

HOW MUCH SHOULD I GIVE AND HOW OFTEN? THE EFFECTS OF GENEROSITY AND FREQUENCY OF FAVOR EXCHANGE ON SOCIAL STATUS AND PRODUCTIVITY

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Data collected from 161 employees of a large firm suggest that perceived generosity is positively related to individual social status, but maintaining an equitable balance is positively related to individual productivity. Employees may address this dilemma by increasing how often they exchange favors rather than by seeking exchange equity. Frequent favor exchange was positively related to both status and productivity and strengthened the generosity-status and the balance-productivity relationships. Findings highlight the value of studying employees, particularly the favor exchange among peer frequency of exchange.

Past research on employee helping behavior has primarily addressed two forms of social exchange: employee-employer exchange and supervisor-subordinate exchange. Research on psychological contracts and organizational citizenship behavior has examined the employee-employer exchange relationship, focusing in particular on how extrarole behavior (positive employee behavior that is not employer prescribed) indirectly benefits organizations (e.g., Bateman & Organ, 1983; Organ, 1988; Robinson & Morrison, 1995; Van Dyne & Ang, 1998). In contrast, research on dyadic exchange in organizations has focused on supervisor-subordinate relationships (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986). Leader-member exchange theory, for example, has informed researchers' understanding of how hierarchical asymmetry influences the nature of dyadic exchange (e.g., Duarte, Goodson, & Klich, 1994).

Whereas understanding of employee-employer exchange and supervisor-subordinate exchange has deepened, understanding of exchange among peer employees remains less developed. This is unfortunate, given that many trends in organizations, such as a variety of employee involvement programs and a move toward team-based work, have had the effect of reducing hierarchical differences among employees (Howard, 1995; Mohrman, Cohen, & Mohrman, 1995). As a result, the need to understand the dynamics of dyadic exchange is no longer limited to hierarchical relationships. In-

stead, how effectively peer employees manage their exchange relationships with one another is an important concern as well (Flynn & Brockner, 2002). Yet little guidance exists about what specific pattern of dyadic exchange (for instance, how much and how often one should give and receive) may be most effective for individual employees.

Research, as well as intuition, suggests that as long as dyadic exchange among peer employees remains *equitable*, it can be mutually beneficial (Cook & Emerson, 1984). Equity in peer exchange relationships is purportedly maintained by adherence to the norm of reciprocity, which stipulates that people should feel compelled to help those who have helped them (Cialdini et al., 1977; Gouldner, 1960). Nevertheless, employees often perceive imbalance in the giving and receiving of favors. The consequences of such imbalance may be paradoxical. On the one hand, imbalance might generate rewards for more generous employees and negative consequences for less generous employees because the former will develop a better reputation than will the latter (e.g., Blau, 1964). On the other hand, if employees are frequently performing favors for other employees and receiving fewer than they give in return, they may incur a resource deficit (a negative balance) that hinders their ability to perform their jobs effectively.

In the present research, I attempted to resolve this seeming paradox by positing that more frequent favor exchange can mitigate the negative impact of perceived imbalance. Past research suggests that the strengthening of exchange relationships yields many benefits for an organization, such as reduced conflict (Nelson, 1989), improved performance (Nelson, 1991), and enhanced knowledge sharing among peer employees (Hansen, 1999). For

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peer employees, the benefits of increased exchange frequency may include an enhanced affinity for one another and greater understanding of one another's underlying interests and values, which, in turn, lead to a more pleasant and efficient pattern of exchange (e.g., Lawler, Thye, & Yoon, 2000; Molm & Cook, 1995). Further, people who establish strong bonds through repeated exchange are more likely to develop trust (Gulati, 1995; Kollock, 1994), which may lead both parties to become more tolerant of perceived imbalance in their exchange relationships because they expect that any imbalance could be quickly eradicated. Thus, increasing the frequency of favor exchange may provide a means for employees to overcome the potential trade-offs between enhancing their reputations (that is, social status) and increasing their ability to perform assigned tasks (that is, productivity) that result from adopting more or less balanced patterns of favor exchange.

THEORY AND HYPOTHESES

Employee Favor Exchange and Perceived Imbalance

Favor exchange refers to dyadic interaction in which giving and receiving resources is predicated on the expectation of equitable resources being provided directly in return (Blau, 1964). In organizations, favors may range in size from providing a small bit of technical expertise to helping a colleague obtain a promotion. The types of resources that people can exchange as favors may be quite diverse. Foa and Foa (1980) proposed a typology of social resources that includes six classes of benefits: information, goods, services, love, status, and money. In this framework, favors provide "concrete" resources, such as information, goods, and services, rather than "symbolic" resources, such as love and status (the sixth type of benefit, money, is in the domain of economic exchange [Blau, 1964]). The present research, then, addresses the exchange of concrete resources, particularly information (such as advice), goods (such as equipment), and services (such as assistance).

Social exchange theorists often depict favor exchange as giving and receiving like for like. Perfectly equitable, sequential episodes of favor exchange, however, are unlikely to occur (Galbraith, 1987). Indeed, employees often form asymmetrical evaluations of the worth of favors because they did not offer identical favors; the favors' values could not be easily estimated and compared with a common metric; and information about the benefits received and the costs incurred was incomplete

and inaccurate (Flynn, 2002; Heath, 1976). Further, previous research has found evidence of an egocentric accounting bias in exchange relationships (Sprecher, 1988): on the average, employees believe they have given more than they have received. Finally, achieving equity may be difficult because an employee can request multiple favors from another employee before the other employee requests any favors in return.

To ensure they either reciprocate that which they owe or request reciprocation for that which they are owed, people maintain loose mental accounts of previous favor exchanges that monitor not only what they have given, but also what they have received (Clark, 1984; Clark, Mills, & Corcoran, 1989). Such accounts may reflect imbalance. Imbalance can be either self-perceived ("I think I gave more or less than I received") or other-perceived ("Others think I gave more or less than I received"). Self-perceived imbalance is a more critical influence on a focal employee's job attitudes, such as commitment and satisfaction. Conversely, other-perceived imbalance is a more critical influence on others' impressions of the focal employee (his or her social status) and on his or her productivity in an interdependent work environment (Blau, 1964).

The Impact of Other-Perceived Imbalance on Social Status and Productivity

Other-perceived imbalance in favor exchange and social status. Sorokin (1927) described four types of status: economic status (based on income, accumulated goods, and wealth); political status (based on authority, coercion, and power); informational status (based on educational attainment, skill, and learning); and social status (based on honor, prestige, and deference). Social status is awarded to people on the basis of their apparent possession of attributes held as ideal by other members of their social group (Bourdieu, 1984; Wegener, 1992). Thus, an individual's ability to claim social status in an organization, or a group thereof, is facilitated by other members' beliefs that the individual possesses a unique value or has provided something of unique value to the group (e.g., Sutton & Hargadon, 1996). That is, group members are more likely to legitimate status claims of individuals who are highly valued or considered critical to the group's success (e.g., Crozier, 1964; Hambrick & Cannella, 1993).

Social status may be conferred as a sign of acknowledgement and deference for favors received but not yet reciprocated. In his study of exchange dynamics in a government bureaucracy, Blau (1963) observed that favor exchange among em-

employees operated as a “basic source of the informally-generated status differences in the group” (1963: 140). Specifically, he noted that other employees seemed more likely to confer status on a focal employee to the extent that he or she was generous. Conversely, to the extent that a focal employee was indebted to other employees, other employees were less likely to confer status on him or her (Blau, 1963). Thus, employees whom others perceive to have been generous in previous episodes of favor exchange will likely be conferred higher social status than will employees whom others perceive to be less generous.

Hypothesis 1. A focal employee’s level of social status will increase as the extent to which others perceive the focal employee to be generous in favor exchange increases.

Other-perceived imbalance in favor exchange and productivity. To increase their productivity, members of organizations often need to request favors from coworkers who control vital information, possess valuable resources, direct important activities, or wield political clout. For example, employees may be able to increase their productivity by soliciting consultation from more knowledgeable coworkers (Blau, 1963). Such consultations often are obtained not by exercising hierarchical authority but by implicitly promising reciprocation in the form of another favor. One distinct feature of favor exchange is that immediate reciprocation is not required (Molm & Cook, 1995). Rather, recipients remain indebted until they are called upon to reciprocate at an unidentified point in the future. Employees may rely on such indebtedness to influence other employees in ways that help them accomplish their assigned tasks when they lack the resources to accomplish such tasks alone. For example, if an employee is having difficulty meeting a project deadline, he or she may enlist the support of employees who have received favors in the past but not yet reciprocated.

Although imbalance can benefit generous employees by increasing their influence over less generous employees, enhancing productivity through favor exchange may require minimal imbalance. That is, employees must either (1) request reciprocation for favors owed or (2) reciprocate favors owed. On the one hand, performing favors yields resource power. Such power must be deployed, however, to enhance productivity (Blau, 1964). If employees perform favors for others but ask for nothing in return, they gain no practical advantage from the favors they are owed. Instead, they are deprived of valued resources that could have been used to enhance their own productivity. On the

other hand, other-perceived indebtedness might also hinder productivity. An employee who others believe is highly indebted might have difficulty obtaining additional favors because others will become increasingly reluctant to expand an outstanding debt as the magnitude of the debt increases. Taken together, these arguments suggest employees might improve their productivity by maintaining other-perceived balance.

Hypothesis 2. There is a curvilinear (inverted U-shaped) relationship between perceived imbalance and productivity. The relationship is positive when others perceive the receiver of a favor as less generous, and it is negative when others perceive the receiver as more generous.

The Impact of Frequency of Favor Exchange on Social Status and Productivity

Frequency of favor exchange and social status.

Increased frequency of favor exchange may influence employees’ conferrals of social status. More frequent favor exchange leads givers and receivers to develop an affinity for one another because repetitive exchange makes people feel good about an exchange relationship and their exchange partners (Willer, Lovaglia, & Markovsky, 1997). The concept of relational cohesion suggests that “individually felt positive emotions unleash a cognitive process through which the emotion is attributed in part to the relations or groups that constitute the context for exchange” (Lawler et al., 2000: 623). Positive emotions engendered by frequent favor exchange with a focal employee may therefore lead others to enhance their impressions of the focal employee, and, in turn, inflate their conferrals of social status because they begin to view the focal employee more favorably.

Hypothesis 3. A focal employee’s level of social status will increase as the frequency with which the focal employee exchanges favors with others increases.

Frequency of favor exchange and productivity.

According to social exchange theory, social relations are formed and maintained because actors provide reciprocal benefits to one another over time (Gouldner, 1960). If they did not, the relations would cease to exist (Emerson, 1976; Lawler et al., 2000). This assumption carries important implications for the relationship between the frequency of favor exchange and productivity. As the reciprocal exchange of benefits increases in frequency, the actors involved should expect to achieve a more efficient exchange of resources because each learns

more about the other actor's underlying interests and values (Molm & Cook, 1995). Through trial and error, then, both actors come to understand what can be gained through increased resource sharing with one another. Such enhanced efficiency achieved through more frequent favor exchange may give employees a productive advantage over others who engage in favor exchange less frequently.

Hypothesis 4. Productivity will increase as the frequency with which a focal employee engages in favor exchange with others increases.

Interactional Effects of Perceived Imbalance in and Frequency of Favor Exchange

Effect on social status. Increased frequency of favor exchange may strengthen the impact of *other-perceived imbalance* in favor exchange on social status. Indebtedness can be disconcerting to less generous employees, "such that the greater its magnitude, the greater the resultant arousal and discomfort, and, hence, the stronger the ensuing attempts to reduce it" through reciprocation (Greenberg, 1980: 4). However, the more generous employee may not have an immediate need for reciprocal favors that the less generous employee can fulfill. In such cases, the less generous employee's aversive sense of indebtedness may persist, leading him or her to resent the focal employee and reduce any conferral of social status (Emerson, 1976). As exchange frequency increases, less generous employees get more opportunities to reciprocate. When the less generous employee is a more frequent exchange partner, he or she will be less averse to feelings of indebtedness and, in turn, less inclined to resent the focal employee, because he or she believes that such indebtedness can be reduced. Thus, status conferrals on a generous employee are likely to be inflated when the focal employee is a more frequent exchange partner.

Hypothesis 5. The positive effect of a generous pattern of favor exchange on social status will be stronger for employees who engage in favor exchange more frequently.

Effect on productivity. Increased frequency of favor exchange may also strengthen the impact of *other-perceived imbalance* in favor exchange on employee productivity. Givers and receivers who maintain reciprocal exchange develop greater trust, find one another more predictable, and infer that they have similar exchange orientations, which increases their willingness to engage in future episodes of exchange (Cook & Emerson, 1984; Kollock, 1994; McAllister, 1995; Molm & Cook, 1995). Fur-

ther, although other employees may be hesitant to perform more substantial favors that increase perceived imbalance, they may grow less hesitant to do so as the frequency with which they exchange favors with a focal employee increases, because they trust that future reciprocation can eradicate such imbalance (Cotterell, Eisenberger, & Spreicher, 1992; Heide & Miner, 1992). Thus, more frequent exchange partners who maintain other-perceived balance may be allowed to request bigger favors from one another. This increased leeway in favor exchange, in turn, will enable employees to perform their jobs more effectively because they will be better able to handle problems of varying size; that is, they may request more substantial favors that help them perform their assigned tasks without worrying about the burden of outstanding obligation.

Hypothesis 6. Frequency of favor exchange moderates the curvilinear (inverted U-shaped) relationship between other-perceived balance and productivity in such a way that the positive effect of a balanced pattern of favor exchange on productivity will be stronger for employees who engage in favor exchange more frequently.

Summary

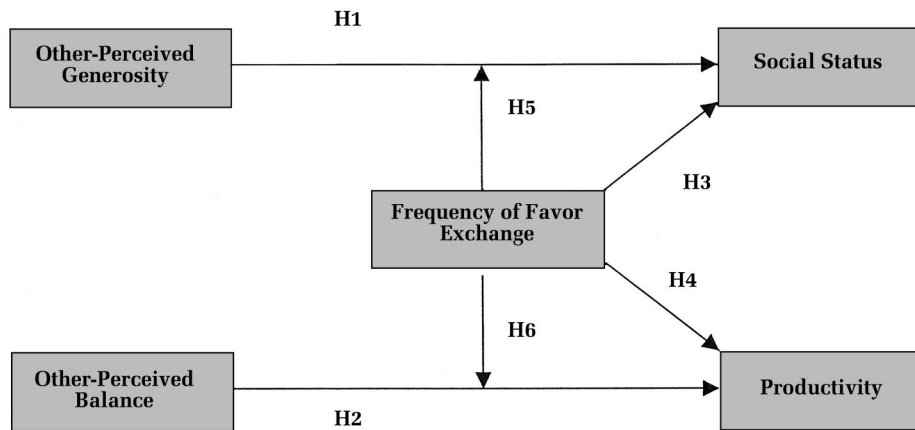
The preceding discussion highlights potential trade-offs inherent in different patterns of favor exchange among peer employees. It is predicted that a pattern of generosity in favor exchange, as perceived by others, enhances social status, whereas a more equitable balance in favor exchange, as perceived by others, enhances individual productivity. The frequency of favor exchange, however, will have a positive effect on both social status and individual productivity and will strengthen the positive relationship between being perceived as generous in favor exchange and social status and the positive relationship between maintaining an equitable balance in favor exchange and productivity. These predictions are summarized in Figure 1.

METHODS

Sample

The site for this study was a division within the headquarters of a large telecommunications firm located near San Francisco. The division employs professional engineers who perform detailed engineering tasks for other branches of the firm throughout the West and Southwest of the United

FIGURE 1
Summary of Hypotheses



States. When reports of engineering problems arrive at the division headquarters, the “jobs” are directed to the appropriate area managers of the eight engineering teams, which range in size from 16 to 41 members. Upon receipt of a job, an area manager and the senior engineers of a team decide which team member should be assigned to each job. The difficulty and complexity of jobs vary but, according to team managers, competence does not play a role in determining who gets which job. Instead, jobs are assigned to engineers solely on the basis of their availability. Although each job is assigned to only one team member, often more than one team member contributes to completing a job.

Procedures

To test the study hypotheses, I developed a questionnaire and pretested it using four employees from different teams. The employees provided detailed feedback about the complexity, wording, and ordering of each question, which was used to clarify and streamline the questionnaire. I customized a revised questionnaire for each focal respondent by affixing a personal identification code to the top right corner of the first page and removing the respondent’s name from a list of group members who were to be rated in the questionnaire. As a result, complete anonymity was not possible. Respondents were assured, however, that their responses would be confidential; that is, no other employees, including the managers, would have access to their individual responses. To reinforce this, the division coleaders issued a letter confirming that they had no interest in acquiring individual responses.

Questionnaires were distributed and collected on-site. Each team set aside an hour during which

those members who had agreed to participate were asked to complete the questionnaire. One hundred sixty-one employees (out of 173) completed the questionnaire, for a response rate of 93 percent. Measures included in the questionnaire assessed patterns of favor exchange, perceptions of social status, and demographic variables. Productivity data were collected from company archives.

Independent Variables

Perceived imbalance in favor exchange and frequency of favor exchange were assessed. Using seven-point Likert-type scales, respondents rated each member of their team (excluding themselves) on (1) the frequency with which the focal member and the respondent exchanged favors and (2) who had given more in their exchange relationship. For the first item, the anchoring statements were “very infrequently” (1) and “very frequently” (7). For the second item, the anchoring statements were “I have received far more than I have given” (1) and “I have given far more than I have received” (7).

To test Hypotheses 1, 2, 5, and 6, I created a measure of other-perceived imbalance in favor exchange by calculating the average of others’ ratings of “who owes whom” in their relationships with a focal employee ($\bar{x} = 4.23$, $s.d. = 0.62$). These responses represented the extent to which other employees perceived they were generous in their favor exchanges with the focal employee. This mean value suggests that employees believed, on the average, that they gave more than they received in their favor exchanges with other employees, a finding that is consistent with previous research on egocentric accounting biases in exchange relationships (e.g., Ross & Sicoly, 1979). Reverse-coding of this measure (7 was recoded as 1, 6 was recoded as

2, and so forth) captured other employees' perceptions of how generous they felt a focal employee was in their favor exchanges with other employees ($\bar{x} = 3.77$, $s.d. = 0.62$). As this measure of perceived imbalance increases, it suggests that other employees believe a focal employee has given more than he or she has received (that is, is generous). Hypotheses 2 and 6 predict a curvilinear effect (inverted U-shaped) of perceived imbalance on productivity. Calculating the squared term of the perceived imbalance measure captured this curvilinear effect. Finally, to test Hypotheses 3–6, I created a measure of the frequency with which a focal employee engaged in favor exchange with fellow team members by calculating the average rating of favor exchange frequency given by other team members ($\bar{x} = 3.35$, $s.d. = 0.83$).

Dependent Variables

Social status. Each respondent was asked to rate ten other members of his or her team (randomly assigned) on several dimensions. Items included (1) "How well respected is this person at work?" (1, "not respected at all"; 7, "respected a great deal"), (2) "How valuable are this person's contributions at work (1, "not valuable at all"; 7, "extremely valuable"), and (3) How much influence does this person exert over decisions at work? (1, "does not affect decisions"; 7, "has a great deal of influence") (Anderson, John, Keltner, & Kring, 2001). The number of other employees who rated a focal employee ranged from three to ten ($\bar{x} = 7.08$, $s.d. = 1.62$). I used the multiple-item within-group interrater reliability equation suggested by James, Demaree, and Wolf (1984) to assess the reliability of these social status ratings. A reliability score was obtained for each group of raters. The mean of these reliability scores was .94. Given the high level of interrater reliability, the three items were aggregated into an overall measure of status ($\alpha = .88$), and an average peer rating score was calculated for each respondent ($\bar{x} = 4.81$, $s.d. = 0.86$).

Productivity. The division collected eight objective measures of individual employee productivity annually. Measures were designed to assess both quantity and quality. The quantity measures, which were compiled by the area managers, included the (1) number of jobs completed, (2) number of "specs" (technical reports) drafted, (3) number of hours logged, and (4) number of technical drawings produced. The quality measures included (1) an efficiency ratio, (2) the number of errors committed, (3) the percentage of jobs in which deadlines were met, and (4) the amount of capital expended per job. For each productivity dimen-

sion, the department management established a goal amount, which reflected prior productivity as well as an employee's actual achievement on that dimension. To obtain an adjusted measure of individual productivity for each dimension, I calculated the ratio of actual achievement to the explicit goal. For example, the adjusted measure for the number of jobs completed was calculated as the actual number of jobs completed divided by an individual's goal level for the number of jobs completed. I then standardized these variables (as Z-scores) and subjected them to a principal components factor analysis, which yielded a single factor (no rotation), accounting for 82.5 percent of the variance. The factor loadings ranged from .83 to .98. Given the unambiguous presence of a general factor (Kim & Mueller, 1978), the eight measures were averaged ($\alpha = .93$) into an aggregate measure of individual productivity ($\bar{x} = 0.08$, $s.d. = 0.66$). The aggregate measure of productivity reflected each employee's productivity in the quarter (a three-month period) that ended immediately after administration of the questionnaire.

Control Variables

Respondents were asked to report their sex and race, and these data were included in each of the analyses as controls for salient demographic differences that may influence patterns of interaction among peer employees and, in turn, social status and individual productivity (e.g., Chatman & Flynn, 2001).

Patterns of favor exchange, status, and productivity may be driven, in part, by access to resources (e.g., Blau, 1963; Long, 1998). To control for this possibility, I collected several measures of individual resources and included them in each of the analyses. First, as a measure of on-the-job experience, respondents were asked to report their tenure with the organization. Second, as a measure of hierarchical level, respondents were asked to indicate whether they were engineers or senior engineers (these responses were converted into a dummy variable in which "engineer" was coded 0 and "senior engineer," 1). Third, as a measure of formal expertise, two measures of educational background were collected: (1) a series of dummy variables representing three levels of education (high school, undergraduate, and graduate) and (2) a dummy variable indicating whether a respondent had a degree in engineering. Fourth, a standardized measure (Z-score) of the average goal level across all eight components of the productivity variable was included to control for each employee's level of ability as proven through prior productivity. The

goal level measure also controlled for the possibility that higher-status employees were given higher goals, or that more productive employees were given lower goals.

To obtain a simple measure of network centrality, I included the number of team members whom respondents identified as coworkers they interacted with regularly as a control variable (Wasserman & Faust, 1994). In addition, an employee may maintain different levels of imbalance in their favor exchanges with different coworkers. As a control for whether a focal employee owed one coworker a lot or many coworkers a little, a measure of dispersion (the standard deviation of the perceived imbalance variable) was included in the analyses. Finally, the influence of between-group variance was controlled for via seven dummy variables representing the engineering teams (the mechanization group was the omitted category). Because these variables had little impact on the results, they are not reported in the tables.

RESULTS

Means, standard deviations, and correlations among study variables are reported in Table 1. All hypothesis-testing analyses were conducted with hierarchical regression equations; results are in Table 2. Control variables were entered on the first step, the measures of other-perceived imbalance and frequency of favor exchange were entered on the second step, and the interaction terms were entered on the final step.

Other-Perceived Imbalance in Favor Exchange

Social status. Hypothesis 1, which posits that employees will confer greater social status to generous employees (those believed to have given more than they received), was supported. Results from model 3 indicate that other-perceived imbalance in favor exchange had a significant, positive effect on social status ($\beta = 0.76, p \leq .01$). That is, if other employees believed a focal employee had

TABLE 1
Means, Standard Deviations, and Correlations

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Female	74.80%														
	25.20%														
2. Racial minority	43.80%		.02												
	56.20%														
3. Tenure	5.61	8.23	.29**	-.02											
4. Senior engineer	87.90%		.18	-.10	.17*										
	12.10%														
5. College degree	30.70%		-.11	.21**	-.41**	-.25**									
	69.30%														
6. Graduate degree	89.10%		.07	.03	-.04	.04	.19*								
	10.90%														
7. Engineering degree	59.60%		-.25**	.22**	-.42**	-.21*	.50**	.11							
	40.40%														
8. Productivity goal	0.11	0.83	-.12	-.12	.01	.05	-.06	-.17	-.09						
9. Number of exchange partners	7.21	1.64	-.04	-.02	.01	.03	-.10	-.10	.09	-.04					
10. Standard deviation of imbalance	0.96	0.27	.04	-.13	.14	.15	-.18*	.10	-.25**	-.14	.08				
11. Other-perceived imbalance	3.77	0.62	.11	-.03	.25**	.18*	-.13	.07	-.16*	-.18*	.11	.08			
12. Frequency of favor exchange	3.35	0.83	.04	-.11	.09	.18*	-.07	.03	-.01	-.15	.06	.14	.43**		
13. Social status	4.81	0.86	.05	-.16*	.16*	.41**	-.08	.04	-.13	-.20*	-.04	.14	.61**	.53**	
14. Individual productivity	0.08	0.66	.04	.06	-.15	.19*	.19	-.02	.15	-.10	.03	-.15	.23*	.28**	.33**

* $p < .05$

** $p < .01$

TABLE 2
Results of Hierarchical Regression Analysis Predicting Social Status and Productivity

Step and Variable	Social Status, Productivity, Model 1		Social Status, Productivity, Model 2		Social Status, Productivity, Model 3		Social Status, Productivity, Model 4		Social Status, Productivity, Model 5		Social Status, Productivity, Model 6		Social Status, Productivity, Model 7		Social Status, Productivity, Model 8		Social Status, Productivity, Model 9		Social Status, Productivity, Model 10		Social Status, Productivity, Model 11		Social Status, Productivity, Model 12		
1. Female	-0.17	0.08	-0.16	0.09	-0.16	0.12	-0.16	0.12	-0.16	0.12	-0.16	0.12	-0.16	0.12	-0.16	0.12	-0.16	0.12	-0.16	0.10	-0.12	-0.12	0.12	-0.12	0.12
Racial minority	-0.27 [†]	0.01	-0.26*	0.01	-0.26*	-0.01	-0.21 [†]	0.02	-0.21 [†]	0.02	-0.21 [†]	0.02	-0.21 [†]	0.02	-0.21 [†]	0.02	-0.21 [†]	0.02	-0.21 [†]	0.03	-0.22*	-0.22*	0.08	-0.22*	0.08
Tenure	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.01	0.01	-0.02 [†]	0.01	0.01	-0.01*	0.01	-0.01*
Hierarchical level	1.09**	0.58**	0.89**	0.50*	0.89**	0.56**	0.82**	0.52**	0.89**	0.56**	0.82**	0.52**	0.89**	0.56**	0.82**	0.52**	0.89**	0.56**	0.52**	0.52**	0.83**	0.83**	0.39*	0.83**	0.39*
College	0.18	0.26	0.15	0.25	0.15	0.25	0.16	0.26	0.15	0.25	0.16	0.26	0.15	0.25	0.16	0.26	0.15	0.25	0.28 [†]	0.16	0.16	0.03	0.16	0.03	
Graduate school	-0.06	-0.18	-0.15	-0.23	-0.15	-0.26	-0.13	-0.25	-0.15	-0.26	-0.13	-0.25	-0.15	-0.26	-0.13	-0.25	-0.15	-0.26	-0.29	-0.09	-0.09	-0.13	-0.09	-0.13	
Engineering degree	-0.05	0.07	0.03	0.11	0.03	0.12	-0.03	0.08	0.12	-0.03	0.08	0.12	-0.03	0.08	0.12	-0.03	0.08	0.12	0.06	-0.08	-0.08	0.13	-0.08	0.13	
Performance goal level	-0.26*	-0.09	-0.16*	-0.05	-0.16*	-0.04	-0.14*	-0.03	-0.16*	-0.04	-0.14*	-0.03	-0.16*	-0.04	-0.14*	-0.03	-0.16*	-0.04	-0.04	-0.12 [†]	-0.12 [†]	-0.12 [†]	-0.05	-0.12 [†]	-0.05
Number of frequent partners	-0.04	-0.01	-0.08*	-0.01	-0.07*	-0.01	-0.07*	-0.01	-0.07*	-0.01	-0.07*	-0.01	-0.07*	-0.01	-0.07*	-0.01	-0.07*	-0.01	-0.07*	-0.07	-0.07*	-0.02	-0.07*	-0.02	
Standard deviation of generosity	0.08	-0.28	0.09	-0.28	0.07	-0.18	0.01	-0.22	0.07	-0.18	0.01	-0.22	0.01	-0.22	0.01	-0.22	0.01	-0.22	-0.20	-0.04	-0.04	-0.19	-0.04	-0.19	
2. Perceived imbalance			0.76**	0.33**	0.48	1.61**	0.58	1.67**	0.48	1.61**	0.58	1.67**	0.48	1.61**	0.58	1.67**	0.48	1.61**	1.49**	0.30	0.30	2.93**	0.30	2.93**	
3. Perceived imbalance squared					0.04	-0.19*	0.01	-0.20**	0.04	-0.19*	0.01	-0.20**	0.01	-0.20**	0.01	-0.20**	0.01	-0.20**	-0.16*	0.07	0.07	-0.52**	0.07	-0.52**	
4. Frequency of favor exchange							0.27**	0.17*					0.27**	0.17*			0.27**	0.12 [†]	0.28**	0.33 [†]	0.33 [†]	-0.32	0.33 [†]	-0.32	
5. Perceived imbalance × frequency of favor exchange																		0.07**	-0.05*	0.07**	0.07**	-0.06*	0.07**	-0.06*	
6. Perceived imbalance squared × frequency of favor exchange																					-0.01	0.05**	-0.01	0.05**	
<i>R</i> ²	.26	.15	.55	.23	.55	.27	.60	.30	.55	.27	.60	.30	.55	.27	.60	.30	.55	.32	.63	.32	.63	.37	.63	.37	
Overall <i>F</i>	3.86**	1.59	11.69**	2.52**	10.67**	2.82**	12.09**	3.03**	10.67**	2.82**	12.09**	3.03**	10.67**	2.82**	12.09**	3.03**	10.67**	3.09**	12.57**	3.09**	11.78**	3.43**	11.78**	3.43**	
<i>df</i>	10, 108	10, 93	11, 107	11, 92	12, 106	12, 91	13, 105	13, 90	12, 106	12, 91	13, 105	13, 90	14, 104	14, 89	15, 103	15, 88	15, 103	14, 89	15, 103	14, 89	15, 103	15, 88	15, 103	15, 88	

^a Entries represent standardized coefficients. In a separate set of models, dummy variables for membership in seven of the eight teams were included in the first step (the mechanization group was the base group), but they had no significant impact on the results. They were therefore removed from the models.

[†] $p \leq .10$

* $p \leq .05$

** $p \leq .01$

been generous in previous episodes of favor exchange, the focal employee's social status increased.

Productivity. Hypothesis 2, which posits a curvilinear (inverted U-shaped) relationship between other-perceived imbalance and productivity, was supported. The results presented in model 6 reveal a significant, positive coefficient for the measure of other-perceived imbalance in favor exchange ($\beta = 1.61, p \leq .01$) and a significant, negative coefficient for the squared term ($\beta = -0.19, p \leq .05$). This indicates that other-perceived imbalance is positively related to productivity up to a certain point, beyond which productivity declines. (The decline begins when the mean reaches 4.23, a value suggesting that a focal employee has given slightly more than he or she has received.) That is, an employee's level of productivity significantly increased as favor exchanges with other employees became more balanced (as other employees believed the focal employee gave as much as he or she received), although a minimal level of generosity appeared to be most strongly related to productivity.

Frequency of Favor Exchange

Social status. Hypothesis 3 predicts that employees will confer greater social status on a focal employee as the frequency with which they exchange favors with the focal employee increases. Results from model 7 reveal that the measure of frequency of favor exchange, as reported by others, had a significant, positive effect on social status ($\beta = 0.27, p \leq .01$). This finding suggests that an employee had greater social status in his or her work group when other members engaged in favor exchange more frequently with the focal employee. Thus, Hypothesis 3 was supported.

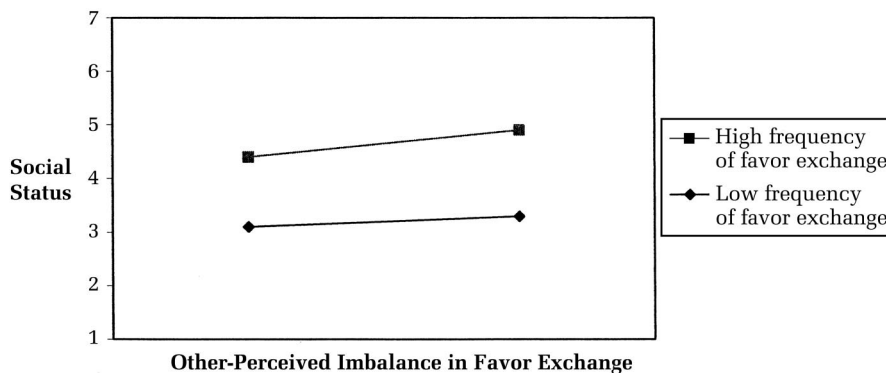
Productivity. Hypothesis 4, which predicts that individual productivity will increase as the frequency with which the focal employee exchanges

favors with other employees increases, was supported. The results presented in model 8 show a significant, positive coefficient for the measure of frequency of favor exchange ($\beta = 0.17, p \leq .05$). As the frequency of favor exchange between an employee and other employees increased, the focal employee's level of productivity significantly increased.

Interactions

The interactional effect of perceived imbalance and frequency of favor exchange on social status. Hypothesis 5 predicts that the positive effect of a generous pattern of favor exchange on social status will be stronger for employees who engage in favor exchange more frequently. As predicted, equation 9 in Table 2 shows a significant, positive coefficient for the interaction of other-perceived imbalance in and frequency of favor exchange ($\beta = 0.07, p \leq .01$). Following the procedure outlined by Aiken and West (1991), I graphed this interaction effect; Figure 2 is the graph. As can be seen, Hypothesis 5 was supported in that more frequent favor exchange had a larger effect on social status for those who were perceived to be more generous than for those who were perceived to be less generous. Specifically, an increase in other-perceived imbalance in favor exchange from one standard deviation below the mean (3.15) to one standard deviation above the mean (4.39) increased social status by .18 units *more* (approximately 21 percent of one standard deviation) when an employee reported a more frequent (one standard deviation above the mean) rather than less frequent pattern of favor exchange (one standard deviation below the mean). Further, it is important to note that when the independent variables were entered simultaneously with the interaction term, the main effect of the quadratic form of the imbalance mea-

FIGURE 2
Interactive Effect of Perceived Imbalance in and Frequency of Favor Exchange on Social Status



sure was no longer significant, and the main effect for frequency was only marginally significant. Thus, the interpretation of the positive main effects of imbalance and frequency on social status should be modified to consider the moderating impact of favor exchange frequency.

The interactional effect of perceived imbalance and frequency of favor exchange on productivity. Hypothesis 6 predicts the interaction between other-perceived balance in favor exchange and frequency of favor exchange will have an effect on productivity. As predicted, equation 12 shows a significant, positive coefficient for the interaction of the squared term for perceived imbalance in favor exchange and frequency of favor exchange ($\beta = 0.05, p \leq .01$). Once again, to understand the form of this interaction, I followed the graphing procedure outlined by Aiken and West (1991) to produce Figure 3. Hypothesis 6 was supported in that productivity was more strongly related to a balanced pattern of favor exchange for those who engaged in favor exchange more frequently. That is, productivity peaked when the frequency of favor exchange was high and perceived imbalance in favor exchange was relatively low. When the independent variables were entered simultaneously with the interaction term, however, the main effect of frequency of favor exchange was no longer significant in the hypothesized direction. Thus, the interpretation of the positive main effect of favor exchange frequency on productivity should be modified to consider the moderating impact of favor exchange frequency on the relationship between perceived imbalance and productivity.

Further, it is worth noting the different impacts of high and low frequency on more and less generous employees. As can be seen in Figure 3, the generous employees had higher levels of productivity if they engaged in favor exchange more fre-

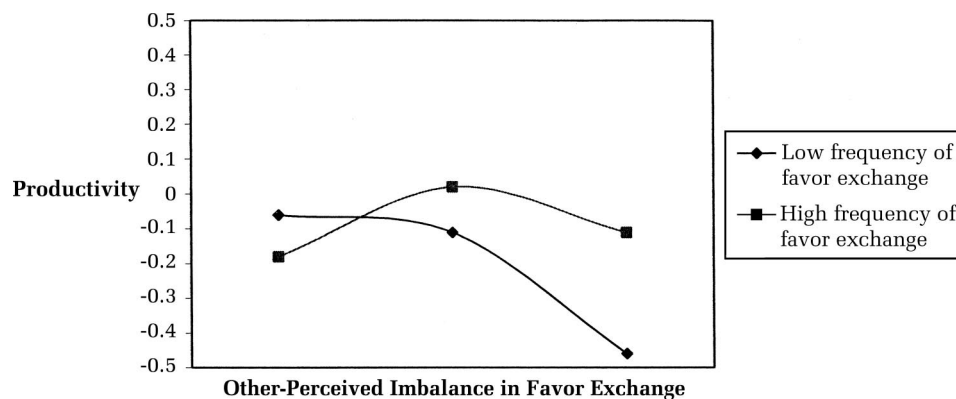
quently. Conversely, employees who had been less generous in previous episodes of favor exchange benefited from engaging in favor exchange less frequently; that is, their productivity was higher than that of less generous employees who engaged in favor exchange more frequently.

DISCUSSION

This study considered the impact of adopting different patterns of favor exchange on employees' social status and productivity. The results highlight a potential trade-off between status and productivity gains resulting from different patterns of exchange. Employees who were perceived as creditors tended to develop better reputations (social status) than did employees who were perceived as debtors (e.g., Blau, 1964). This observation implies that employees benefit from maintaining a generous image in exchange relationships with other employees. The findings also suggest, however, that if employees frequently perform favors for other employees and receive significantly fewer favors in return, they may be worse off; that is, here, employees who maintained highly unbalanced patterns of favor exchange tended to be less productive. In this sense, it may be more beneficial for employees to minimize perceived imbalance in favor exchange because the draining of resources that could result from a generous pattern of favor exchange might hinder their productivity.

These findings seem to present a dilemma. If employees adopt a highly generous pattern of favor exchange, they may accrue social status, but their productivity may also decline. Conversely, if employees obtain reciprocation for favors they are owed, it may improve their productivity, but decrease their social status. This apparent paradox may be partly resolved by examining the effects of

FIGURE 3
The Interactive Effect of Perceived Imbalance in and Frequency of Favor Exchange on Productivity



increased frequency of favor exchange on social status and productivity. In this study, increased frequency had a positive impact on both social status and productivity. The findings further reveal that frequency of favor exchange moderated the impact of perceived imbalance on social status and productivity. Specifically, status and productivity were more strongly related to more frequent favor exchange for those employees who were considered to be more generous or more balanced, respectively, in their exchange relationships with other employees. Therefore, employees may be better off in terms of both status and productivity if they increase the frequency with which they exchange favors with their coworkers rather than worry about the extent to which such exchanges are balanced. Or, alternatively, by participating in favor exchange more frequently, employees may be able to increase their social status *and* maintain a higher level of productivity, thereby overcoming the apparent trade-off between social status and productivity that results from adopting different patterns of favor exchange.

The differing impacts of high and low frequency of favor exchange on employees perceived to be generous and those perceived to be less generous is intriguing. Increased favor exchange seems to benefit more generous employees relatively more than it benefits less generous employees. The finding that infrequent, generous patterns of favor exchange are more deleterious to productivity than are frequent, generous patterns of favor exchange is consistent with this study's predictions. The finding that less generous, frequent patterns of favor exchange are more deleterious to productivity than are less generous, infrequent patterns of favor exchange, however, is not. It may be that the negative impact of perceived indebtedness on productivity simply overwhelms the positive impact of increased frequency. Indeed, continually performing favors for someone without receiving reciprocation from that person may lead others to develop feelings of resentment, which hinders cooperation and, in turn, the focal employee's productivity.

Limitations and Directions for Future Research

This empirical research is marked by a few limitations that should be addressed in future studies. First, there is no way of knowing the accuracy of respondents' accounts of favor exchange with other employees. However, social exchange theorists assume that givers and receivers are influenced by subjective evaluations of goods exchanged because objective values often do not exist (Blau, 1964; Emerson, 1987). Therefore, accuracy, or reality, is

not necessarily important; rather, subjective perceptions of favor exchange episodes are most important. Nevertheless, isolating the impact of memory biases that influence perceptions of imbalance in favor exchange might be informative, and an attempt to do so should be encouraged in future research. For example, future research might limit the impact of memory biases by using multiple measures of perceived imbalance in and frequency of favor exchange.

Second, one might criticize this study because the findings are derived from cross-sectional data, which limit causal inferences. It is possible that social status influences patterns of favor exchange, just as patterns of favor exchange influence social status. For example, given that higher-status employees are likely to have more resources at their disposal, they may experience a sense of noblesse oblige that leads them to engage in generous favor exchange more frequently. I attempted to control for this possibility by including several measures of resources (including, for instance, hierarchical authority, educational expertise, and on-the-job expertise) as control variables in the analyses. As the results showed, the impact of perceived generosity and frequency remained strong even after such differences in resource levels were accounted for.

Further, one of the two offices studied (the southwest office) had been formed just one year prior to data collection, when the firm hired more than 90 percent of the engineers working in this division. I ran the analyses again using only these employees, and the findings obtained in this smaller sample were consistent with those obtained in the full sample. The results of this supplementary analysis suggest that history effects (based, for instance, on prior status) did not bias the findings obtained in this study. In the future, however, researchers might find it worthwhile to collect longitudinal data on patterns of favor exchange among peer employees, social status, and individual productivity. Longitudinal data would allow for finer-grained analyses of (1) the relationship between perceived imbalance in favor exchange and frequency of favor exchange and (2) the impact that each variable has on social status and productivity. Further, such data might help rule out some alternative hypotheses. For example, the extent to which two employees are friends prior to engaging in favor exchange might influence the extent to which they confer status on each other following such exchanges.

Third, the processes underlying the hypothesized relationships should be verified empirically. For example, future research might measure emotion resulting from an exchange of favors and test

whether it mediates the relationship between the frequency of favor exchange and social status. Likewise, it was suggested that enhanced trust resulting from more frequent favor exchange strengthened the impact of balance on productivity by allowing exchange partners to request more favors of greater magnitude without worrying about immediate reciprocation. Future research may help shed light on the relationships between frequency of favor exchange, perceptions of balance, and productivity by examining (1) whether more frequent favor exchange does in fact enhance trust, (2) whether such trust leads to greater leniency in exchange relationships, and (3) whether the relationship between perceived balance and productivity is thereby moderated.

Fourth, future research might expand on these findings by considering the impact of salient demographic differences on favor exchange among peer employees. In this study, it appeared that being a member of a racial minority had a negative impact on social status, albeit at a marginal level of significance ($\beta = -0.16, p < .10$). Lower social status might be driven, in part, by different perceptions of favor exchange patterns among demographically different people. For example, demographically similar people may believe that demographically different people have given relatively less in previous episodes of favor exchange because of an in-group/out-group bias (e.g., Chatman & Flynn, 2001). Future research might examine whether such biases influence perceptions of imbalance in exchange relationships and, in turn, other employees' willingness to confer social status.

Finally, this study emphasized a highly instrumental view of the concept of value in favor exchange. In the past, social exchange theorists (e.g., Blau, 1964; Emerson, 1976; Homans, 1958) have assumed that people are oriented toward receiving and providing certain levels of help in exchange for certain levels of cost and effort. According to this approach, one's perception of an exchange partner's generosity should hinge on the material benefits the other party has offered in the past, which implies that the manner in which favors were given should not be nearly as consequential as the outcomes associated with them. Past research on interaction norms (e.g., Goffman, 1971), however, suggest that the way in which a favor is performed (for instance, with alacrity, with a smile) can influence its recipient's evaluation of it. That is, employees may have more positive impressions of other employees' generosity in previous episodes of favor exchange if they were treated with dignity and respect in such interactions. Given this, in future

research scholars might consider the manner in which favors are enacted as a potential determinant of status and productivity.

The Importance of Studying Favor Exchange among Peer Members of Organizations

Past research on exchange dynamics in organizations has primarily focused on exchanges between employees and employers. In recent years, however, the flattening of organizational hierarchies and the popularity of various management practices based on employee involvement (such as self-managing work teams) have begun to reduce hierarchical differences among employees. As a result, an increasing number of important interactions are taking place among peer employees who have no hierarchical authority over one another. How well employees can manage their peer exchange relationships (as well as their exchange relationships with supervisors and subordinates) becomes an important concern for organizational scholars interested in issues of power and exchange.

As a topic of theoretical and empirical study, favor exchange among peer employees holds great potential for researchers because such patterns of exchange serve several critical functions in organizations. Through favor exchange, employees who are resource-deficient can obtain necessary resources from other employees by implicitly promising future reciprocation. This, in turn, helps to ensure a smooth distribution of valued resources to places in an organization where they are most needed (e.g., Blau, 1963). Also, to the benefit of the individual and the organization, fewer costs, such as negotiating the terms of a contract, are incurred because employees rely on the norm of reciprocity to facilitate episodes of favor exchange (Gouldner, 1960). Further, favor exchange can help members of organizations overcome the inadequacies of formal hierarchical structures. Kaplan (1984), for example, argued that informal favor exchange networks were necessary to enable managers to exchange resources across departmental boundaries without challenging one another's authority. Thus, favor exchange may yield significant efficiency gains for organizations and their members by minimizing social and economic costs and avoiding the shortcomings of formal hierarchical structures.

Beyond yielding efficiency gains, favor exchange may bind employees more closely together. After an initial favor has been granted, the outstanding debt can serve as the basis for an ongoing relation-

ship (Mauss, 1925). The giver is motivated to remain in good standing with the receiver to ensure the likelihood of reciprocation (Emerson, 1976; Homans, 1958). Likewise, the receiver is motivated to remain in good standing with the giver so that he or she might be given some leniency in providing reciprocation or asking for additional favors. Even if the outstanding balance has been eradicated, the two parties will likely remain allies because they have developed trust based on their previous exchange experience (Kollock, 1994). In this sense, favor exchange may be a means to build a collegial environment that will heighten employees' sense of attachment to one another and facilitate their communication and cooperation.

CONCLUSION

The overall goal of this study was not only to help guide employees who are interested in adopting more beneficial patterns of exchange, but also to draw scholarly attention to an underdeveloped area of research: favor exchange among peer members of organizations. The results suggest that the manner in which employees engage in favor exchange correlates with their success in organizations. The results further suggest that employees who engage in favor exchange are confronted by a seeming paradox: generosity might enhance one's social status, but too much generosity might also hinder one's productivity. As an attempt to reconcile these tradeoffs, the present research encourages scholars to redirect their attention to other aspects of exchange dynamics, such as the frequency of exchange. Increased frequency of favor exchange might benefit employees both in terms of status and in terms of productivity. A worthwhile challenge for future research, then, is to examine whether such differences in favor exchange patterns benefit not only an individual employee, but also an organization as well.

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