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Comparison of Dependence and Punitive Forms of Power

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Keywords
tactical action, conflict, power, punitive capability, dependence

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Abstract

This paper deals with the impact of power on tactical action in conflict. The theory and research is organized around two conceptual distinctions: one between power based on dependence versus punitive capability, and the other between relative power (i.e., power difference) and "total power" in a relationship (i.e., across actors). The paper will argue that these distinctions are important on both theoretical and empirical grounds. Theoretically, they are important to explicate the connection between conceptions of power that stress the coercive foundation of power (Bierstedt 1950; Tedeschi, Schlenker & Bonoma 1973) and those that treat power as dependence (Bacharach & Lawler 1981; Cook & Emerson 1984; Cook et al. 1981; Emerson 1962, 1972a, 1972b; Molm 1985), as well as to understand the relation of power to tactical action. Empirically, these distinctions are important to the degree that different tactics available to actors are a function of disparate facets of the power relationship.

This paper tests several propositions specifying the impact of dependence and punitive capability on concession and coercive tactics in bargaining. Power is defined as a potential to influence which can take the form of either dependence or punitive (i.e., coercive) capability (Bacha- rach & Lawler 1980,1981,1986; Bierstedt 1950; Emerson 1962,1972a, 1972b; Kipnis 1974; Lawler & Bacharach 1986; Molm 1985; Tedeschi, Schlenker & Bonoma 1973; Wilier and Anderson 1981). Relative power refers to the difference in either dependence or punitive capability between two or more actors; while "total power" refers to the amount of power potential available to actors in a relationship (i.e., the sum of the power capability across actors in the relation).[1] The contrast of relative and total power can apply to either the dependence or punitive foundation of power, and the question is: Are the effects of relative and total power similar for both dependence and punitive foundations of power?

Tactical action refers to behavior that is intended to influence another actor (Bacharach & Lawler 1980; Kipnis 1974; Michener & Suchner 1972). Such action typically falls into one of two categories: action that promises to or actually provides some benefit to the other (e.g., concession tactics in bargaining) or action that threatens to or actually levies some cost on the other (e.g., damage or punishment tactics). This paper will utilize an artificial bargaining context to test theories that predict concession and damage tactics from the power relationship.

The theory and research in this paper is grounded in criticisms of previous work on power that fall into two classes: problems of *theory* and problems of *emphasis*. The theoretical problems stem from the neglect of some important distinctions. First of all, while both dependence and punitive capability are foundations of power, this does not necessarily suggest that theoretical principles or research findings which apply to one of these forms of power apply to the other. The distinction is essentially a difference between opportunity costs and retaliation

costs. Power-dependence theory stipulates that the power of A over B is a function of the value B places on the outcomes received in the relationship with A and level of these (or substitutable) outcomes that can be gotten from other actors (Emerson 1962, 1972a, 1972b). The level of alternatives (weighted by the value) constitute the *opportunity costs* of staying in the relationship with A (Bacharach & Lawler 1980, 1981). On the other hand, the punitive form of power is based on the "retaliation" costs that one actor can levy on the other, that is, the ability to administer additional costs beyond simply withdrawing some existing benefit supplied to the other. On both theoretical and empirical grounds, there are good reasons for distinguishing opportunity from retaliation costs and, hence, the relevant forms of power.

As an example, assume that two actors in a bargaining relation have both (a) alternative actors from whom they might negotiate some level of payoff and (b) the capacity to add costs beyond those involved in breaking off negotiations. These additional costs could be the costs of a strike to management, of military action or economic sanctions levied by one nation against another, etc. The power they have over each other is not just based on the difference between their alternative outcome sources (weighted by the value) but also on how much retaliation each can or will suffer if they do not make sufficient concessions in the bargaining or decide to opt for the alternative. Opting for the alternative would have not only opportunity costs (i.e., what can be gotten by staying in the negotiations) but also retaliation costs based on the punishment that can be levied in response to bargaining tough or breaking off negotiations and going elsewhere.

It is quite possible to subsume and fuse these costs under a power dependence framework. Emerson (1972) does this as do Bacharach and Lawler (1980) in their reformulation of Emerson. However, while it is dear that punitive forms of power can be subsumed under power dependence, it is not clear whether this is an advisable .theoretical stance. If the same

prindples do not apply to dependence and punitive forms of power or the distinction has important empirical consequences, power dependence theory will not provide information or explanations that are applicable to contexts where the principal form of power available to actors is punitive in nature.

The second theoretical problem is the failure of most work on power to consider the distinction between relative power and total power (for a few exceptions, see Kanter 1977; Tannenbaum 1968). Much of the literature on power and tactics confounds relative and total power (c.f. Homstein 1965; Lawler 1986; Rubin & Brown 1975) such that the effects of power can be attributed to either or both the power difference or the total power in the social relationship. To illustrate this, assume that the magnitude of political power for each actor (whether based on dependence or punitive capability) can range from 1 unit to 100 units, and that the power difference between the actors is 30. A power difference of 30 could mean that one actor has 40 units of power (i.e., based on dependence or punitive capability) while the other has 10 or that one actor has 90 while the other has 60, or 50 vs. 20, etc. The relative power is constant across these two situations, but the total power in the relationship differs (i.e., "50" vs. "150"). Conversely, relative power could vary across situations with total power remaining constant (e.g., 30 vs. 20, 45 vs. 5, etc.). The point is that relative and total power can vary independently of one another (see Bacharach & Lawler 1981).

What we have termed "total power," Emerson (1972) has called an indicator of "cohesion." The idea of cohesion does tend to grasp the import of mutual dependence—greater mutual dependence (i.e., total power on the dependence dimension) should increase the conciliatory behavior in the relationship. Furthermore, Bacharach and Lawler (1981) have shown that higher levels of total power on the dependence dimension produce softer concession tactics

by actors in dyadic bargaining or "cohesion effects" in Emerson's terms. The problem is that it is not clear whether total power on the punitive dimension operates in the same way as total power on the dependence dimension. Some research implies that greater (mutual) punitive capability increases punitive action (Deutsch 1973), while other work has suggested that greater levels of such capability decrease punitive action (Bacharach & Lawler 1981; Lawler, Ford & Ble- gen 1986). The former have been termed "conflict spiral" effects and the latter have been called "deterrence," and theories of both bilateral (mutual) deterrence and conflict spiral have been developed to deal with these opposing effects of punitive capability on the use of power (Bacharach & Lawler 1981; Lawler 1986). This research will use the deterrence formulation to compare the effects of dependence and punitive based power on tactical action in a bargaining context.

The second class of problems with previous work on power are matters of emphasis. We have three specific criticisms: (1) micro work on tactical action has emphasized the question of how effective particular tactics are at influencing another actor (see reviews in Pruitt 1981; Rubin & Brown 1975; Tedeschi, Schlenker & Bonoma 1973) and neglected the question of how the power relationship affects the choice of tactic (see Bacharach & Lawler 1981; Kipnis 1974; Lawler & Bacharach 1976; Molm 1985 for exceptions); (2) in work that links power to tactics, the emphasis is on power dependence OR punitive capabilities and threat/damage tactics OR concession/reward tactics. Research on concession tactics seldom incorporates threat and damage tactics, and research on damage tactics seldom incorporates concession tactics (e.g., Pruitt 1981); (3) and related, the form of tactic appears to dictate the form of power (or vice versa). If the focus is on threats, then the punitive or coercive capability is the form of power of interest; if concession behavior is the focus, then dependence is the form of power included in

the theoretical and empirical analysis. The implicit and untested hypothesis implied in the limited emphases of prior work is as follows:

> *Hypothesis 1*: The dependence form of power will affect concession, but not damage, tactics of actors; while, punitive capability will affect damage, but not concession, tactics.

This is the initial hypothesis around which the bilateral deterrence ones will be organized. Assuming the above "match" between forms of power and types of tactics, the deterrence formulation will suggest similar effects for dependence and punitive power on concession and damage tactics, respectively.

Bilateral Deterrence Hypotheses

The deterrence formulation makes predictions for "total power" consistent with Emerson's cohesion notion. The primary deterrence proposition is that greater levels of total power lead to lower rates of power usage across actors in the relationship (Bacharach & Lawler 1981; Lawler 1986). The rationale for this is that an actor's rate of using power is a function of (a) the actor's fear of retaliation (Bacharach & Lawler 1981) and (b) the expectation of attack from the opponent (Lawler 1986; Schelling 1960). The opponent's capability has a positive impact on the fear of retaliation and the actor's own capability has a negative impact on the expectation of attack by the opponent (see Lawler 1986 for a more extensive explanation). Thus, given a constant degree of power difference, the higher the power of each actor in the

relationship, the greater each actor's fear of retaliation if he or she uses power and the lower their expectation that die other will initiate power use. Higher fear of retaliation combined with lower expectations of power use by the opponent will, in turn, lead each actor to use power less often. Applying the deterrence formulation to dependence-based as well as punitive-based power (in the context of Hypothesis 1) this study will test two "total power" hypotheses:[2]

> *Hypothesis 2*: With relative power held constant, higher levels of total (i.e., mutual) dependence will lead to higher levels of concession magnitude, that is, softer concession tactics (across actors).

> *Hypothesis 3*: With relative power (i.e., power difference) held constant, higher levels of total punitive capability will lead to lower rates of using threat and damage tactics (across actors).

It should be noted that while the deterrence formulation is clearly designed for punitive power, it raises the question of whether dependence will affect punitive tactics in the same way as punitive capability. Similarly, punitive power could affect concession behavior in the same way as dependence. To the degree that such common effects do not occur, the distinction between dependence and punitive forms of power is important empirically.

Bilateral deterrence theory also contains propositions on the effects of equal vs. unequal power. Once again, these were designed for understanding the punitive form of power (see Bacharach & Lawler 1981) but can be extended to differences with regard to power dependence. The theory stipulates that unequal power will undermine the processes that create and maintain

deterrence, thereby, increasing power use *by both the higher- and lower-power actor*. The high-power actor will be more inclined to exploit power because the only real obstacle to this—retaliation—appears less likely given B's lower power. In other words, power use by the advantaged actor will be a function primarily of that actor's own fear of retaliation. However, the low-power actor will also be more likely to use power. While the low-power actor's fear of retaliation is greater, that actor will use punitive tactics in order to demonstrate that he or she cannot be intimidated or to communicate to the opponent that an attack will involve some retaliation costs. That is, power use by the disadvantaged actor will be a function primarily of that actor's expectation of attack. Under unequal power, the low- and high-power actor are assumed to accord different weight to the fear of retaliation and expectation of attack, and, thus, the following hypotheses are suggested:

Hypothesis 4: With total power constant, unequal dependence will engender lower levels of concession magnitude (across actors) than equal dependence.

Hypothesis 5: With total power constant, unequal punitive capability will produce higher rates of threat and damage tactics (across actors) than equal punitive capability.

Method

Design and Subjects

A $2 \times 2 \times 2 \times 2$ factorial design manipulated total dependence (low vs. high), relative dependence (equal vs. unequal), total punitive capability (low vs. high), and relative punitive capability (equal vs. unequal). One hundred and twenty-eight dyads (same-sex) were randomly assigned to one of the 16 experimental conditions (8 dyads per cell—4 female and 4 male). Dyads consisted of "real" subjects who actually bargained with each other, and there was no deception in the study.

Procedures

Subjects were scheduled in groups of 6 to 10. After they arrived, the experimenter assigned subjects to one of two rooms. Subjects took a seat in separate cubicles within one of these rooms and read written instructions. The instructions indicated that to maintain anonymity, they would be paired at random with one of the persons in the other room. One of them would represent a group called Alpha, while the other would represent a group termed Beta.

The experimental situation was essentially "context free," meaning that we did not provide concrete roles, for example, as labor negotiators, representatives of a nation, etc. In addition, the "issue" being negotiated was an abstract continuum with 29 agreement levels identified by whole numbers between 1 and 29, rather than the price of product, wage rates, or the like. Context-free procedures were designed to minimize the degree that subjects would act

in terms of some stereotypical image they have of particular issues or particular bargaining settings.

The instructions indicated that the two groups—Alpha and Beta— had engaged in preliminary discussions and that Alpha had made an offer of "1" and Beta had made an offer of "29" in these discussions. The task of the subject was to negotiate in their group's interest and, specifically, maximize their own gain regardless of what the opponent received. They understood that their pay for the experiment was contingent on the agreement level arrived at in the negotiations, and instructions contained a profit list which identified the actor's own profit at each of the 29 agreements levels. Alpha received greater profit the higher the agreement level, and Beta received greater profit the lower the agreement level. The profit list showed a linear progression in profit (points) from one end of the continuum to the other ("1" for Beta, "29" for Alpha). Subjects were unaware of the opponent's profit at each agreement level and points rather than real money were the payoff units on the profit list, based on the assumption that bargainers seldom have complete information even on their own profits. The instructions informed subjects that the experimenter would use a chart to transform the points into money at the end of the experiment.

Subjects learned from the instructions that the bargaining would take place through written offers and messages across a series of rounds. On each round, bargainers would send one written offer (i.e., a number between 1 and 29) and have the opportunity to send either a warning or fine message by circling a "W" (for warning) or "F" (for a fine). Consider the offers first. Alpha was chosen by chance to send the first offer. When making an offer, the bargainer had three options: (a) stick with and repeat their last offer, (b) accept the last offer of the opponent, or (c) make a concession. The only restriction was that bargainers could not retract earlier

concessions. Turning to the warning/fine options, on each round the bargainer had the option to send a warning or fine (not both) by circling a "W" or "F" next to the offer line for that round. A warning was a threat to use a fine in the future if the other does not make more concessions in the bargaining; a fine message reduced the point outcomes of the opponent. No more than 5 fines could be used in the bargaining and each of the fines reduced the other's outcome by a fixed percent set by the experimental manipulation (discussed below).

The bargaining continued until an agreement was reached or until the end of the 15th round. If no agreement was reached, actors received no points from the bargaining but were able to reach an agreement with a hypothetical other. This was termed the "chance alternative" and it involved a drawing to determine the agreement level which the subjects would get from an alternative opponent and on which they would be paid. The chance alternative was used to manipulate dependence as the probability of getting a good agreement from another (hypothetical in this case) actor.

Experimental Manipulations

The maximum percent reduction in the other's outcomes served as the manipulation of each actor's punitive capability, while the probability of getting a good agreement from the hypothetical alternative actor manipulated the dependence relationship. For both punitive capability and dependence, the total power (low vs. high) and relative power (equal vs. unequal) were manipulated as follows:

Punitive Capability

Each dyad was assigned to one of four punitive capability conditions: 25%- 25% (equal with low total power); 75%-75% (equal with high total power); 40%-10% (unequal with low total power); or 90%-60% (unequal with high total power). Notice that the total power (sum of each actor's power) is constant across the equal and unequal power conditions and also that the power difference is constant across conditions of total power. This is designed to avoid the confounding of relative and total power often found in previous work.

Dependence

Each dyad was also simultaneously assigned to one of four conditions of dependence, operationalized as the probability of getting a favorable agreement from the "change alternative"; that is, an agreement within a favorable range on the issue continuum from another actor. The probability conditions utilized the same numbers as those used to manipulate punitive capability: 75%-75% (equal with low total power); 25%-25% (equal with high total power); 90%-60% (unequal with low total power); or 40%- 10% (unequal with high total power). The confounding of relative and total power is avoided in a similar manner here.

Dependent Variables

There are three primary dependent variables: the frequency of fine behavior (damage tactics) across both actors, the frequency of warnings (i.e., threat tactics) and the magnitude of concessions made throughout the bargaining. Given that the number of rounds can vary across

dyads, the fine and warning behavior will be treated as a proportion per round. Concession magnitude will be measured as the amount of difference between the endpoint of the issue continuum (1 for Beta, 29 for Alpha) and the final offers of each bargainer. All variables are dealt with at the dyad level, but the analysis is conducted using role (Alpha vs. Beta) as a within-sub- jects factor to control for role and determine whether role effects qualify the major findings of the research.

Results

The results will focus on three forms of tactical action available to actors in the experiment: fine behavior, warning behavior, and concession behavior.

Fine Behavior

Table 1 contains means for the fines as a proportion per round and the absolute frequencies of fines (in parentheses) by experimental condition. An analysis of variance on the proportion scores[3] with subject (Alpha vs. Beta) as a within subjects factor revealed main effects for three of the manipulated variables: relative dependence, $F(l, 112) = 5.24, p < .02$; relative punitive capability, $F(l, 112) = 22.56, p < .001$; and total punitive capability, $F(l, 112) = 5.87, p < .02$. With regard to total power, the results are consistent with the bilateral deterrence hypotheses on punitive power but not with the extension to dependence. Greater total punitive capability reduced the frequency of damage tactics in the relationship, but the impact of total dependence on fine use was not statistically significant (F<1). With regard to relative power

(equal vs. unequal), the results for both punitive capability and dependence are consistent with bilateral-deterrence notions. Damage tactics (fines) were more frequent under conditions of unequal, compared to equal, punitive power and unequal, compared to equal dependence.

Bilateral-deterrence theory predicts that in an unequal-power relationship *both* lower- and higher-power actors will use power more, that is, each should use fines more than they would in an equal-power relationship. To assess this, the mean fine use for low- and high-power actors in unequal dyads was computed and compared with each other and with actors in equal-power relationships. For punitive power, low- and high- power actors had nearly identical rates of fine use ($M's = 3.16$ and 3.20 respectively, $f < 1$) and these rates were larger than those of actors in an equal relationship ($M's = 1.63$ and 1.72 for the two actors). In the case of dependence, the same pattern of results occurred—lower- and higher- power actors had comparable rates of fine use ($M's = 2.70$ and 2.78, respectively, $f < 1$) which were, in turn, higher than actors in an equal-power relationship ($M's = 2.09$ and 2.12). These results support bilateral deterrence. Furthermore, it is clear that the impact of differences in punitive capability and dependence cannot be attributed to different rates of power use by the low- vs. high-power actors in the unequal-power relationship.

Insert Table 1 Here

The only significant interaction is a three-way effect between relative dependence, total dependence, and relative punitive capability, $F(1,112) = 6.18, p < .01$. Tuke/s HSD indicates that none of the differences reach statistical significance, (at the $.05$ level) and the pattern of the interaction does not suggest any major qualifications of the foregoing main effects. Overall, the

results for punitive capability consistently support the deterrence formulation, while those for dependence offer partial support for the extension of deterrence principles to the dependence form of power.

Warning Behavior

Table 2 contains the mean threats per round as well as the absolute frequency of threats by experimental condition. A five-way analysis of variance identical to that for fine behavior revealed only two marginally significant results: a weak main effect for relative dependence, $F(l, 112) = 2.76, p < .10$, and a marginal interaction effect between relative dependence and relative punitive capability, $F(l, 112) = 3.61, p < .06$. The main effect reveals a trend in support of deterrence theory (i.e., more threats in the unequal than equal condition) but this is qualified by the marginal two-way interaction. The two-way interaction shows a clear pattern indicating that threat usage was lowest when actors were equal on both dependence and punitive capability ($M = .17$ vs. $.26$ for each of the other three conditions). However, the major implication of the results is that threat tactics do not respond to the same processes or conditions as damage tactics. This is consistent with some research in the trucking-game tradition and more recent research as well (Bacharach & Lawler 1981; Lawler, Ford & Blegen 1986).

Concession Behavior

Table 3 contains the data on concession magnitude, number of rounds, and proportion of agreements by experimental condition. For the most critical measure, concession magnitude, the

five-way analysis of variance revealed (a) a main effect for total dependence, $F(l, 112) = 5.30, p < .02$, (b) a main effect for relative punitive capability, $F(l, 112) = 11.13, p < .001$, and (c) a three-way interaction (relative dependence × total dependence × relative punitive capability), $F(l, 112) = 6.44, p < .01$. The two main effects support deterrence predictions—greater conciliation (i.e., concession magnitude across actors) with high total dependence than low total dependence, and also greater conciliation with equal than with unequal punitive capability. The pattern of the three-way interaction is that the greatest level of concession magnitude occurred when bargainers were equal on both dependence and punitive dimensions while also having high total dependence.

Insert Table 2 Here

Turning to the number of rounds and rate of agreement, few significant effects emerge. Analysis of variance reveals only one significant effect for the number of rounds, a four-way interaction that just makes the .05 level, $F(l, 112) = 4.08, p < .05$. The pattern implies that the fewest rounds occurred when bargainers had equal power on both dependence and punitive dimensions, high total (i.e., mutual) dependence, and low total power on the punitive dimension. Turning to the data on whether agreement occurred, the same pattern is observed—conflict resolution was most likely under conditions of equal power on both dependence and punitive capability combined with high mutual (total) dependence. A log- linear analysis of the agreement data indicates that this three-way interaction reaches statistical significance ($X^2(1) = 5.21, p < .05$). The only other significant effect is a total dependence main effect showing higher rates of agreement under high as opposed to low, mutual dependence, $X^2(1) = 4.55, p < .05$.

Given the problem of replicating complex interactions, it is dangerous to attribute importance to three- or four-way interactions that are not clearly derived from a theory. However, the interactions reported in this section cohere in a noteworthy way. Given the particular combination of conditions that recur in these interactions (i.e., equal power with regard to both forms of power plus high mutual dependence), the data offer corroboration to some of the general ideas underlying the bilateral-deterrence formulation (Bacharach & Lawler 1981; Lawler 1986)—equal power conditions and higher levels of mutual power capability tend to generate less conflictual (or more conciliatory) behavior.

Insert Table 3 Here

Gender and Role Analyses

There are few gender or role effects by power on the three major dependent variables, and those that occur tend to be weak. A main effect for gender on warnings indicates a tendency for females to use more threats than males, $F(l, 112) = 5.30, p < .05$; a three-way interaction (total dependence × total punitive capability × gender) suggests that under high total (mutual) power on both dependence and punitive power females were less likely than males to use fines, $F = 4.49, p < .05$; the one and only role (Alpha vs. Beta) by power effect from all the analyses is a complex fourway interaction (relative dependence × total dependence × total punitive capability × role) for warnings, $F = 4.80, p < .05$. The replicability and interprabability of these effects is questionable. The key point is that they do not significantly qualify the major results.

Discussion

The research has two general implications. First, the theoretical distinctions made in the introduction—dependence vs. punitive capability and relative vs. total power—have important empirical consequences. These forms or dimensions of power show somewhat divergent effects on two classes of bargaining behavior: concession and damage tactics. Second, the significant results found in the study support bilateral-deterrence theory. The support for bilateral deterrence applies to the propositions on both "total power" and relative power (i.e., power differences) on the punitive dimension, and, with some qualification, it extends to the dependence dimension. These implications are elaborated below.

The broadest (and also most tenuous) hypothesis of the study was that the dependence form of power would determine concession behavior while the punitive form of power would determine punitive behavior. This hypothesis was treated as implicit in the exclusive focus of prior literature on either dependence/concession behavior or punitive capability/threats, that is, the tactic of primary concern leads to a consideration of one form of power but not the other (e.g., Bacharach & Lawler 1981; Komorita 1977; Pruitt 1981; Rubin & Brown 1975). Consider the differential causes of concessions and damage tactics in light of this hypothesis. Concession behavior is a function of total power on the dependence dimension as well as relative power (equal vs. unequal) on the punitive dimension; whereas, damage tactics are a function of relative and total power on the punitive dimension as well as relative power on the dependence dimension. The initial hypothesis on the exclusive effects of dependence vs. punitive capability

is not supported. The question, however, is how do we make sense of the different patterns for dependence and punitive capability?

The answer appears to lie in the distinction between relative and total power. There is actually complete support for the initial hypothesis in the case of the total power dimensions: total power on the dependence dimension (i.e., mutual dependence) affects concession behavior but not punitive behavior; and, similarly, total power on the punitive dimension (i.e., mutual punitive capability) affects punitive behavior (i.e., damage tactics) but not concession behavior. The negative evidence on the hypothesis is due to the fact that a power difference on the dependence dimension affects punitive behavior, while a power difference on the punitive dimension affects concession behavior. The implication is that if there is unequal power on either dimension of power (dependence or punitive capability), the low- and high-power actors will be motivated to use that differential capability in both decisions on concession and punitive tactics. In any case, the different effects of power dependence and punitive power document the empirical importance of this distinction.

Virtually all of the results can be understood in the context of the bilateral deterrence formulation of Bacharach and Lawler (1981) and Lawler (1986). The support is strongest with regard to the effects of punitive capability. As predicted, greater total power (i.e., punitive capability) in the relationship decreases the use of damage tactics, while unequal power produces higher rates of such action. The explanation offered by the theory is that an increase in total power will enhance each actor's fear of the other's retaliation while also reducing the expectation of attack from the other. For a given actor, it is the other's punitive capability that creates the fear of retaliation and one's own punitive capability that underlies the degree that the actor expects the other to engage in damaging action (Bacharach & Lawler 1981; Lawler 1986).

The effects of relative power also offer substantial support to the reformulated theory (Lawler 1986), which argues that unequal power will actually increase each actor's use of damage tactics. Higher-power actors will fear retaliation less and be more inclined to use the power capability, while the lower-power actors, expecting such action by the higher-power person, will be more inclined to use damage tactics as a means of communicating resolve and a desire to avoid being intimidated (Lawler 1986). While these effects on both actors' use of damage tactics are based on "idealized" conditions (e.g., bilateral power), the critical point of the theory is that unequal power will not simply increase tire higher-power actor's use of power and reduce the lower-power's use to a proportional degree, a notion very often found in the literature on power and tactics (Rubin & Brown 1975). The result of such counterbalanced effects would be no effect on the overall rate of damage tactics in the relationship. Bilateral deterrence theory clearly rejects this view, and so do the results from this experiment.

Finally, it appears that principles from bilateral deterrence theory can be extended to dependence-based power. Total dependence has a positive impact on concession magnitude across actors, and unequal dependence reveals a deterrence effect on the use of damage tactics. The results for dependence are not as consistent as those for punitive capability simply because while all of the effects that do occur are in support of deterrence theory, some of the predicted effects (e.g., effect of relative dependence on concession magnitude) do not occur. Nevertheless, it is clear that deterrence theory, though designed primarily for the analysis of punitive capabilities, contains principles that apply to dependence-based power. Furthermore, while this study suggests that the theory of bilateral deterrence may have broader applicability than originally intended, it suggests that power-dependence theory may not be as general a framework as originally intended. At minimum, this paper demonstrates the need for power dependence

theory to come to grips with punitive forms of power and suggests that the theory of bilateral deterrence offers a promising approach for linking power capability and power use.

To conclude, this paper argues that work on power has overlooked some theoretically and empirically important distinctions—dependence vs. punitive power and relative vs. total power. The contrast of dependence and punitive power is essentially a contrast of opportunity and retaliation costs (see also Bacharach & Lawler 1981). The distinction between relative and total power is essentially a distinction between the distributive and integrative faces of power (see Lawler & Bacharach 1986). This paper adopted a tactical approach to conflict and showed that these disparate dimensions or forms of power have different effects on tactical action in bargaining (e.g., concession and damage tactics). The effects are consistent with the predictions drawn from the theory of bilateral deterrence.

Notes

1. Total power is the foundation for what Emerson (1972) terms, “cohesion,” and it introduces a non-zero sum feature into a power analysis (see Bacharach & Lawler 1981, pp. 65- 68), which power-dependence theorists have generally failed to develop or capitalize on (see Molm 1985 for an exception). Although total power is constant or fixed in a specific relationship at a given point in time, it varies across relationships and can increase or decrease over time within the same relationship. (For a theoretical analysis of patterns over time, see Lawler & Bacharach 1986.)
2. A more detailed and explicit presentation of the assumptions and scope conditions of the theory can be found in Lawler (1986).
3. Results for the absolute frequency of fines are virtually identical to those for the proportion of rounds on which fines occurred. Also, the analysis of the proportions was rerun using arcsine-transformed scores, and the results were identical.

Table 1

Table 1. PROPORTION OF ROUNDS ON WHICH FINES WERE ADMINISTERED BY EXPERIMENTAL CONDITIONS*

	Dependence			
	Equal		Unequal	
Punitive Capabilities	Low Total	High Total	Low Total	High Total
Equal				
Low total	.12 (1.88)	.06 (.94)	.16 (1.94	.19 (2.81)
High total	.08 (1.25)	.02 (.38)	.10 (1.44)	.18 (2.75)
Unequal				
Low total	.19 (2.81)	.29 (4.31)	.26 (3.94)	.25 (3.50)
High total	.18 (2.69)	.18 (2.62)	.22 (3.38)	.15 (2.19)

*Absolute frequencies in parentheses.

Table 2

Table 2. PROPORTION OF ROUNDS ON WHICH WARNINGS WERE ADMINISTERED BY EXPERIMENTAL CONDITION*

	Dependence			
	Equal		Unequal	
Punitive Capabilities	Low Total	High Total	Low Total	High Total
Equal				
Low total	.18 (2.69)	.10 (1.62)	.22 (3.06)	.30 (4.25)
High total	.24 (3.69)	.16 (2.31)	.28 (4.19)	.26 (3.75)
Unequal				
Low total	.28 (4.19)	.31 (4.62)	.25 (3.81)	.27 (3.81)
High total	.25 (3.69)	.21 (3.19)	.28 (4.19)	.22 (3.19)

*Absolute frequencies in parentheses.

Table 3

Table 3. CONCESSION MAGNITUDE, NUMBER OF ROUNDS, AND PERCENT AGREEMENT BY EXPERIMENTAL CONDITION

	Dependence			
	Equal		Unequal	
Punitive Capabilities	Low Total	High Total	Low Total	High Total
Equal				
Low total	C=11.12 R=15.0 A=13%	C=14.31 R=11.9 A=63%	C=12.38 R=13.9 A=38%	C=13.06 R=14.4 A=38%
High total	C=10.62 R=14.4 A=13%	C=13.62 R=14.9 A=63%	C=12.31 R=14.9 A=50%	C=12.31 R=14.5 A=25%
Unequal				
Low total	C=10.69 R=15.0 A= 0%	C= 8.62 R=15.0 A=13%	C= 9.88 R=15.0 A=13%	C=11.56 R=13.6 A=50%
High total	C=10.94 R=14.8 A=25%	C=11.8 R=15.0 A=25%	C= 9.88 R=14.5 A=25%	C=12.25 R=13.9 A=50%

C=concession magnitude.
R=number of rounds.
A=percent of dyads reaching agreement.

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