coordination and efficiency are to be increased within a group. Indeed, it seems that these position descriptions or labels may undermine a cooperative form of resource allocation. Within organizations, however, status differences in terms of role or job descriptions exist (Yukl, 1994). Therefore, it is necessary to identify and examine some situational factors that moderate the effect of assigned roles on the use of the equality rule. In line with this suggestion, some evidence for the moderating role of accountability was gathered by using another scenario study.

STUDY 2

In light of our theoretical introduction, a main effect is expected for role assignment such that leaders will take more from the resource than followers (Hypothesis 1). Second, a main effect for accountability is predicted such that resource allocations will be according to the equality rule when accountability is high rather than low (Hypothesis 2). Finally, an interaction between role assignment and accountability is expected. Leaders will use the equality rule when accountability is high, but not when accountability is low. Regarding followers' allocations, no difference is expected between the two accountability conditions (Hypothesis 3).

Method

Participants. Fifty-six undergraduates at a Dutch business school participated voluntarily in the second study. The design was a 2 (Role Assignment: leader vs. follower) \times 2 (Accountability: high vs. low) between-subjects design.

Procedure. The procedure was quite similar to the one presented in Study 1. During a classroom exercise, the study was introduced as a group decision task. Participants were asked to imagine that they were members of a board consisting of six persons. Again, each participant was told that he or she was chosen to be the first to take from a resource of 90 points.

Similar to Study 1, the manipulation of role was introduced. Half of the participants were told that they occupied the role of the leader and the other half were told that they occupied the role of a follower. Then the manipulation of accountability was introduced (see Kramer, Pommerenke, & Newton [1993] for a similar procedure). Half of the participants were allocated to the high-accountability condition, in which they were told that they had to imagine that after they made the allocation decision, the other board members would be informed about it. Thus, each board member's decision was *not* anonymous. The other half of the participants were allocated to the low-accountability condition, in which they were told that they had to imagine that only they would know their decision. Thus, their decision would remain anonymous. To check the effectiveness of this manipulation, participants were asked how responsible they felt toward the group (ranging from 1 = *not at all* to 7 = *very much so*). A 2 (Role Assignment) \times 2 (Accountability) ANOVA on this question revealed a significant main effect for accountability, $F(1, 52) = 23.94, p < .001$. Participants in the high-accountability condition felt more responsible toward the group than those in the low-accountability condition ($M_s = 5.34$ vs. 4.38 , respectively).² After this manipulation, participants decided how many points they wished to take from the resource.

Results

Allocation decisions. Again, the equality heuristic predicts that participants would take 15 points each. In line with Hypothesis 1, a 2 (Role Assignment) \times 2 (Accountability) ANOVA revealed a significant main effect for role assignment, $F(1, 52) = 4.93, p < .05$. Again, leaders took more from the resource than followers ($M_s = 20.66$ vs. 15.95 , respectively). Further, in support of Hypothesis 2, ANOVA also revealed a significant main effect for

TABLE 1
Resource Allocations as a Function of
Role Assignment and Accountability (Study 2)

Role Assignment	Accountability	
	High	Low
Leader	16.33 _a	25.00 _b
Follower	15.82 _a	16.07 _a

NOTE: Allocations could range from 0 to 90 points. Means with different subscripts differ significantly at $p < .01$.

accountability, $F(1, 52) = 4.41, p < .05$. When participants were accountable for their actions, they took less from the resource than when they were not accountable ($M_s = 16.07$ vs. 20.53 , respectively). It is important to note that when individuals were assigned to the follower role and accountability was high, the number of points taken was close to the number of points predicted by the equality rule.

Finally, the predicted interaction between role assignment and accountability emerged, $F(1, 52) = 3.93, p = .05$ (see Table 1).

In line with predictions, leaders took considerably less from the resource when accountability was high than when it was low, $M_s = 16.33$ versus 25.00 , respectively; $t(24) = 3.84, p = .001$. For followers, no significant difference between the high-and low-accountability condition was found, $M_s = 15.82$ versus 16.07 , respectively; $t(28) = -0.74, ns$.

Discussion

The results revealed again that role assignment influences allocations: Leaders took more from the common resource than followers. Furthermore, the manipulation of accountability was found to moderate the role assignment effect. Leaders allocated less to themselves when accountability was high than when it was low. For the followers, no difference between the two accountability conditions was found.

STUDY 3

In the first two studies, participants were asked to read a scenario and imagine that they occupied the role of a follower or a leader. For it to be possible to draw strong conclusions, one has to determine whether similar results can be obtained when people are involved in an actual group in which they

are actual leaders and followers. A problem with thought exercises, such as reading scenarios, is that it does not capture the dynamics that exists in actual groups by people assuming actual roles. Furthermore, particularly in imaginary situations, people's attitudes may not match up well with their actual behavior (Ajzen, 1991; in particular, attitude strength in such situations may be low; Kraus, 1995). Therefore, to test whether the observed effects indeed occur when participants are exposed to a situation in which they occupy the role of actual leaders or followers in a more realistic setting, an experimental setup was designed. Moreover, this setup provided a good opportunity to test whether feelings of privilege underlie this role effect. Type of role and accountability served as independent variables in this study.

It was first predicted that leaders would take more from the common resource than followers (Hypothesis 1). Second, resource allocations were predicted to be closer to the equality rule when accountability is high rather than low (Hypothesis 2). Third, an interaction between role assignment and accountability was expected (Hypothesis 3). Finally, it was expected that leaders would feel more privileged than followers and this feeling would underlie the effect of role on resource allocation (Hypothesis 4).

Method

Participants. Seventy-six undergraduates at a Dutch business school participated voluntarily in the study. The design was a 2 (Role Assignment: leader vs. follower) \times 2 (Accountability: high vs. low) between-subjects design.

Procedure. The study was part of a classroom exercise and participants were told that it was an investigation into how organizational groups make decisions regarding resource allocations. Participants were informed that they were part of an organizational board consisting of six persons. They were told that their board was responsible for making decisions with respect to the organization's welfare (e.g., maximizing organizational profits, obtaining higher dividends for shareholders, and distributing organizational resources). One important task their board was required to do was to allocate organizational resources. It was stressed clearly that during this task the members of the group were not allowed to talk to one another. It was further explained that the organizational resource that their group shared was worth 90 points (each point represented an investment value of \$100 for each board member).

After receiving this information, participants were told that the task was to allocate the resource among the board members and that each member was allowed to take as much from the resource as he or she wished. This situation thus created high interdependence among the board members, as their own decisions influenced their own and other's outcomes (Kelley & Thibaut, 1978). As a result, participants during this experimental study felt bound to the other group members, which allowed for cognitive processes associated with the role assignment to come into play. Furthermore, it was explained that not all board members could choose simultaneously and therefore one member at a time would consume the resource. The experimenter would determine who would go first. In reality, all participants were informed that they were the first to take from the resource. After this, the manipulation of role assignment was introduced. Participants were told that in organizational groups, members differ with regard to their position in the hierarchy. Therefore, some board members would occupy the role of a leader and others would occupy the role of a follower. To reinforce the importance of these roles, participants were told that the position they occupied would also be of importance for the rest of the study. Half of the participants received information that they were leaders and the other half received information that they were followers.

Furthermore, to manipulate accountability, a procedure that has been used in previous research was employed (Kramer et al., 1993; Tetlock & Boettger, 1989). Participants in the low-accountability condition were informed that only they would know how much they took from the resource. Thus, after all allocations were made, participants would not be asked to reveal their decision to the other board members. In the high-accountability condition, participants were informed that after all allocations were made, all board members were required to reveal their decision to the others.

After this manipulation, participants were asked whether their role gave them the right to receive privileges (responses ranging from 1 = *not at all* to 7 = *very much so*). Finally, participants were asked how much they wished to take from the common resource.

Results

Allocation decisions. As in the two scenario studies, the equality heuristic predicts that participants would each take 15 points from the resource. In line with Hypothesis 1, a 2 (Role Assignment) \times 2 (Accountability) ANOVA on participants' requests revealed a significant main effect for role assignment,

TABLE 2
Resource Allocations as a Function of Role Assignment
and Accountability (Study 3)

<i>Role Assignment</i>	<i>Accountability</i>	
	<i>High</i>	<i>Low</i>
Leader	15.73 _a	19.63 _b
Follower	14.47 _c	16.42 _a

NOTE: Allocations could range from 0 to 90 points. Means with different subscripts differ significantly at $p < .05$.

$F(1, 72) = 23.97, p < .001$: Leaders took more from the common resource than followers ($M_s = 17.68$ vs. 15.44 , respectively). The means show that followers' allocations were close to the equality rule. Furthermore, as predicted by Hypothesis 2, a significant main effect for accountability was found, $F(1, 72) = 40.88, p < .001$. Participants in the high-accountability condition took less from the common resource than participants in the low-accountability condition ($M_s = 15.10$ vs. 18.02 , respectively). Finally, in line with Hypothesis 3, a significant interaction between role assignment and accountability emerged, $F(1, 72) = 4.54, p < .05$ (see Table 2).

The associated means show that leaders' allocations decreased when accountability was high rather than low, $M_s = 15.73$ versus 19.63 , respectively; $t(36) = 6.36, p < .001$. Additional analyses showed that when accountability was low, the average allocation for leaders differed significantly from the average score predicted by the equality rule (i.e., 15), $t(18) = 8.91, p < .001$ (mean difference of 4.63). When accountability was high, the average allocation for leaders was not significantly different from the average score predicted by the equality rule, $t(18) = 2.28, p < .10$ (mean difference of 0.73). Furthermore, followers' allocations also decreased significantly when accountability was high rather than low, $M_s = 14.47$ versus 16.42 , respectively; $t(36) = 2.87, p < .01$. Additional analyses revealed that when accountability was low, followers' average allocation differed significantly from the average allocation predicted by the equality rule, $t(18) = 2.92, p < .05$ (mean difference of 1.42). When accountability was high, followers' average allocation did not differ significantly from the average allocation predicted by the equality rule, $t(18) = 1.11, p < .30$ (mean difference of 0.52).

Mediational analysis. It was also predicted that feelings of being privileged underlie the effect of role assignment (i.e., act as a covariate). To

examine this, it first has to be demonstrated that feelings of being privileged are affected by the independent variable of role assignment. Therefore, a univariate analysis with the privilege score as a dependent measure was conducted. To test whether the covariate has an effect on the dependent variable of resource allocation and eliminates the significant relationship between resource allocation and role assignment, the privilege measure was entered as a covariate in an ANCOVA analysis.

A 2 (Role Assignment) \times 2 (Accountability) ANOVA on the privilege score revealed a significant main effect for role assignment, $F(1, 72) = 18.00$, $p < .001$, indicating that leaders felt that they were entitled to more privileges than followers did ($M_s = 5.02$ vs. 4.18, respectively). No main effect for accountability was found, $F(1, 72) < 1$, and the interaction between role assignment and accountability was marginally significant, $F(1, 72) = 3.44$, $p < .07$.

How did feelings of being privileged mediate participants' allocation decisions? A 2 (Role Assignment) \times 2 (Accountability) ANCOVA, with the privilege score as covariate, was performed on resource allocations. This analysis revealed a significant main effect for the covariate, $\beta = .26$, $F(1, 71) = 10.33$, $p < .005$, indicating a positive link between feelings of being privileged and resource allocations. Furthermore, the main effect of role assignment in the original analysis, that is, $F(1, 72) = 18.00$, $p < .001$, decreased in strength, $F(1, 71) = 10.33$, $p < .005$, a decrease of 7.67 in F value. Moreover, the marginally significant interaction between role assignment and accountability disappeared entirely, $F(1, 71) = 2.32$, $p < .15$, that is, original analysis $F(1, 72) = 3.44$, $p < .07$.

GENERAL DISCUSSION

The purpose of this research was to examine the moderating effects of situational factors (role assignment and accountability) on the equality rule in allocation decisions. In both the scenario studies and the experimental study, results demonstrated that when individuals occupy the role of a leader they allocate more resources to themselves than when they occupy the role of a follower (the latter allocated amounts close to the equality rule). Moreover, leaders were more convinced than followers that their role position justified their actions. Further, Scenario Study 2 and the experimental study showed that the equality rule was applied more when accountability was high than when it was low. Moreover, when leaders' decisions were accountable,

allocations were close to the amount predicted by the equality rule. The theoretical and practical implications of these findings are discussed in the following paragraphs.

The first important finding was that the position people occupy within a group influences the use of social heuristics like the equality rule (Samuelson & Allison, 1994). Indeed, leaders' allocations were consistently higher than the amount predicted by the equality rule. Social heuristics are mostly activated when time is precious and important decisions have to be made, as they are cognitively less complex and reduce uncertainty by providing a certain reference point (Allison & Messick, 1990; Schelling, 1960). This description fits in well with many decision situations confronting managers (Conger & Kanungo, 1987). Organizations are becoming more and more complex and time has become a valuable resource; thus these situations provide the perfect setting for social heuristics to come into play. It needs to be asked, however, how role differences moderate the use of such heuristics in uncertain situations.

A possible reason for this finding may be that leaders think that their job label justifies such actions. That is, occupying the role of a leader activates cognitive schemas that communicate that due to their position of responsibility, leaders deserve certain privileges (Fiske, 1996). When acting upon these schemas in a resource allocation context, leaders may be expected to allocate more to themselves than a fairness perspective would predict. The results of this research support this assumption. Moreover, a mediational analysis provided some support to the notion that feelings of being privileged served as an underlying mechanism of this role assignment effect. Thus, despite the fact that social heuristics operate in complex and uncertain decision situations, role differences may exert such a powerful influence that the equality rule is violated.

From an organizational perspective, it seems worrying that particularly those who exert power and have responsibilities toward the organization and its personnel violate heuristics like the equality rule more easily than others do. Indeed, recent literature on the importance of charismatic leadership in groups and organizations argues, for example, that followers expect effective leaders to be self-sacrificing as well (De Cremer, 2002; Shamir, House, & Arthur, 1993; Yorges, Weiss, & Strickland, 1999). In a resource allocation context, sacrificing means that leaders are expected from time to time to give up certain personal outcomes in order to maintain efficiency within a group or organization. Because the present results seem contradictory to this assumption, it is necessary to know which situational factors promote more fair and self-sacrificing actions when allocating resources.

According to this research, accountability of decisions may be one situational factor that moderates this role assignment effect. The findings showed that when there is a group of people who care about the outcome and who hold the leader accountable for his or her decisions, the leader's allocations remain close to the equality rule. In light of the extensive literature on accountability (Lerner & Tetlock, 1999), this effect may be explained by self-presentational concerns and the need to get respect from others (Baumeister, 1993). That is, people are believed to seek approval and status from the others within their group, and therefore they are motivated to act in ways that serve their self-presentation. As a result, such behavior enhances the possibility of obtaining support from followers and inclusion in positive future interactions with others (Baumeister & Leary, 1995; Tyler & Lind, 1992). Because leaders occupy responsible and visible positions (Yukl, 1994), their concern for self-presentation should be high, consequently motivating them to display fair allocation behavior.

This research suggests that providing employees job or status labels does not seem entirely without problems. The assignment of a role quite spontaneously activates role schemas, which communicate certain expectations, but more importantly, also certain privileges. Managerial-level personnel may think that their position justifies their engaging in more self-favoring behavior (i.e., assigning more allocations to themselves). Therefore, situational or organizational structures need to be identified to hinder the use of such self-favoring tendencies. Based on the present results, one suggestion may be that managers be told explicitly that all important allocation decisions they make, for both personal as subgroup interest, will be made identifiable to others (i.e., other personnel and subgroups) if problems related to these decisions arise within the organization.

Furthermore, as argued in the introduction, fairness of resource allocation is determined by two distributive justice components, that is, equity and equality. Research has shown that both distributive principles are applied in organizations. More specifically, rewards in organizations are sometimes distributed in proportion to an individual's own input and sometimes they are distributed equally. An interesting finding over the last two decades, however, is that distributive aspects of resource allocations seem to vary with cultural values (Farh, Earley, & Lin, 1997; Morris & Leung, 1999; Rutte & Messick, 1995). For example, collectivistic cultures are found to apply the equality rule more, whereas individualistic cultures are more likely to apply the equity rule (Bond, Leung, & Wan, 1982), particularly where in-group members are concerned (Leung & Bond, 1984). This effect of cultural values on preferences for distributive principles may also have implications for the

present findings. That is, this research was conducted in the Netherlands, a culture that is highly “feminine” and egalitarian (or what Hofstede [1980, 1991] called low in power distance).

Compared to high-power societies such as Hong Kong and Japan, authorities in low-power societies like Sweden and the Netherlands are perceived as equals and as such are not granted deference and privileges. Furthermore, in contrast to “masculine” cultures, feminine cultures stress the importance of solidarity and equality. As Hofstede (1991) argued, “organisations in a masculine society stress results and want to reward on the basis of equity, organisations in a feminine society, however, are more likely to reward people on the basis of equality” (p. 93). In light of this, it should be expected that authorities in the Netherlands would not violate the equality rule when allocating organizational resources. However, despite these assumptions, these results showed that authorities departed from this equality rule, particularly when accountability was low. To corroborate this finding, it would be worthwhile to examine this leader-follower effect in resource-sharing tasks across some other low-power-distance and feminine cultures. Moreover, it should also be examined whether the prediction that authorities may violate the equality rule holds in cultures in which authorities are entitled to privileges.

It has to be noted, however, that these suggestions and assumptions may only hold for decision situations in which allocations are perceived as relevant to one’s own or one’s subgroup’s interest (Samuelson & Allison, 1994). If allocation decisions do not reveal direct or salient personal or subgroup benefits (i.e., making decisions for other subgroups or individuals), this role effect may not occur. Instead, under such circumstances, the equality rule may be expected to dictate decisions, as no self-serving allocations can be made. Thus, a suggestion for future research may be to vary the relevance of the decision or the level of interdependence with the others involved in the allocation situation.

Finally, the artificial nature of the circumstances and the absence of belonging to a real organizational group can, of course, be considered as important limitations to this research. Therefore, the practical implications outlined must be tempered by the mentioned limitations. It is clear that issues such as generalizability are important to organizational issues and therefore require studies with high external validity. However, a large body of research in real work settings suffers from the problem of having to demonstrate causal relations and underlying mechanisms of behavior, and, as such, is limited in being able to provide a strong theoretical and controllable explanation for the phenomena studied. Experimental setups may be a perfect first step in developing and testing specific theoretical predictions, which are highly relevant to organizational settings before examining whether the same processes

occur in real-life settings. This line of research therefore provides interesting empirical findings, which may invite future researchers, both in the field and the experimental management tradition, to focus in more detail on the interplay among role differences, decision rules, and allocation decisions.

NOTES

1. To summarize social psychology and behavioral economy research, a central finding seems to be that decision makers prefer and value outcomes more when they are close to those predicted by fairness norms and thus deviate from payoff-maximizing norms (e.g., Blount, 1995; Loewenstein, Thompson, & Bazerman, 1989).

2. Because the accountability manipulation aimed at increasing accountability, it can be concluded that this manipulation was successful. That is, the manipulation increased feelings of accountability in the high-accountability condition rather than decreasing feelings of accountability in the low-accountability condition.

REFERENCES

- Adams, J. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Allison, S. T., & Messick, D. M. (1990). Social decision heuristics in the use of shared resources. *Journal of Behavioral Decision Making*, 3, 195-204.
- Ancona, D. G. (1990). Outward bound: Strategies for team survival in an organization. *Academy of Management Journal*, 33, 334-365.
- Aquino, K., & Reed II, A. (1998). A social dilemma perspective on cooperative behavior in organizations: The effects of scarcity, communication, and unequal access on the use of a shared resource. *Group & Organization Management*, 23, 390-413.
- Baumeister, R. F., & Hutton, D. G. (1987). Self-presentation theory: Self-construction and audience pleading. In B. Mullen & G. R. Goethals (Eds.), *Theories of group behavior* (pp. 390-413). New York: Springer-Verlag.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Blount, S. (1995). When social outcomes aren't fair: The effect of causal attributions on preferences. *Organizational Behavior and Human Decision Processes*, 63, 131-144.
- Bonacich, P. (1987). Communication networks and collective action. *Social Networks*, 9, 389-396.
- Bond, M. H., Leung, K., & Wan, K. C. (1982). How does cultural collectivism operate? The impact of task and maintenance contributions on reward distribution. *Journal of Cross-Cultural Psychology*, 13, 186-200.
- Camerer, C., & Thaler, R. H. (1995). Anomalies: Ultimatums, dictators and manners. *Journal of Economic Perspectives*, 9, 209-219.
- Conger, J. A., & Kanungo, R. N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, 12, 637-647.

- De Cremer, D. (2001). Effects of roles and performance feedback on the equality rule in resource-sharing tasks. *Journal of Social Psychology, 141*, 153-155.
- De Cremer, D. (2002). Charismatic leadership and cooperation in social dilemmas: A matter of transforming motives. *Journal of Applied Social Psychology, 32*, 997-1016.
- De Cremer, D., Snyder, M., & Dewitte, S. (2001). The less I trust, the less I contribute (or not?): The effects of trust, accountability and self-monitoring in social dilemmas. *European Journal of Social Psychology, 31*, 93-107.
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice? *Journal of Social Issues, 31*, 137-149.
- Fahr, J., Earley, P. C., & Lin, S. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly, 42*, 421-444.
- Fiske, S. T. (1993). Social cognition and social perception. In M. R. Rosenzweig & L. W. Porter (Eds.), *Annual review of psychology* (Vol. 4, pp. 155-194). Palo Alto, CA: Annual Reviews.
- Fiske, S. T. (1996). Controlling other people: The impact of power on stereotyping. *American Psychologist, 48*, 621-628.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal, 32*, 115-130.
- Guth, W., Schmittberger, R., & Schwarze, B. (1982). An experimental analysis of ultimatum games. *Journal of Economic Behavior and Organization, 3*, 367-388.
- Harris, R. J., & Joyce, M. A. (1980). What's fair? It depends on how you phrase the question. *Journal of Personality and Social Psychology, 38*, 165-179.
- Hofstede, G. (1980). *Culture's consequences: International differences in work related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1991). *Culture and organizations: Software of the mind*. London: McGraw-Hill.
- Kahneman, D., Knetsch, J. L., & Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *American Economic Review, 76*, 728-741.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: John Wiley.
- Kramer, R. M. (1991). Intergroup relations and organizational dilemmas. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 13, pp. 191-228). Greenwich, CT: JAI.
- Kramer, R. M., Pommerenke, P., & Newton, E. (1993). Effects of social identity and interpersonal accountability on negotiator decision making. *Journal of Conflict Resolution, 37*, 633-654.
- Kraus, S. J. (1995). Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin, 21*, 58-75.
- Langholtz, H., Gettys, C., & Foote, B., (1993). Resource-allocation behavior under certainty, risk, and uncertainty. *Organizational Behavior and Human Decision Processes, 54*, 203-224.
- Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. *Psychological Bulletin, 125*, 255-275.
- Leung, K. (1997). Negotiation and reward allocations across cultures. In P. C. Earley & M. Erez (Eds.), *New perspectives on international industrial/organizational psychology* (pp. 640-675). San Francisco: Jossey-Bass.
- Leung, K., & Bond, M. H. (1984). The impact of cultural collectivism on reward allocation. *Journal of Personality and Social Psychology, 47*, 793-804.

- Loewenstein, G. F., Thompson, L., & Bazerman, M. H. (1989). Social utility and decision making in interpersonal contexts. *Journal of Personality and Social Psychology*, 57, 426-441.
- Lord, R. G., Foti, R., & DeVader, C. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance*, 34, 343-378.
- Luce, R. D., & Raiffa, H. (1957). *Games and decisions*. New York: John Wiley.
- Mannix, E. A. (1993). Organizations as resource dilemmas: The effects of power balance on coalition formation in small groups. *Organizational Behavior and Human Decision Processes*, 55, 1-22.
- Messick, D., & Schell, T. (1992). Evidence for an equality heuristic in social decision making. *Acta Psychologica*, 80, 311-323.
- Messick, D. M., Wilke, H., Brewer, M. B., Kramer, R. M., Zemke, P. E., & Lui, L. (1983). Individual adaptations and structural change as solution to social dilemmas. *Journal of Personality and Social Psychology*, 44, 294-309.
- Morris, M. W., & Leung, K. (1999). *Justice for all? Progress in research on cultural variation in the psychology of distributive and procedural justice* (Research paper No. 1582). Stanford, CA: Graduate School of Business, Stanford University.
- Murnighan, J. K., & Ross, T. W. (1999). On the collaborative potential of psychology and economics. *Journal of Economic Behavior and Organization*, 39, 1-10.
- Pfeffer, J. (1997). *New directions in organizational theory: Problems and prospects*. New York: Oxford University Press.
- Rutte, C. G., & Messick, D. M. (1995). An integrated model of perceived unfairness in organizations. *Social Justice Research*, 8, 239-261.
- Rutte, C. G., Wilke, H. A. M., & Messick, D. M. (1987). Scarcity or abundance caused by people or the environment as determinants of behavior in the resource dilemma. *Journal of Experimental Social Psychology*, 23, 208-216.
- Samuelson, C. D., & Allison, S. T. (1994). Cognitive factors affecting the use of social decision heuristics in resource-sharing tasks. *Organizational Behavior and Human Decision Processes*, 58, 1-27.
- Schelling, T. C. (1960). *The strategy of conflict*. Cambridge, MA: Harvard University Press.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based concept. *Organizational Science*, 4, 577-594.
- Sniezek, J. A., May, D. R., & Sawyer, J. E. (1990). Social uncertainty and interdependence: A study of resource allocation decision in groups. *Organizational Behavior and Human Decision Processes*, 46, 155-180.
- Staw, B. M. (1980). Rationality and justification in organizational life. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 2, pp. 45-80). Greenwich, CT: JAI.
- Tetlock, P. E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. *Advances in Experimental Social Psychology*, 25, 331-376.
- Tetlock, P. E., & Boettger, R. (1989). Accountability: A social magnifier of the dilution effect. *Journal of Personality and Social Psychology*, 57, 388-398.
- Thorn, B. K., & Connolly, T. (1987). Discretionary data bases: A theory and some experimental findings. *Communication Research*, 14, 512-528.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453-458.

- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 25, pp. 115-191). New York: Academic.
- Van Dijk, E., & Grodzka, M. (1992). The influence of endowments asymmetry and information level on the contribution to a public step good. *Journal of Economic Psychology*, 13, 329-342.
- Van Dijk, E., & Wilke, H. A. M. (1994). Asymmetry of wealth and public good provision. *Social Psychology Quarterly*, 57, 352-359.
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly*, 40, 145-180.
- Yorges, S. L., Weiss, H. M., & Strickland, O. J. (1999). The effect of leader outcomes on influence, attributions, and perceptions of charisma. *Journal of Applied Psychology*, 84, 428-436.
- Yukl, G. (1994). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.

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