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The Bases of Social Power

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The processes of power are pervasive, complex, and often disguised in our society. Accordingly, one finds in political science, in sociology, and in social psychology a variety of distinctions among different types of social power or among qualitatively different processes of social influence (1, 6, 14, 20, 23, 29, 30, 38, 41). Our main purpose is to identify the major types of power and to define them systematically so that we may compare them according to the changes which they produce and the other effects which accompany the use of power. The phenomena of power and influence involve a dyadic relation between two agents which may be viewed from two points of view: (a) What determines the behavior of the agent who exerts power? (b) What determines the reactions of the recipient of this behavior? We take this second point of view and formulate our theory in terms of the life space of P, the person upon whom power is exerted. In this way we hope to define basic concepts of power which will be adequate to explain many of the phenomena of social influence, including some which have been described in other less genotypic terms.

Recent empirical work, especially on small groups, has demonstrated the necessity of distinguishing different types of power in order to account for the different effects found in studies of social influence. Yet there is no doubt that more empirical knowledge will be needed to make final decisions concerning the necessary differentiations, but this knowledge will be obtained only by research based on some preliminary theoretical distinctions. We present such preliminary concepts and some of the hypotheses they suggest.

POWER, INFLUENCE, AND CHANGE

PSYCHOLOGICAL CHANGE

Since we shall define power in terms of influence, and influence in terms of psychological change, we begin with a discussion of change. We want to define change at a level of generality which includes changes in behavior, opinions, attitudes, goals, needs, values, and all other aspects of the person's psychological field. We shall use the word *system* to refer to any such part of the life space. Following Lewin (26, p. 305), the state of a system at time 1 will be denoted $s_1(a)$.

Psychological change is defined as any alteration of the state of some system a over time. The amount of change is measured by the size of the difference between the states of the system *at* time 1 and at time 2: $ch(a) = s_2(a) - s_1(a)$.

Change in any psychological system may be conceptualized in terms of psychological forces. But it is important to note that the change must be coordinated to the resultant force of all the forces operating at the moment. Change in an opinion, for example, may be determined jointly by a driving force induced by another person, a restraining force corresponding to anchorage in a group opinion, and an own force stemming from the person's needs. . . .

THE BASES OF POWER

By the basis of power, we mean the relationship between O and P, which is the source of that power. It is rare that we can say with certainty that a given empirical case of power is limited to one source. Normally, the relation between O and P will be characterized by several qualitatively different variables which are bases of power (30, Chapter 11). Although there are undoubtedly many possible bases of power which may be distinguished, we shall here define five which seem especially common and important. These five bases of O's power are: (1) *reward power*, based on P's perception that O has the ability to mediate rewards for him; (2) *coercive power*, based on P's perception that O has the ability to mediate punishments for him; (3) *legitimate power*, based on the perception by P that O has a legitimate right to prescribe behavior for him; (4) *referent power*, based on P's identification with O; and (5) *expert power*, based on the perception that O has some special knowledge or expertness. . . .

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REWARD POWER

Reward power is defined as power whose basis is the ability to reward. The strength of the reward power of O/P increases with the magnitude of the rewards which P perceives that O can mediate for him. Reward power depends on O's ability to administer positive valences and to remove or decrease negative valences. The strength of reward power also depends upon the probability that O can mediate the reward, as perceived by P. A common example of reward power is the addition of a piecework rate in the factory as an incentive to increase production.

The new state of the system induced by a promise of reward (for example the factory worker's increased level of production) will be highly dependent on O. Since O mediates the reward, he controls the probability that P will receive it. Thus P's new rate of production will be dependent on his subjective probability that O will reward him for conformity minus his subjective probability that O will reward him even if he returns to his old level. Both probabilities will be greatly affected by the level of observability of P's behavior. Incidentally, a piece rate often seems to have more effect on production than a merit rating system because it yields a higher probability of reward for conformity and a much lower probability of reward for nonconformity.

The utilization of actual rewards (instead of promises) by O will tend over time to increase the attraction of P toward O and therefore the referent power of O over P. As we shall note later, such referent power will permit O to induce changes which are relatively independent. Neither rewards nor promises will arouse resistance in P, provided P considers it legitimate for O to offer rewards.

The range of reward power is specific to those regions within which O can reward P for conforming. The use of rewards to change systems within the range of reward power tends to increase reward power by increasing the probability attached to future promises. However, unsuccessful attempts to exert reward power outside the range of power would tend to decrease the power; for example if O offers to reward P for performing an impossible act, this will reduce for P the probability of receiving future rewards promised by O.

COERCIVE POWER

Coercive power is similar to reward power in that it also involves O's ability to manipulate the attainment of valences. Coercive power of O/P stems from the expectation on the part of P that he will be punished by O if he fails to conform to the influence attempt. Thus negative valences will exist in given regions of P's life space, corresponding to the threatened punishment by O. The strength of coercive power depends on the magnitude of the negative valence of the threatened punishment multiplied by the perceived probability that P can avoid the punishment by conformity, i.e., the probability of punishment for nonconformity minus the probability of punishment for conformity (11). Just as an offer of a piece-rate bonus in a factory can serve as a basis for reward power, so the ability to fire a worker if he falls below a given level of production will result in coercive power.

Coercive power leads to dependent change also; and the degree of dependence varies with the level of observability of P's conformity. An excellent illustration of coercive power leading to dependent change is provided by a clothes presser in a factory observed by Coch and French (3). As her efficiency rating climbed above average for the group the other workers began to "scapegoat" her. That the resulting plateau in her production was not independent of the group was evident once she was removed from the presence of the other workers. Her production immediately climbed to new heights.[1]

At times, there is some difficulty in distinguishing between reward power and coercive power. Is the withholding of a reward really equivalent to a punishment? Is the withdrawal of punishment equivalent to a reward? The answer must be a psychological one—it depends upon the situation as it exists for P. But ordinarily we would answer these questions in the affirmative; for P, receiving a reward is a positive valence as is the relief of suffering. There is some evidence that conformity to group norms in order to gain acceptance (reward power) should be distinguished from conformity as a means of forestalling rejection (coercive power) (5).

The distinction between these two types of power is important because the dynamics are different. The concept of "sanctions" sometimes lumps the two together despite their opposite effects. While reward power may eventually result in an independent system, the effects of coercive power will continue to be dependent. Reward power will tend to increase the attraction of P toward O; coercive power will decrease this attraction (11, 12). The valence of the region of behavior will become more negative, acquiring some negative valence from the threatened punishment. The negative valence of punishment would also spread to other regions of the life space. Lewin (25) has

pointed out this distinction between the effects of rewards and punishment. In the case of threatened punishment, there will be a resultant force on P to leave the field entirely. Thus, to achieve conformity, O must not only place a strong negative valence in certain regions through threat of punishment, but O must also introduce restraining forces, or other strong valences, so as to prevent P from withdrawing completely from O's range of coercive power. Otherwise the probability of receiving the punishment, if P does not conform, will be too low to be effective.

LEGITIMATE POWER

Legitimate power is probably the most complex of those treated here, embodying notions from the structural sociologist, the group-norm and role-oriented social psychologist, and the clinical psychologist.

There have been considerable investigation and speculation about socially prescribed behavior, particularly that which is specific to a given role or position. Linton (29) distinguishes group norms according to whether they are universals for everyone in the culture, alternatives (the individual having a choice as to whether or not to accept them), or specialties (specific to given positions). Whether we speak of internalized norms, role prescriptions and expectations (34), or internalized pressures (15), the fact remains that each individual sees certain regions toward which he should locomote, some regions toward which he should not locomote, and some regions toward which he may locomote if they are generally attractive for him. This applies to specific behaviors in which he may, should, or should not engage; it applies to certain attitudes or beliefs which he may, should, or should not hold. The feeling of "oughtness" may be an internalization from his parents, from his teachers, from his religion, or may have been logically developed from some idiosyncratic system of ethics. He will speak of such behaviors with expressions like "should," "ought to," or "has a right to." In many cases, the original source of the requirement is not recalled.

Though we have oversimplified such evaluations of behavior with a positive-neutral-negative trichotomy, the evaluation of behaviors by the person is really more one of degree. This dimension of evaluation, we shall call "legitimacy." Conceptually, we may think of legitimacy as a valence in a region which is induced by some internalized norm or value. This value has the same conceptual property as power, namely an ability to induce force fields (26, p. 40–41). It may or may not be correct that values (or the superego) are internalized parents, but at least they can set up force fields which have a phenomenal "oughtness" similar to a parent's prescription. Like a value, a need can also induce valences (i.e., force fields) in P's psychological environment, but these valences have more the phenomenal character of noxious or attractive properties of the object or activity. When a need induces a valence in P—for example, when a need makes an object attractive to P—this attraction applies to P but not to other persons. When a value induces a valence, on the other hand, it not only sets up forces on P to engage in the activity, but P may feel that all others ought to behave in the same way. Among other things, this evaluation applies to the legitimate right of some other individual or group to prescribe behavior or beliefs for a person even though the other cannot apply sanctions.

Legitimate power of O/P is here defined as that power which stems from internalized values in P which dictate that O has a legitimate right to influence P and that P has an obligation to accept this influence. We note that legitimate power is very similar to the notion of legitimacy of authority, which has long been explored by sociologists, particularly by Weber (42), and more recently by Goldhammer and Shils (14). However, legitimate power is not always a role relation: P may accept an induction from O simply because he had previously promised to help O and he values his word too much to break the promise. In all cases, the notion of legitimacy involves some sort of code or standard accepted by the individual by virtue of which the external agent can assert his power. We shall attempt to describe a few of these values here.

Bases for Legitimate Power

Cultural values constitute one common basis for the legitimate power of one individual over another. O has characteristics which are specified by the culture as giving him the right to prescribe behavior for P, who may not have these characteristics. These bases, which Weber (42) has called the authority of the "eternal yesterday," include some things as age, intelligence, caste, and physical characteristics. In some cultures, the aged are granted the right to prescribe behavior for others in practically all behavior areas. In most cultures, there are certain areas of behavior in which a person of one sex is granted the right to prescribe behavior for the other sex.

Acceptance of the social structure is another basis for legitimate power. If P accepts as right the social structure of his group, organization, or

society, especially the social structure involving a hierarchy of authority, P will accept the legitimate authority of O who occupies a superior office in the hierarchy. Thus legitimate power in a formal organization is largely a relationship between offices rather than between persons. And the acceptance of an office as *right* is a basis for legitimate power—a judge has a right to levy fines; a foreman should assign work; a priest is justified in prescribing religious beliefs; and it is the management's prerogative to make certain decisions (10). However, legitimate power also involves the perceived right of the person to hold the office.

Designation by a legitimizing agent is a third basis for legitimate power. An influencer O may be seen as legitimate in prescribing behavior for P because he has been granted such power by a legitimizing agent whom P accepts. Thus, a department head may accept the authority of his vice president in a certain area because that authority has been specifically delegated by the president. An election is perhaps the most common example of a group's serving to legitimize the authority of one individual or office for other individuals in the group. The success of such legitimizing depends upon the acceptance of the legitimizing agent and procedure. In this case it depends ultimately on certain democratic values concerning election procedures. The election process is one of legitimizing a person's right to an office which already has a legitimate range of power associated with it.

Range of Legitimate Power of O/P

The areas in which legitimate power may be exercised are generally specified along with the designation of that power. A job description, for example, usually specifies supervisory activities and also designates the person to whom the jobholder is responsible for the duties described. Some bases for legitimate authority carry with them a very broad range. Culturally derived bases for legitimate power are often especially broad. It is not uncommon to find cultures in which a member of a given caste can legitimately prescribe behavior for all members of lower castes in practically all regions. More common, however, are instances of legitimate power where the range is specifically and narrowly prescribed. A sergeant in the army is given a specific set of regions within which he can legitimately prescribe behavior for his men.

The attempted use of legitimate power which is outside of the range of legitimate power will decrease the legitimate power of the authority figure. Such use of power which is not legitimate will also decrease the attractiveness of O (11, 12, 36).

Legitimate Power and Influence

The new state of the system which results from legitimate power usually has high dependence on O though it may become independent. Here, however, the degree of dependence is not related to the level of observability. Since legitimate power is based on P's values, the source of the forces induced by O include both these internal values and O. O's induction serves to activate the values and to relate them to the system which is influenced, but thereafter the new state of the system may become directly dependent on the values with no mediation by O. Accordingly, this new state will be relatively stable and consistent across varying environmental situations, since P's values are more stable than his psychological environment.

We have used the term *legitimate* not only as a basis for the power of an agent, but also to describe the general behaviors of a person. Thus, the individual P may also consider the legitimacy of the attempts to use other types of power by O. In certain cases, P will consider that O has a legitimate right to threaten punishment for nonconformity; in other cases, such use of coercion would not be seen as legitimate. P might change in response to coercive power of O, but it will make a considerable difference in his attitude and conformity if O is not seen as having a legitimate right to use such coercion. In such cases, the attraction of P for O will be particularly diminished, and the influence attempt will arouse more resistance (11). Similarly the utilization of reward power may vary in legitimacy; the word *bribe,* for example, denotes an illegitimate reward.

REFERENT POWER

The referent power of O/P has its basis in the identification of P with O. By identification, we mean a feeling of oneness of P with O, or a desire for such an identity. If O is a person toward whom P is highly attracted, P will have a desire to become closely associated with O. If O is an attractive group, P will have a feeling of membership or a desire to join. If P is already closely associated with O, he will want to maintain this relationship (39, 41). P's identification with O can be established or maintained if P behaves, believes, and perceives as O does. Accordingly, O has the ability to influence P, even though P may be unaware of this referent power. A verbalization of such power by P might be, "I am like O, and therefore I shall

behave or believe as O does," or "I want to be like O, and I will be more like O if I behave or believe as O does." The stronger the identification of P with O the greater the referent power of O/P.

Similar types of power have already been investigated under a number of different formulations. Festinger (7) points out that in an ambiguous situation, the individual seeks some sort of "social reality" and may adopt the cognitive structure of the individual or group with which he identifies. In such a case, the lack of clear structure may be threatening to the individual, and the agreement of his beliefs with those of a reference group will both satisfy his need for structure and give him added security through increased identification with his group (16, 19).

We must try to distinguish between referent power and other types of power which might be operative at the same time. If a member is attracted to a group and he conforms to its norms only because he fears ridicule or expulsion from the group for nonconformity, we would call this coercive power. On the other hand, if he conforms in order *to obtain praise* for conformity, it is a case of reward power. The basic criterion for distinguishing referent power from both coercive and reward power is the mediation of the punishment and the reward by O: To the extent that O mediates the sanctions (i.e., has means control over P), we are dealing with coercive and reward power; but to the extent that P avoids discomfort or gains satisfaction by conformity based on identification, regardless of O's responses, we are dealing with referent power. *Conformity with majority opinion* is sometimes based on a respect for the collective wisdom of the group, in which case it is expert power. It is important to distinguish these phenomena, all grouped together elsewhere as "pressures toward uniformity," since the type of change which occurs will be different for different bases of power.

The concepts of "reference group" (40) and "prestige suggestion" may be treated as instances of referent power. In this case, O, the prestigeful person or group, is valued by P; because P desires to be associated or identified with O, he will assume attitudes or beliefs held by O. Similarly a negative reference group which O dislikes and evaluates negatively may exert negative influence on P as a result of negative referent power.

It has been demonstrated that the power which we designate as referent power is especially great when P is attracted to O (2, 7, 8, 9, 13, 23, 30). In our terms, this would mean that the greater the attraction, the greater the identification, and consequently the greater the referent power. In some cases, attraction or prestige may have a specific basis, and the range of referent power will be limited accordingly: A group of campers may have great referent power over a member regarding campcraft, but considerably less effect on other regions (30). However, we hypothesize that the greater the attraction of P toward O, the broader the range of referent power of O/P.

The new state of a system produced by referent power may be dependent on or independent of O; but the degree of dependence is not affected by the level of observability to O (6, 23). In fact, P is often not consciously aware of the referent power which O exerts over him. There is probably a tendency for some of these dependent changes to become independent of O quite rapidly.

EXPERT POWER

The strength of the expert power of O/P varies with the extent of the knowledge or perception which P attributes to O within a given area. Probably P evaluates O's expertness in relation to his own knowledge as well as against an absolute standard. In any case expert power results in primary social influence on P's cognitive structure and probably not on other types of systems. Of course changes in the cognitive structure can change the direction of forces and hence of locomotion, but such a change of behavior is secondary social influence. Expert power has been demonstrated experimentally (8, 33). Accepting an attorney's advice in legal matters is a common example of expert influence; but there are many instances based on much less knowledge, such as the acceptance by a stranger of directions given by a native villager.

Expert power, where O need not be a member of P's group, is called "informational power" by Deutsch and Gerard (4). This type of expert power must be distinguished from influence based on the content of communication as described by Hovland et al. (17, 18, 23, 24). The influence of the content of a communication upon an opinion is presumably a secondary influence produced after the *primary* influence (i.e., the acceptance of the information). Since power is here defined in terms of the primary changes, the influence of the content on a related opinion is not a case of expert power as we have defined it, but the initial acceptance of the validity of the content does seem to be based on expert power or referent power. In other cases, however, so-called facts may be accepted as self-evident because they fit into P's cognitive structure; if this impersonal acceptance of the truth of the fact is independent of the more or less enduring relationship between O

and P, then P's acceptance of the fact is not an actualization of expert power. Thus we distinguish between expert power based on the credibility of O and informational influence which is based on characteristics of the stimulus such as the logic of the argument or the "self-evident facts."

Wherever expert influence occurs, it seems to be necessary both for P to think that O knows and for P to trust that O is telling the truth (rather than trying to deceive him).

Expert power will produce a new cognitive structure which is initially relatively dependent on O, but informational influence will produce a more independent structure. The former is likely to become more independent with the passage of time. In both cases the degree of dependence on O is not affected by the level of observability.

The "sleeper effect" (18, 24) is an interesting case of a change in the degree of dependence of an opinion on O. An unreliable O (who probably had negative referent power but some positive expert power) presented "facts" which were accepted by the subjects and which would normally produce secondary influence on their opinions and beliefs. However, the negative referent power aroused resistance and resulted in negative social influence on their beliefs (i.e., set up a force in the direction opposite to the influence attempt), so that there was little change in the subjects' opinions. With the passage of time, however, the subjects tended to forget the identity of the negative communicator faster than they forgot the contents of his communication, so there was a weakening of the negative referent influence and a consequent delayed positive change in the subjects' beliefs in the direction of the influence attempt ("sleeper effect"). Later, when the identity of the negative communicator was experimentally reinstated, these resisting forces were reinstated, and there was another negative change in belief in a direction opposite to the influence attempt (24).

The range of expert power, we assume, is more delimited than that of referent power. Not only is it restricted to cognitive systems, but the expert is seen as having superior knowledge or ability in very specific areas, and his power will be limited to these areas, though some "halo effect" might occur. Recently, some of our renowned physical scientists have found quite painfully that their expert power in physical sciences does not extend to regions involving international politics. Indeed, there is some evidence that the attempted exertion of expert power outside of the range of expert power will reduce that expert power. An undermining of confidence seems to take place.

Summary

We have distinguished five types of power: referent power, expert power, reward power, coercive power, and legitimate power. These distinctions led to the following hypotheses.

1. For all five types, the stronger the basis of power, the greater the power.
2. For any type of power, the size of the range may vary greatly, but, in general, referent power will have the broadest range.
3. Any attempt to utilize power outside the range of power will tend to reduce the power.
4. A new state of a system produced by reward power or coercive power will be highly dependent on O, and the more observable P's conformity, the more dependent the state. For the other three types of power, the new state is usually dependent, at least in the beginning, but in any case the level of observability has no effect on the degree of dependence.
5. Coercion results in decreased attraction of P toward O and high resistance; reward power results in increased attraction and low resistance.
6. The more legitimate the coercion, the less it will produce resistance and decreased attraction.

Note

1. Though the primary influence of coercive power is dependent, it often produces secondary changes which are independent. Brainwashing, for example, utilizes coercive power to produce many primary changes in the life space of the prisoner, but these dependent changes can lead to identification with the aggressor and hence to secondary changes in ideology which are independent.

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Reading 17

Relationships between Leader Reward and Punishment Behavior and Group Processes and Productivity

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In a presentation at the Biennial Leadership Symposium, C. A. Schriesheim, Mowday and Stogdill (1979) argued strongly that greater consideration of group processes is necessary if our understanding of leadership effectiveness is to be facilitated.

C. A. Schriesheim et al. (1979) observed that there are several reasons why understanding the relationship between leaders and groups is important. First, leaders emerge from groups or are appointed to manage them and therefore must have a working knowledge of group processes in order to be effective. Leaders also play an important role in determining the goals of the groups they lead and in monitoring the social relationships of those groups. Finally, leaders are influenced by the groups they lead; and, to the extent that they understand the nature of this influence process, the better able they will be to change or modify their own behavior in an effective manner.

Despite the convincing arguments presented by C. A. Schriesheim et al. (1979) regarding the inclusion of groups into our analysis of leadership effectiveness, to our knowledge only two studies have been explicitly designed to analyze leader–subordinate interactions since the presentation was made. Both of these studies examined group processes within the context of a leader's instrumental and supportive behaviors. Greene and C. A. Schriesheim (1980) found both instrumental leader behavior (ILB) and supportive leader behavior (SLB) to positively influence group cohesion and arousal. In addition, they found that ILB had particularly strong effects on these group processes in large and newly formed groups while SLB exerted its greatest influence in small and newly formed groups. J. F. Schriesheim (1980) examined the moderating effects of group cohesiveness on the relationships between instrumental and supportive leader behaviors and several subordinate criterion variables. She reported that group cohesiveness negatively moderated the relationships between ILB and subordinates' role clarity, satisfaction, and performance and positively moderated the relationship between SLB and these same criterion variables. In the discussion of her findings, Schriesheim concluded that "this study examined only one aspect of the primary work group. The results were encouraging and suggest that leadership research might benefit from more careful attention to the literature on groups" (J. F. Schriesheim, 1980, p. 191).

Given the theoretical importance C. A. Schriesheim et al. (1979) have accorded group processes in the determination of leader effectiveness and the empirical evidence reported by Greene and C. A. Schriesheim (1980) and J. F. Schriesheim (1980), it would appear that additional research designed to examine other forms of leader behavior that might be expected to be related to group criterion variables would be warranted. Two general classes of leader behavior that seem to be particularly relevant to group processes and productivity are leader reward and punishment behaviors.

There is a substantial amount of evidence which suggests that the way leaders administer individual rewards and punishments influences subordinates' performance and satisfaction (cf. Greene, 1976a; Hunt & Schuler, 1976; Podsakoff, 1982; Podsakoff, Todor, Grover, & Huber, 1984; Podsakoff, Todor, & Skov, 1982; Sims, 1977; Sims & Szilagyi, 1975; Szilagyi, 1980). The way rewards and punishments are administered to *groups* of individuals has also been shown to have a significant relationship with various group criterion variables, including group productivity (French, Brownell, Graziano, & Hartup, 1977; Rosenbaum, Moore, Cotton, Cook, Hieser, Shovar, & Gray, 1980), cohesiveness and interpersonal attraction among group members (see Bersheid & Walster,

Source: P. M. Podsakoff, W. D. Todor, *Journal of Management* 1985, 11, 1, 55–73.

1978; Byrne, 1971; or Lott & Lott, 1965, for reviews), the amount of dysfunctional or inappropriate group member behaviors (Sulzbacher & Houser, 1970), and the amount of tutoring that takes place in a group (Hamblin, Hathaway, & Wodarski, 1971). What has been relatively neglected, however, is the effects that individual reward and punishment contingencies administered by a leader have upon group processes and productivity.

An analysis of the impact that individually administered rewards and punishments have upon group processes and productivity should prove to be of considerable interest to practicing managers and leaders. Several authors have noted that while particular reward and punishment contingencies may appear to have functional effects at the individual level, they may have just the opposite effects at the group level. Hardin (1968), for example, in his discussion of the "tragedy on the commons," noted the problems encountered in a small community when all the townspeople responded to individual reinforcement contingencies which eventually hurt the community as a whole. Schelling (1971) provided a number of similar examples of situations in which individuals acted rationally in order to increase their own outcomes, only to find that the overall result of their actions was a loss for the entire group of which they were members. And, in discussing the effects of monetary rewards in organizations, Lawler (1971) noted that even though individual incentive systems have generally positive effects on subordinates' performance, they sometimes lead to "soldiering" by group members (that is, pressure by group members to limit or restrict productivity to a particular level). Taking these findings into consideration, it is possible that even though leaders who administer rewards contingent upon performance have been generally found to have functional effects on individual levels of performance and satisfaction, such behavior by the leader may have unintended or dysfunctional effects on group processes or productivity. Leaders who administer contingent rewards, for example, may not only increase the motivation of their subordinates to perform, but also may increase the competitiveness of these individuals. Such competition, while not inherently bad, may prove dysfunctional if the tasks performed by the subordinates require cooperation. For, under these conditions, the competition developed among the subordinates may interfere with or disrupt the cooperation needed among the group members to perform effectively. Thus, it makes practical sense to examine the effects of rewards administered by the leader not only on the individual, but also on the group.

The purpose of the research reported here is to examine the relationships between individually administered rewards and punishments and subordinates' perceptions of various group characteristics. In addition to productivity, Stogdill (1972) has identified group cohesiveness and drive as essential dimensions of organized groups. Stogdill (1972) defined group drive as "the degree of group arousal, motivation, freedom, enthusiasm, or esprit" and group cohesiveness as "the extent to which members reinforce each other's expectations regarding the value of maintaining the identity of the group" (p. 27). Because of the prominence assigned to group cohesiveness and drive by both Stogdill (1972) and Schriesheim et al. (1979), these group processes, along with group members' perceptions of their group's productivity, are considered in the present study. Consistent with the research of Hunt and Schuler (1976) and Podsakoff, Todor, and Skov (1982), the relationships between both contingent and noncontingent reward and punishment behaviors and the group criterion variables will be examined. Contingent rewards and punishments are those that are based on the performance of the subordinates. Leaders who administer contingent rewards provide praise, commendation, and acknowledgement to group members when they perform at high levels or improve their performance. Similarly, leaders who administer contingent punishment reprimand their subordinates when they perform poorly or at low levels. Noncontingent rewards and punishments, on the other hand, are those that are administered independently of subordinates' performance. Thus, a leader who utilizes noncontingent rewards (or punishments) administers them to group members who deserve them as well as to group members who do not deserve them.

BACKGROUND AND EXPECTATIONS

LEADER BEHAVIOR AND GROUP COHESIVENESS

Byrne and a colleague (Byrne, 1971, Byrne & Clore, 1970) have suggested that the interpersonal attraction we express toward other individuals is influenced by the rewards and punishments associated with those individuals. More specifically, Byrne has hypothesized that we like and/or are attracted to those individuals or groups

in whose presence we receive rewards, but we dislike and are not attracted to those individuals or groups in whose presence we are punished. Numerous studies have been conducted in order to assess the effects that receiving rewards or punishments in the presence of other individuals or groups of individuals has upon a person's attitude toward those individuals or groups (cf. Byrne, 1971; Lott & Lott, 1965). In general, the results of these studies indicate that individuals are more attracted to groups with which they interact, or describe groups as more cohesive, when the individuals receive rewards in the presence of the group's members than when they receive no rewards or are punished.

The findings reported above should not be taken to suggest that all types of rewards and punishments have precisely the same effects on a group member's perception of group cohesiveness however. Several studies have demonstrated that the reinforcing potential of a stimulus event, and subsequently its effects on an individual's attitude, is influenced by the manner in which the stimulus is administered (cf. Hunt & Schuler, 1976; Keisler, 1966; Podsakoff, Barman, Todor, & Grover, 1982). Podsakoff, Barman, Todor, and Grover, for example, found that while there is a positive relationship between co-worker satisfaction and leader reward behavior when rewards are administered contingently by the leader, no such relationship existed when leaders administered rewards noncontingently. In addition, these researchers reported that while there is a negative relationship between leader noncontingent punishment behavior and subordinates' satisfaction with their co-workers, no such relationship existed between leader contingent punishment behavior and this criterion variable. Based on these findings, and assuming that co-worker satisfaction may serve as an indirect measure of group cohesiveness, we would expect that *while neither leader contingent punishment nor noncontingent reward behavior will be related to group members' perceptions of cohesion, leader contingent reward behavior will be positively related to perceptions of group cohesion and leader noncontingent punishment behavior will be negatively related to this criterion variable.*

LEADER BEHAVIOR AND GROUP DRIVE

Zander (1971) has suggested that group drive may be assessed by a group's aspiration level. Among other things, he views the group's aspiration level to be a function of individual group members' perceptions of the probability that the group will be able to achieve success and avoid failure. Leaders who allocate rewards and punishments contingently administer reinforcing and punitive events according to the performance levels of group members. Such behavior on the part of the leader would therefore be expected to increase group members' perceptions that by performing well in their tasks, they should be able to increase the rewards and decrease the punishments they receive. If this perception regarding the ability to obtain rewards and avoid punishments also generalizes to the group members' beliefs regarding the probability that the group they belong to will be able to increase its rewards and to avoid punishment, we would expect that both *leader contingent reward and contingent punishment behavior will be positively related to group members' perceptions of group drive.*

Leaders who allocate rewards and punishments noncontingently, on the other hand, administer reinforcing and punitive events independent of the performance levels of group members. Under such circumstances group members have an approximately equal probability of receiving rewards or punishments, regardless of how well or how poorly they perform their tasks. For these reasons, we would expect that both *leader noncontingent reward and noncontingent punishment behavior will not be related to group drive.*

LEADER BEHAVIOR AND GROUP PRODUCTIVITY

Of all the group criterion variables examined in this study, it is perhaps the most difficult to make specific predictions concerning group productivity. As noted earlier, several authors (e.g., Hardin, 1968; Lawler, 1971; Schelling, 1971) have provided examples of the potential dysfunctional consequences that may occur when members of a group are rewarded individually. These examples suggest that while individually administered contingencies may increase the motivation of individual group members, this motivation may be channeled into behavior which is counterproductive to the group as a whole. Stogdill (1972), however, has reported that group drive (or motivation) is generally positively related to group productivity, suggesting that leader behaviors which increase a group's drive will also increase a group's productivity. Moreover, Zander (1971) has noted that group drive may result in group productivity when group members are provided with accurate performance feedback. Leaders who administer rewards and punishments contingently provide feedback which is appropriate to the level of performance of

group members. Leaders who administer rewards and punishments noncontingently, on the other hand, provide feedback to group members which is independent of their performance levels. Therefore, as in the case with group drive, we expect that *group members' perceptions of leader contingent reward and punishment behaviors will be positively related to their perceptions of group productivity, while perceptions of leader noncontingent reward and punishment behaviors will not be related to this criterion variable.*

ASSUMPTIONS UNDERLYING EXPECTATIONS

The preceding expectations regarding the relationships between leader reward and punishment behaviors and group cohesiveness, drive, and productivity are based on two basic assumptions. The first assumption is that the respondents in the present study are in functioning groups. Reitz (1981), among others, has indicated that there are four essential criteria that must be met to have a functioning group. These criteria are: (a) two or more people who (b) interact with each other or influence each others' behavior, (c) share a common goal, and (d) see themselves as a group. Respondents used in the present study were drawn from three different samples of state and local government bodies or agencies. Within these samples, all of the groups exceeded three people (range = 4 to 14), all had a common supervisor, and all of the group members were located in the same general proximity. While it was not possible to actually assess the absolute level of interaction that took place among the group members or the degree to which the group members saw themselves as a group, we feel it safe to assume that these conditions were generally met because (a) the close proximity of the majority of the group members would be expected to produce numerous interactions among them and because (b) the questions relating to the group processes measured in this study asked respondents to describe the group of individuals who report to the same immediate supervisor.

The second assumption regarding the nature of the groups in the present study is that generally no competition or work-flow interdependence exists among the group members. Several studies (see Johnson, Maruyama, Johnson, Nelson, & Skon, 1981, for a review of this literature) suggest that dysfunctional consequences may accrue in groups in which rewards are administered individualistically if the performance of the group members is interdependently linked. The majority of the respondents sampled in the present study were clerical, administrative, or white-collar government employees who interact with each other in their jobs but whose work flow is not linked. Thus, interdependence was not seen as a general problem. Similarly, since these employees are paid either by salary or on an hourly basis according to their seniority or tenure (but not by their actual performance), little or no competition was also assumed. . . .

DISCUSSION AND CONCLUSIONS

The purpose of this study was twofold. The primary objective was to examine the relationships between leader reward and punishment behaviors and group drive, cohesiveness, and productivity. The findings of the study reported here provide little support for the proposition that leaders who administer evaluative rewards contingently at the individual level will have dysfunctional effects on group processes. Group cohesion, drive, and group productivity were all found to be positively related to leader contingent reward behavior. The positive relationship between CR [contingent reward behavior] and group cohesion may be explained by Byrne's (1971) interpersonal attraction model. However, other plausible explanations also exist. It is possible, for example, that leaders who administer evaluative rewards to group members according to their performance levels increase the group members' perceptions of equity, which subsequently increase their feelings of interpersonal attraction toward the group. An alternative explanation is that leaders who reward individuals appropriately also reward the group as a whole when it performs well or succeeds on a task. Several studies have shown that groups which receive rewards for their performance express more cohesion than groups which receive no rewards (cf. Lott & Lott, 1965).

The somewhat weaker support provided for the relationship between contingent reward behavior and group productivity than the support provided for either the relationship between CR and group cohesiveness or CR and group drive suggests that even though CR increases group drive and cohesiveness, these group processes are not always translated into improved levels of group performance. Greene (1976b) has suggested the possibility that group acceptance of organizational goals may serve to moderate the relationship between group cohesiveness and productivity. In a longitudinal field study he reported that group cohesiveness

caused increases in the productivity of groups that accepted organizational goals but decreased the productivity of groups that did not accept organizational goals. Thus, one possible reason for the lower level of relationship between CR and group productivity is that organizational goals may have been accepted by some groups but not by other groups in the study.

Another plausible reason for the lower level of correspondence between contingent reward behavior and group productivity than between either CR and group drive or cohesiveness has to do with the nature of the tasks performed by the work groups. As noted earlier, results from several studies (cf. Cherrington, Reitz, & Scott, 1971; Miller & Hamblin, 1963; Rosenbaum et al., 1980; Scott & Cherrington, 1974) suggest that individually administered monetary rewards are more effective when the tasks subordinates perform are independent or nonadditive, whereas rewards based on group performance are more effective when tasks are additive or require cooperation. If these findings are applicable to social rewards such as the praise and commendations provided by leaders, it may mean that leaders who establish individualistic reward contingencies will positively affect the performance of groups that perform nonadditive tasks but will have no effect, or a negative effect, on the performance of groups which perform tasks which are interdependent or require cooperation. Despite the fact that it was assumed that no work-flow interdependence was present among the groups in this study, no explicit measure of these relationships was taken. Future research directed at analyzing the relationships between leader reward and punishment behaviors and group productivity should therefore consider the nature of the tasks performed by the subordinates.

Among the more interesting findings in this study were the generally consistent positive relationships between contingent punishment behavior and group drive and productivity (although the results between CP and drive are somewhat equivocal). The majority of research conducted to date suggests that contingent punishment is frequently not related to individual subordinate performance (cf. Sims, 1980); and in those instances in which it has been shown to be related, the relationship is often negative and the causal direction is reversed (cf. Greene, 1976a; Szilagyi, 1980). That is, the evidence suggests that it is decreases in employee performance that cause increases in the leader's use of contingent punishment and not vice versa. The results of the present study, however, do suggest that contingent punishment behavior administered by the leader may have significant positive effects on group productivity. There are several possible reasons for this finding. First, we might speculate that leaders who use contingent punishment convey to the individual being punished as well as to the other group members, that their expectations were not met. This may lead to increased goal setting at either the individual or group level, both of which have been shown to influence the productivity of workers (cf. Locke, Cartledge, & Knerr, 1970; Zander, 1971). Second, we would expect that leaders who administer CP are perceived by most group members to be administering punishment to those who deserve it. Under these circumstances, the group members themselves may also encourage the poorly performing group co-worker to straighten up, or the group may take other forms of corrective action. Related to this is the fact that several behavioral scientists (Hamner & Organ, 1977; Scott & Podsakoff, 1982; Skinner, 1953; Solomon, 1964) have noted that the administration of punishment is often an emotional experience, not only for those being punished but also for the one administering the punishment as well. If group members find that when a leader punishes a poorly performing group member it decreases the likelihood that the leader will administer rewards to other group members for some time because the leader is too upset, the group may bring pressure to bear on the employee to improve performance. Finally, leaders who employ contingent punishment behavior not only identify what they consider dysfunctional or unproductive behavior for the individual being punished, but for other group members as well. In so doing, the leaders may clarify their expectations for all group members.

The results of this study with respect to noncontingent rewards also proved to be quite intriguing. For, while the relationship between NCR and the three group criterion variables measured in this study were nonsignificant before accounting for common method variance, all of these relationships were found to be significantly negative when same-source variance was removed. This finding contrasts with the generally positive relationships found between leader contingent reward behavior and these same criterion variables; it also suggests that it is not rewards alone which determine the relationships between the leader behaviors measured in this study and group processes, but it it how the rewards are administered that is important. This finding also suggests that, in general, the common method variance factor measured in this study served as a suppressor of the negative

relationships between NCR and group cohesiveness, drive, and productivity.

Few significant relationships were found between leader noncontingent punishment behavior and the group criterion variables measured in this study when common method variance was partialled out. The one exception, the negative relationship between NCP and group drive, suggests that leaders who administer noncontingent punishment decrease the group's motivation to perform. This is consistent with the findings of research on individual behavior which demonstrates that uncontrollable aversive events decrease an individual's effort and often induce a feeling of helplessness (Seligman, 1975).

Taken as a whole, therefore, the results of our study indicate that leaders who administer evaluative rewards and punishments contingently will have a more functional effect not only on subordinate performance and satisfaction (cf. Hunt & Schuler, 1976; Podsakoff, 1982; Podsakoff, Todor, & Skov, 1982; Podsakoff, Todor, Grover, & Huber, 1984; Sims & Szilagyi, 1975) but also on group outcomes as well. This suggests that leaders will be more effective to the extent that they identify those classes of behavior which prove functional (or dysfunctional) to the organization as a whole and provide evaluative rewards (or punishments) for them accordingly. . . .

Of course, given the fact that the relationships reported in our study are relatively conservative (and cross-sectional in nature), additional research utilizing longitudinal and experimental designs is going to be necessary before unequivocal evidence regarding the relationships between leader reward and punishment behaviors and group processes can be obtained. Nevertheless, we do feel the results of our study are of considerable interest and do indicate a need to focus more attention on the effects that evaluative rewards administered on an individualistic basis by leaders have on group processes and productivity.

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