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The authors employ a simulated market channel to investigate two properties of interdependence—magnitude and relative asymmetry. Increasing magnitudes of joint dependence are associated with more frequent use of noncoercive strategies, less frequent use of coercive strategies, lower residual conflict, and more favorable evaluations of partner performance. These results support the relational exchange paradigm. Findings for relative asymmetry were not anticipated but are informative. First, an increasing power advantage did not result in the predicted greater use of threats and punishments, although demands and normative statements were more prevalent. Second, one side of the dyad decreased its use of rewards and the other increased its use of rewards, promises, and information persuasion. As predicted, an increasing power advantage (lower relative dependence) is associated with less favorable performance evaluations of exchange partners and less residual conflict.

Exchange Interdependence and Interfirm Interaction: Research in a Simulated Channel Setting

Dependence refers to a firm's need to maintain an exchange relationship to achieve desired goals (Frazier 1983) and is considered the obverse of power (Emerson 1962). In exchange, both participants are, to some degree, dependent on each other. The structure of this reciprocal dependence characterizes their interdependence and provides important implications for exchange interaction. As characterized by Emerson (1962, p. 34):

> Reciprocal power provides the basis for studying three features of power relations: first, a power advantage can be defined as Pab [i.e., Power of A over B], minus Pba which can be either positive or negative (a power disadvantage); second, the cohesion of a relationship can be defined as the average of Dab [i.e., Dependence of A on B] and Dba...; and finally, it opens the door to the study of balancing operations as structural changes in power-dependence relations which tend to reduce power advantage.

Many researchers (i.e., Dwyer, Schurr, and Oh 1987; Mohr and Nevin 1990) have observed that the structure of

reciprocal dependence is important to the understanding of channel interactions. We hypothesize that this structure affects each partner's disposition toward the other, including (1) exchange behaviors and communications, (2) interpretations of events and outcomes, and (3) residual perceptions and feelings. If an objective of the firm is to manage its channel relationships, then it will be helpful to understand, anticipate, and possibly influence what is likely to transpire on each side of the dyad.

Few authors have addressed this subject in full. For the most part, their investigations have focused on the power of one party (i.e., Frazier, Gill, and Kale 1989; Frazier and Summers 1984; Gaski and Nevin 1985; Kale 1986). Some investigators have measured perceptions of relative dependence (i.e., Anderson, Lodish, and Weitz 1987; Anderson and Narus 1990; Anderson and Weitz 1989; Buchanan 1992), and others have statistically controlled for a partner's dependence or power (i.e., Frazier and Rody 1991; Frazier and Summers 1986). Although these studies are important, they do not separately measure the dependence or power of both parties, nor do they explore how they combine to affect other channel phenomena.

Our objective is to explore more fully the concept of interdependence. Following Emerson (1962), we offer a conceptualization incorporating the properties of *magnitude* (i.e., cohesion) and *relative asymmetry* (i.e., power advantage). Hypotheses relating these dimensions to interfirm influence, conflict, and performance are tested within a simu-

lated exchange environment. We conclude with a discussion of results and implications and suggestions for further research.

HYPOTHESES

Interdependence has been explored and defined conceptually within a variety of social science disciplines. Pfeffer and Salancik (1978, p. 40) state, "Interdependence exists whenever one actor does not entirely control all of the conditions necessary for the achievement of an action or for obtaining the outcome desired from the action." Similarly, Tedeschi, Schlenker, and Bonoma (1973, p. 234) observe that interdependence represents "the degree to which one actor's behaviors, acts or other goals are dependent for their occurrence or change on the behaviors, actions or goals of one or a set of other actors." In channels research, Cadotte and Stern (1979, p. 133) suggest that "interdependence means that two or more organizations must take each other into account if they are to accomplish their goals." Etgar and Valency (1983, p. 87) believe that "channel interdependence refers to the extent to which distributors and suppliers are committed to mutual exchanges."

These definitions suggest that firms become interdependent as a result of engaging in economic exchange to obtain resources outside their control but necessary to their goals. The degree of interdependence affects each party's motivation, behaviors, and perceptions in the exchange.

A limitation of this interpretation and prior conceptualizations is that they are necessarily incomplete. As such, they constrain our theoretical perspective on *how* interdependence affects exchange interaction. For example, to observe simply that two parties are dependent on each other overlooks their balance of power and the relative freedom of each to act in its own self-interest. Similarly, to observe that one party has a power advantage fails to recognize their joint dependence and its constraints. We propose that interdependence be further defined to include the structure of dependence existing within an exchange relationship. This structure can be characterized by two dimensions—magnitude and relative asymmetry.

Magnitude of Interdependence

Magnitude is defined as the sum of the dependence in an exchange and embraces Emerson's (1962) notion of cohesion. Conceptually, magnitude characterizes the amount of "attention" concerning policies and issues given to a relationship by exchange partners (Mohr and Nevin 1990). Dwyer, Schurr, and Oh's (1987) four subprocesses of relationship development—awareness, exploration, expansion, and commitment—characterize increasing magnitudes of interdependence.

In a transactional sense, minor relationships (i.e., low magnitude) warrant neither the time, effort, nor opportunity cost for extensive interaction (Anderson and Weitz 1989). Often these relationships are seen as a series of discrete transactions with roles reduced to simply those of buyer and seller and the benefit of an exchange assessed on the basis of each transaction (Kaufmann and Stern 1992). Terms of exchange are explicitly specified for each transaction with incentives to cooperate countered by the desire for individu-

al gain and autonomy. Together, these characteristics complicate coordination of exchange activities.

In contrast, high-magnitude relationships depict involved or established exchange associations. In these relationships, joint dependence mitigates or, at minimum, reduces tensions arising from increased functional interdependence. Each party's possession of power, coupled with benefits obtained from the relationship, fosters an atmosphere of cooperation (Dwyer, Schurr, and Oh 1987). Implicit or explicit pledges of relational continuity (Anderson and Weitz 1989), joint planning (Frazier and Rody 1991), and solidarity (Macneil 1980)—hallmarks of these associations—contribute to bilateral and programmed interaction.

Interfirm influence. In low-magnitude relationships, interactions can be quite competitive, with participants engaging in tough bargaining and employing coercive forms of influence to obtain desired terms. Coercive influence strategies are defined as mechanisms for gaining target compliance that reference or mediate negative consequences for noncompliance. Given the lack of substantive dependence, the use of coercive strategies is less apt to result in costly repercussions, and therefore their greater frequency can be expected (Roering 1977). The frequency of noncoercive strategies, such as rewards and information exchange, is also likely to be lower. Noncoercive influence strategies are defined as mechanisms that reference or mediate positive consequences for compliance (cf., Hunt and Nevin 1974). These strategies are not without cost. Without a quid pro quo or the prospect of a long-term pay off, the cost of these strategies may exceed their benefits.

In high-magnitude relationships, noncoercive strategies will be favored over coercive forms of influence because of their less volatile nature (Raven and Kruglanski 1970). These strategies contribute to the relationship, strengthening each firm's identification with the other, and increasing agreement (French and Raven 1959). As Frazier and Rody (1991, p. 655) suggest, "The fact that most noncoercive strategies center on the 'inherent desirability' of performing certain actions ... lead[s] to greater conceptual agreement between firms." Over time, the use of noncoercive strategies results in each firm's programs, policies, and behaviors becoming more predictable and aimed at conducting the relationship in a coordinated rather than autonomous fashion (Stern and Reve 1980).

This perspective is supported indirectly by Gaski and Nevin (1985) and Anderson, Lodish, and Weitz (1987), who report cooperative and integrative behavior in contractual relationships possessing moderate to high joint dependence. Frazier and Rody's (1991) research in an industrial products channel indicates that noncoercive strategies increase and coercive strategies decrease as the power of manufacturers and distributors increases. Similarly, Boyle and colleagues (1992) find that the use of coercion diminishes as relationalism increases in an exchange.

We offer the following hypotheses:

H_1: A's use of noncoercive strategies toward B will be positively related to the magnitude of their interdependence.

H_2: A's use of coercive strategies toward B will be negatively related to the magnitude of their interdependence.

Conflict. Consideration of the relationship between magnitude and conflict suggests a "conflict paradox." At higher levels of joint dependence, potential conflict increases as opportunities for interference in each party's goal attainment increase (Cadotte and Stern 1979). Potential or latent conflict, however, need not lead to manifest and conflict aftermath. As exchange relationships evolve through their developmental stages and, presumably, higher levels of joint dependence, conflict may actually decrease.

In the early stages, the potential for conflict stems largely from differences in language and expectations and a lack of familiarity with each other's operating policies and procedures. Standards often lack clarity, with each party reacting tentatively toward the other. To evolve, however, and prior to making substantial commitments, fundamental issues (e.g., incompatible goals, unrealistic demands) must be resolved. When problems persist, termination of the exchange is likely.

Relationships grow to the extent that one or both parties adapt to their fundamental differences. Adaptive behaviors facilitate the convergence of perspectives and goals. Recognition of each other's dependence, and hence the power of the other, fosters cooperation, thereby enhancing benefits and future commitment. Together, these factors help lower perceived conflict. Of course, economic factors, execution errors, and other pressures occasionally strain any relationship. However, incentives and mechanisms for cooperatively resolving conflict are greater and more available in relationships of high magnitude than in those of low magnitude.

In summary, potential conflict increases as the magnitude of interdependence grows. However, incentives for cooperative interaction and normalization of the exchange relationship in high-magnitude associations temper manifest conflict in favor of adaptive problem resolution. Adaptive behavior leads to favorable conflict outcome and more positive feelings. This process repeats itself, resulting in diminished conflict potential and a reduction in overall conflict.

The focus in this research is on residual feelings of conflict (conflict aftermath) because they embody manifestations of the conflict process and portend the future of the relationship. To this point Kaufmann and Stern (1992, p. 142) observe, "The conceptual importance of the conflict aftermath stage is, therefore, the recognition of the affective carryover which extends beyond the ostensible termination of the conflict episode." Anderson and Weitz (1992) also observe that conflict has a strong carryover effect. We offer the following hypothesis:

H₃: Residual feelings of conflict by A toward B will be inversely related to the magnitude of their interdependence.

Observe that our research is further focused on the conflict experienced by an individual channel member. Although conflict is a shared phenomenon, our reasoning suggests that the perception of conflict, the tactics employed to resolve conflict, and the residual perceptions and feelings of conflict will have a major component unique to each channel member. As such, we examine conflict, not as a dyadic experience, but as a singular one.

Business performance. An exchange partner's role performance affects the management and structure of exchange (Kumar, Stern, and Achrol 1992). Previous research has emphasized financial performance, including sales, contribution margin, service level, profit, and market share (cf. Frazier, Gill, and Kale 1989; Frazier and Summers 1986; Gaski and Nevin 1985). We examine broader dimensions of relationship performance, including the competence of a party's decisions, knowledge of markets and competition, and ability to work effectively with a partner. Each is important for understanding performance in the context of exchange.

The structure of dependence in exchange has an indirect effect on the evaluation of a partner's performance. Increasing magnitudes of interdependence result in mutual influence and negotiated compromise, which in turn are likely to result in the convergence of attitudes, values, and goals. Similarity on key business issues and a willingness to follow the course favored by the other should also manifest positive assessments. Decisions that reflect joint policy formulation and collective goals further contribute to this outcome. We offer the following hypothesis:

H₄: A's evaluation of the business performance of B will be positively related to the magnitude of their interdependence.

Relative Asymmetry of Interdependence

Relative asymmetry is defined as the comparative level of dependence in an exchange and parallels Emerson's (1962) "power advantage" notion. Operationally, it is the difference in the dependence levels, taken from the perspective of the focal organization. Assuming dependence to be the obverse of power, a positive value indicates a power advantage, and a negative value a disadvantage. The absolute size of this difference captures the party's relative power. Relative asymmetry may vary from dependence favoring the focal firm to balance or symmetry to dependence favoring the partner. A common condition is when both firms are dependent; in other words, each possesses power. Wholesale voluntaries, retail cooperatives, and strategic alliances are examples of formal relationships of this kind, and voluntary commitments between vendors and their industrial customers are examples of informal relationships. A buyer's or seller's market illustrates unbalanced relationships containing one highly dependent exchange party.

Interfirm influence. Under balanced dependence, the "usable" power of one party is held in check by the other's equal power (Thibaut and Kelley 1959, p. 107). A party's ability to make demands is countered by its partner's capacity to resist them. Incentives are also comparable. Analogous motivations from mutual commitment constrain opportunistic tendencies. Competitive bargaining is reduced (Pruitt 1981) in favor of cooperative interaction (Burgess and Huston 1983). As dependencies diverge, however, implications arise for exchange. Two points of view are held—opportunistic and benevolent.

The *opportunistic* perspective suggests that a dependence advantage will manifest exploitative tendencies. That is, the possession of more power (i.e., less dependence) will encourage action to gain a disproportionate share of resources from a less powerful partner (McAlister, Bazerman, and Fader 1986). There is less concern over the use of coercion, given a superior position and access to other partners. Wilemon (1972, p. 79) observes, "Where alternative channel participation opportunities are available..., [a party] may become quite rigid in his [or her] demands during negotiations

with another channel member." Williamson (1985) maintains that asymmetric exchanges resemble hierarchical relations containing centralized decision structures and unilateral governance. Domination, specifically coercion, is often a hallmark of these associations. On this point, Pfeffer and Salancik (1978) suggest that coercion may serve to institutionalize and legitimatize power. According to Wilkinson and Kipnis (1978), more powerful partners may actually feel justified in using coercion.

For a more dependent party, tolerance over coercion derives from the receipt of important resources (Frazier, Gill, and Kale 1989), a lack of alternatives, greater interest in sustaining a relationship (Anderson and Narus 1984), and lower status (Frazier and Rody 1991). Of course, the extent to which a less dependent party can make demands in a relationship is limited by the net value of the benefits received by the more dependent party. A dependent party may reject demands that reduce the net value of the relationship below that of alternative relationships (Buchanan 1992).

A more dependent party is less likely to use coercion and more inclined to use noncoercive strategies. Retaliation is likely when coercive strategies are employed (Frazier and Summers 1986). Moreover, dependent parties are not apt to possess the necessary resources or capabilities to achieve results through these strategies. Given few alternatives and a desire to obtain valued resources, noncoercive strategies are more probable (Buchanan 1992). These strategies build relationships, and because they add benefits and reduce the viability of alternatives, they have the advantage of increasing the dependence of a powerful partner and therefore balancing the power structure.

In channels research, studies by Dwyer and Walker (1981) and Roering (1977) and findings by Wilkinson and Kipnis (1978) suggest that asymmetric possession of power will be exploited through more frequent use of coercion. In India's tungsten carbide tool channel, more powerful suppliers were found to favor the use of coercion (Frazier, Gill, and Kale 1989). In franchising, Hunt and Nevin (1974, p. 187) report that powerful franchisers primarily employ coercive sources of power to achieve power over their franchisees. Similarly, Dant and Schul (1992) observe that powerful franchisers prefer coercive political solutions when franchisees' dependence is high. Conversely, problem-solving tactics are favored when franchisee dependence is low. Finally, Frazier and Rody's (1991) research in an industrial product's channel supports the view that a less powerful party will reduce its use of coercion. We offer the following hypotheses:

H_5: A's use of noncoercive strategies toward B will be negatively related to their asymmetry of interdependence.
H_6: A's use of coercive strategies toward B will be positively related to their asymmetry of interdependence.

These hypotheses do not imply that the incidence of coercive strategies will be greater than the incidence of noncoercive strategies as asymmetry increases. The comparison is made strictly within strategy type. Except in unusual circumstances, it is not likely that an exchange relationship could endure if coercive strategies exceeded noncoercive strategies. This conclusion is supported in our own results, in which we observed that the average incidence of reward

and promise tactics greatly exceeded the average incidence of punishment and threat tactics.

In contrast to the opportunistic view, the advantages of strong ties through dependence (Anderson and Weitz 1989, 1992; Buchanan 1992) and the positive role of power in providing effective coordination of exchange relationships (Frazier and Rody 1991; Frazier and Summers 1984, 1986) has been recognized. The *benevolent* perspective emphasizes cooperative exchange and its implications. In particular, the benefits of long-term dependence are thought to temper or override opportunistic tendencies, encourage cooperation, and enhance efficiency.

The use of coercion under these conditions is counterproductive. Coercion undermines a partner's ability to perform critical functions, can be detrimental to the establishment of cooperative norms, and changes the structure of dependence. The exercise of power through noncoercive means, in contrast, is thought to aid in the achievement of integration, adaptation, and goal attainment (Stern and Heskett 1969). Research by Frazier and Summers (1986), Frazier and Rody (1991), and Ganesan (1993) provides empirical evidence that suggests that a powerful party's use of coercion may be tempered in favor of alternative strategies in which long-term cooperation is critical. Following this perspective, we offer the following alternative hypotheses:

H_{5ALT}: A's use of noncoercive strategies toward B will be positively related to the asymmetry of their interdependence.
H_{6ALT}: A's use of coercive strategies toward B will be negatively related to the asymmetry of their interdependence.

In a comparative sense, the opportunistic perspective emphasizes associations in which long-term cooperation is either limited or considered less important. In contrast, when long-term cooperation is paramount, the repercussions of exploiting a dominant position are thought to be sufficient to hold opportunistic inclinations in check. Both of these conditions may exist in different exchange relationships.

Conflict. Relative asymmetry of dependence affects all stages of the conflict process. In terms of conflict potential, disparity in dependence affects compatibility of goals, role responsibilities, and perceptions of the environment. The amount of attention parties give to one another is also affected. Dependent parties, wanting to gain balance, are prone to be concerned and attendant to the needs of their powerful partners. The latter are less likely to feel the need to reciprocate and may in fact be tempted to exploit their advantage (Anderson and Narus 1990). Anderson and Weitz (1989) observe that asymmetric relationships are less stable, due to lower trust and confidence in the future. Together, these conditions may result in feelings of dissatisfaction and the perception that conflict exists by more dependent parties.

As asymmetry increases, relationships generally exhibit more manifest conflict and less cooperation (Dwyer, Schurr, and Oh 1987). More powerful parties generally get their way and therefore are not inclined to retain negative feelings. In contrast, their counterparts are liable to experience frustration and tension, given a less-than-satisfactory outcome to a conflict episode (e.g., one that does not favor their goals, values, and interests). We offer the following hypothesis:

H_7: Residual feelings of conflict experienced by A toward B will be inversely related to the asymmetry of their interdependence.

Business performance. The structure of dependence indirectly affects each party's evaluations of its partner's performance. Dependent parties tend to be viewed as less effective (Wilkinson and Kipnis 1978) and are often devalued by powerful partners (Kipnis 1976). Several factors contribute to this outcome. Resources provided by highly dependent partners offer limited benefits to less dependent parties and are more easily replaced. In addition, more powerful parties tend to attribute causality for a partner's actions to their own endeavors and influence, thus diminishing the worth of their partners' efforts or compliance. As Kipnis (1976, p. 177) points out, "The very act of compliance ... diminishes the worth of any product achieved by the target." Devaluation is likely to accompany lower performance assessment.

In contrast, less dependent (i.e., more powerful) parties tend to be highly valued and viewed as more effective. Anand and Stern (1985) observe that franchisees perceive powerful franchisers as more effective and responsible for their success. The authors speculate that "franchisees may simply view the franchiser (linked as it is to a major corporation and having considerable resources at its disposal) as better able to cope with marketing activities. They may therefore discount the franchiser's failures and embellish its successes" (p. 374). We offer the following hypothesis:

H_8: A's evaluation of the business performance of B will be inversely related to their asymmetry of interdependence.

METHOD

Access to exchange environments in dyadic form is important for studying exchange behavior (Achrol, Reve, and Stern 1983). Laboratory games, including behavioral simulations, allow researchers to create interdependent organizational units and study dyadic relationships under controlled conditions. Alternative scenarios involving channel structure, bargaining, and conflict have been investigated (cf. Dwyer and Walker 1981; Roering 1977; Stern, Sternthal, and Craig 1973).

Schlenker and Bonoma (1978) observe that gaming techniques are used in the behavioral sciences because they serve as a skeletal analogy of social phenomena. They are helpful in the developmental stage of theory or construct measurement because the researcher can observe the phenomenon of interest carefully. To be suitable for theory testing, the games and social phenomena of interest must share similar structural characteristics. Isomorphic requirements are that participants, as in life, be confronted with choices possessing uncertain and interdependent outcomes in settings in which neither the choices, outcomes, nor rules are perfectly clear (p. 12). Additional considerations should extend from particular concepts and theories of interest to the researcher. At a minimum, the game or simulation should provide a sufficiently realistic context in which these concepts and theories can occur and operate. Within the current context, Tedeschi, Schlenker, and Benoma (1973) observe that games are useful for testing specific predictions derived from theories of conflict, power, and bargaining. After care-

ful evaluation, a channel simulation by Cadotte (1990) was found to possess the required isomorphic characteristics.

Research Setting

The simulation depicted manufacturer and distributor relationships in a channel setting patterned after the microcomputer industry in its developmental stage. Participants were randomly organized into teams of manufacturers or distributors containing four to five members. Each team self-selected positions for president, finance, marketing, research, and sales/purchasing. Manufacturers had primary responsibility for designing and manufacturing products. Distributors were responsible for opening and stocking retail stores and selling to end users. To reach final consumers, manufacturers were required to sell through distributors. Each was responsible for a variety of functions that affected the success of the other. For example, distributors could alter a manufacturer's brand demand through pricing, shelf location, point-of-purchase promotion, and sales force decisions. Manufacturers could affect distributor performance by controlling access to high demand brands, wholesale prices, and advertising support in cities carrying their brands. As a result, manufacturers and distributors had a vested interest in the decisions of their channel partners. This dependence provided the impetus for mutual influence attempts across a variety of decision areas beyond price and quantity.

Masters of business administration students and senior undergraduate marketing majors enrolled in a marketing strategy class participated in the study. The ten-week class was devoted to the simulation exercise, which comprised eight one-week periods. During the first four periods, the teams developed an understanding of the market through analysis and test marketing. One week was then devoted to preparing a two-year business plan. In the last four periods, teams executed their plans and interacted with competitors and channel partners. Throughout, manufacturer and distributor representatives negotiated and interacted on a continuing basis. Each firm was free to establish its own "style" of interaction with channel partners and develop or terminate exchange relationships to achieve desired objectives. Four administrations of the game were conducted over consecutive academic quarters. Each administration employed an industry structure simulating a bilateral oligopoly.

The channel simulation departs from previous research-oriented simulations in four important respects. First, it is not conducted in a lab or a controlled physical environment; it is more businesslike in that the place, timing, and extent of interaction are determined by the subjects as each seeks to maximize the profitability of his or her respective firms. Second, the subjects interact over an extended period of time. This arrangement allows for the development of relational bonds and social exchange. Complicated negotiations occur with both formal and informal obligations, often extending into future periods. Third, the number and scope of decisions vastly exceed prior research simulations. This level of complexity allows for greater realism and the sense that a team is actually "running" a business for an extended time. Last, the simulation is positioned as a strategic marketing exercise. No obvious emphasis is placed on channel relations, dependence, power, influence strategies, or con-

flict. Thus, the objective of the research can be disguised until questionnaires are administered near the end of the exercise.

Data Collection

Participants completed surveys relative to channel interactions at the end of the seventh week of each eight-week simulation session. Each participant was first asked to identify his or her organization's three primary exchange partners by estimating percentage of sales (manufacturer) or purchases (distributors) attributable to all channel members. These three primary partners were evaluated through separate questionnaires. In an effort to reduce possible bias from initial simulation learning and "wind-up," only interactions that occurred during the three periods prior to the last were measured. Overall, observations were gathered from 179 participants. In addition, objective data pertaining to sales and purchases were obtained from manufacturer-distributor contracts over the three-period reporting time frame.

Unit of Analysis

Our research focus was the exchange dyad. The research objective was to identify all dyadic pairs in which ongoing exchange occurred and obtain "organizational perceptions" of each partner. A multi-informant methodology was employed to assess organizational responses because data from a single member might contain bias. (A description of this methodology is available from the authors.)

For each administration, the instructor rated participants on their "involvement in interfirm interaction" (5-point scale, "low" to "high"). To obtain a composite score for each perceptual indicator, the observations of the two or three highest-rated participants in an organization were weighted by their proportional "involvement rating" and then summed together. This approach permitted allocating greater weight to participants viewed as more involved with interfirm interaction.

To be included in the sample, at least two members of both the manufacturer and distributor teams had to report that economic exchange occurred during the three-period study frame. Recall that a team was required to evaluate only the top three in terms of exchange. Team members were not always consistent in the identification of the top three. If an organization dealt with four channel partners, it was possible for one of the three selected informants to disagree on which was the least significant exchange relationship. This culling procedure yielded 44 composite observations by manufacturers and 44 by distributors.

Operational Measures

Appendix A contains the measures used in the study and their descriptive statistics.

Dependence. Operationalizations of interdependence asymmetry and magnitude required a measure of channel member dependence. Drawing on Emerson's (1962) work, we adopted Cadotte and Stern's (1979) definition of dependence:

> The dependence of channel member A upon channel member B is (1) directly proportional to B's net contribution to A's current level of goal attainment and (2) in-

versely proportional to the number and viability of A's alternatives for goal attainment.

Defined in this way, dependence reflects the extent to which a member provides important resources, of which there are few alternative sources of supply.

As noted by Frazier, Gill, and Kale (1989), percentages of sales and profit have been employed extensively as an indicator of dependence. Similarly, we employed the percentage of total gross margin derived from a channel partner as our indicator. For manufacturers, the gross profit margin associated with a particular distributor was computed by using data from the executed sales contracts during the study period. For each contract, we computed the difference between a brand's wholesale price and its production cost, multiplied the difference by the number of units sold, and summed the total gross margin for each contract across all executed contracts. Similarly, for distributors, we computed the difference between wholesale and retail prices, multiplied the difference by the number of units bought, summed this product for all brands purchased, and then summed across all contracts during the study period.

Operationalizing dependence in this way captures a large portion of the goal attainment dimension of dependence because it is so clearly tied to the extent to which a partner provides important resources and contributes to the firm's economic viability. To the degree that a firm allocates its purchases or sales in proportion to the profitability of available suppliers or customers, it also reflects the viability of alternatives. Given that the total supply of important resources is limited, partners providing more (less) of these resources are also more (less) difficult to replace.

Two conditions of the simulation design favor this interpretation. First, there was only one type of manufacturer and only one type of distributor. Second, manufacturers were able to differentiate themselves to both the end user market (modeled by the computer) and their channel partners. As a consequence, a strong possibility existed that the firms allocated their purchases on the basis of the perceived quality of available channel partners.

In summary, the advantages of using percentage of gross margin as an indicator of dependence are that it is objective, ratio scaled, independently verifiable, and comparatively easy to obtain for both sides of the dyad. From both accounting and marketing perspectives, it is an important indicator of the relative value of an exchange relationship. Its disadvantages are that it does not capture all of the costs and benefits of a relationship, reflect structural differences in markets (i.e., types, number, or financial resources of suppliers or customers), or directly measure the viability of alternatives. Further theoretical and empirical research is required to develop a single indicator of dependence that incorporates all these dimensions.

Interfirm influence. Previous research emphasizes separately *influence strategies* (i.e., communications) and the exercise of *power sources* (i.e., behavior) as mechanisms of influence in channel interactions. As developed by Frazier and Summers (1984, p. 43), influence strategies include "the context and structure of the communications utilized by a source firm's personnel in their influence attempts with target firms." Alternatively, operationalizations of "exercised

Table 1
INTERFIRM INFLUENCE[a]

Variable	Definition
Noncoercive Strategies	
Reward	A positive inducement granted by A to B to gain compliance on some issue
Promise	A's communication to B that it would receive future positive inducements in return for its compliance on some issue
Information persuasion	A's communication of information and/or opinions in the form of a logical or persuasive argument in an effort to gain B's compliance
Recommendation	A's communication to B that compliance on an issue would be very desirable
Request	A's communication to B of its wish for B's compliance
Positive normative	A's communication to B that compliance on some issue would be in conformity with established norms and/or enhance their relationship
Coercive Strategies	
Punishment	A negative sanction applied by A against B to gain compliance on some issue
Threat	A's communication to B that future negative sanctions would be applied if B did not comply on some issue
Demands	A's communication to B of its requirement or insistence that B comply on some issue
Negative normative	A's communication to B that failure to comply on some issue would be in violation of established norms and/or would disrupt their relationship

[a]Adapted from Tedeschi, Schlenker, and Bonoma (1973), Angelmar and Stern (1978), Frazier and Sheth (1985).

power sources" by Gaski (1986) and some explications of "power sources" by others (Gaski and Nevin 1985; Hunt and Nevin 1974) encompass tactical behaviors or actions in the application of power.

Some researchers, however, have noted the simultaneous and corresponding use of these strategies in channel interactions (Frazier and Sheth 1985; Gaski 1987). For example, rewards and punishments (i.e., exercised power sources) would likely be accompanied by some form of communication. Punishments would rarely be administered without a prior explanatory communication (i.e., threat). Rewards would typically result from a fulfilled promise. Other communications, such as requests, demands, or exchange of information, might also be employed. For these reasons, two actions and eight influence communications were investigated (shown in Table 1). Each was classified a priori as coercive or noncoercive.

There is some controversy as to whether promises should be classified as noncoercive or coercive. Frazier and Summers classified promises as coercive and found a negative relationship between the use of promises by automobile manufacturers and the satisfaction of their dealers (1986, p. 172). Notwithstanding, we treat promises as noncoercive because of their close association to rewards. Use of rewards is viewed as contributing to a relationship and strengthening the target's identification with the source. Rewards have been found to be positively correlated with satisfaction and negatively related to conflict (Gaski and Nevin 1985). For a

review of strategy classifications, see Johnson and colleagues (1993).

We employed multiple-item indicators to capture the tactical domain of each and to avoid item response bias. Items representing tactics were adapted from previous research (cf. Frazier and Sheth 1985; Gaski and Nevin 1985; Wilkinson and Kipnis 1978). In addition, focus group interviews with earlier simulation participants provided additional detail.

We took measures of the use of promise, rewards, threats, and punishments within the simulation setting. The promise and granting of rewards and the threat and imposition of punishments were believed to be conceptually related. In each case, three subcategories of tactics were found to be relevant: operational, economic, and relational. Operational items (eight) addressed how a firm could modify its operations to affect the goals of a partner, economic items (ten) focused on monetary decisions that affected the cash flow or profitability of a partner, and relational items (seven) emphasized the broader dimensions of exchange relations such as cooperation, preference over competitors in negotiations, or help in decision making.

An assortment of other communication strategies was measured. These included information persuasion (four items), requests (two items), recommendations (two items), demands (three items), positive normative items (four), and negative normative items (four).

A multidimensional composite index was created for each measure. These are best described as "checklist" indices or multidimensional composites (Howell 1987). Each item is thought to represent a single dimension and "more" of the construct is defined by a higher frequency across each dimension. Participants were asked to report how often (7-point scale, "never" to "extremely often") their partners employed each strategy. Target perceptions were used because of potential bias associated with self-reports reflecting threats, punishments, and so on.

Conflict. The focus of our research was on the residual feelings of conflict emanating from the conflict process. A scale developed by Stern, Sternthal, and Craig (1973, 1975) and employed by Hunger and Stern (1976) was modified for this purpose. Scale refinement criteria included ease of understanding, relevance, and simplicity as determined through three focus group interviews with prior simulation participants. Item and factor analyses were also used in two pretests to sort out unrelated items. The final scale contained 18 bipolar adjectives in a semantic differential format with seven response categories. Participants were asked to recall their organization's negotiations or dealings with each partner and report their feelings.

Business performance. Participants were asked to evaluate each partner's performance. In contrast to Frazier's (1983) measure of role performance, a broader measure of overall business performance was employed. Respondents were asked (7-point scale, "extremely poor" to "extremely good") to recall their dealings and experiences with each firm and evaluate, for example, its ability to "outsmart competitors," "understand the needs of the market," and "make good financial decisions." The scale comprised ten items, which were summed to represent an overall evaluation.

Measure Evaluation and Validation

Interrater reliability. The data matrix was transposed and coefficient alpha used to estimate interrater reliability among key informants (Hughes and Garrett 1990). Dependability coefficients were computed for each team across all scale items for each dyad. Only 4 of the 60 coefficients were low (< .40). In each case, infrequent exchange and low dependence were observed. Lower levels of informant convergence were considered tolerable under these circumstances.

Internal consistency. The unidimensional nature of the conflict and business performance scales was examined through principal components analysis. The percentages of explained variance for a single-factor solution were 71% and 69% for the conflict scales (manufacturers and distributors, respectively) and 78% and 69% for the business performance scales and provided support for their unidimensional nature. Alpha coefficients for conflict were .98 for both manufacturers and distributors. For business performance, the coefficients were .97 and .94, respectively.

The high coefficient alpha values indicate that some respondents may not have discriminated among items in their evaluations of each channel partner. Our investigation of the response patterns suggest that a global or gestalt evaluation may have been obtained in these cases rather than a multifaceted one. Importantly, each subject had varied the evaluations across channel partners. Considering (1) our use of multiple informants, (2) satisfactory interrater reliability, and (3) the exploratory nature of this research, we believe these global evaluations are adequate.

Dependence. The measure of dependence was correlated with different indicators to assess its convergent validity. Objective percentages of total sales in both units (r = .91, $p < .00$, manufacturer data; r = .90, $p < .00$, distributor data) and dollars (r = .94, $p < .00$ and r = .93, $p < .00$, respectively) from each partner were obtained. Perceptual measures included estimates of (1) percentage of sales or purchases obtained from each partner (r = .86, $p < .00$ and r = .73, $p < .00$) and (2) the importance of a partner as reflected in estimates of the effect (11-point scale, "no negative effect" to "disastrous effect") if a named partner was no longer available (r =.67, $p < .00$ and r = .69, $p < .00$). The magnitude of these correlations provides satisfactory evidence of convergent validity.

For assessment of nomological validity, the measure of dependence was correlated with two measures of partner power. Measures were obtained from two different perspectives. First, participants were asked how much power a named partner had over their organization (11-point scale, "no power" to "very high power"). Correlation coefficients were .51 ($p < .00$) for manufacturers and .65 ($p < .00$) for distributors. Second, participants were asked how much power their organization had over each partner (same response scale). The correlations were .62 ($p < .00$) for manufacturers and .45 ($p < .00$) for distributors. Although the relationship of these variables is still speculative, the data suggest an acceptable degree of nomological validity.

Influence strategies. Beyond assessment of face validity, normal item and scale evaluation was considered inappropriate for the influence strategy indices. These constructs are not defined by the joint intercorrelations of their items but

Table 2
PRINCIPAL COMPONENTS ANALYSIS (OBLIQUE ROTATION) INFLUENCE STRATEGIES

| | Factor loadings | | | |
| | Manufacturer use of | | Distributor use of | |
Influence Strategies	Factor 1[a]	Factor 2	Factor 1[b]	Factor 2
Noncoercive				
Rewards				
Operational	95	-7	79	-22
Economic	88	-12	87	-22
Relational	92	-12	87	-23
Promises				
Operational	86	8	86	7
Economic	89	-2	89	-2
Relational	86	11	79	24
Information persuasion	53	48	72	25
Recommendations	35	65	44	48
Requests	48	57	32	53
Positive normative	27	77	51	61
Coercive				
Punishments				
Operational	-42	73	-22	56
Economic	-17	70	-3	57
Relational	-45	70	-16	88
Threats				
Operational	-18	79	14	67
Economic	21	74	19	65
Relational	-11	83	-10	90
Demands	14	68	-15	84
Negative normative	12	80	-3	75

Underlines indicate which factor loading is highest of the two factors.
[a]Interfactor correlation .11.
[b]Interfactor correlation .10

rather by the total frequency across the items (Howell 1987). Thus, inferences from correlations among the index items are not meaningful. The "checklist" nature of indices required deriving a sum score to represent each construct.

Evaluation of the a priori coercive and noncoercive classification of the influence strategies was conducted through principle components analysis of the summed indices (shown in Table 2). Employing a two-factor solution, loadings for each index confirm their a priori classifications for the most part. Oblique rather than orthogonal rotation was employed because of the interrelated nature of these influence strategies (Howell 1987). Unexpectedly, recommendation, request, and positive normative strategies loaded on both factors. Frazier and Summer (1984, 1986) found similar results for recommendations attributing the relatively focused and directive nature of this strategy for its coercive loading. Similar arguments might also be advanced for requests and positive normative strategies: Requests could be viewed as directive in content, and positive normative strategies as positively drawn coercion. Notwithstanding these arguments, recommendations, requests, and positive normative strategies were not included in subsequent analysis because they could not be categorized according to our a priori classification.

Factor analysis of the operational, economic, and relational subcategories of rewards, promises, punishments, and threats was also conducted. A single-factor solution provided the best factor structure and interpretability for both man-

Table 3
REGRESSION ANALYSIS: MANUFACTURER

Dependent Variables	R^2	Magnitude of Interdependence $(Dep_D+Dep_M)/2$	Relative Asymmetry of Interdependence Dep_D-Dep_M
Manufacturer use of			
Noncoercive Strategies			
Rewards	.41	.56[c]	-.21[b]
Promises	.26	.45[c]	-.16
Information persuasion	.09	.30[b]	.17
Coercive Strategies			
Punishments	.10	-.28[b]	.08
Threats	.03	-.14	.08
Demands	.12	.07	.36[c]
Negative normative	.05	.03	.24[a]
Manufacturer perceptions of			
Conflict	.25	-.51[c]	-.13
Distributor performance	.19	.34[c]	-.20[a]

[a]$p \le .10$ (one-sided test)
[b]$p \le .05$ (one-sided test)
[c]$p \le .01$ (one-sided test)

ufacturer and distributor data. Therefore, the subcategories for each index were aggregated for analysis.

RESULTS

In Appendix B, we report the zero-order correlations among the study variables. Hypotheses were tested through multiple regression analysis, with results shown in Tables 3 and 4. Equations were estimated for each dependent variable and the independent variables of magnitude and relative asymmetry.

Effects of Magnitude of Interdependence on Interfirm Influence

Noncoercive strategies. The hypothesized (H_1) positive relationship between magnitude of interdependence and the use of noncoercive strategies is supported. Manufacturer and distributor use of rewards, promises, and information persuasion increased as their joint dependence increased.

Coercive strategies. The hypothesized (H_2) negative relationship between magnitude of interdependence and coercion is partially supported. Manufacturer use of punishments and distributor use of punishments, threats, and demands decreased with increasing interdependence. Manufacturer threats, demands, and negative normative strategies and distributor negative normative strategies are not significant.

Effects of Relative Asymmetry of Interdependence on Interfirm Influence

Noncoercive strategies. Our analysis of relative asymmetry and noncoercive strategies yields conflicting results. Manufacturer use of rewards increased as relative power increased. In contrast, distributor use of rewards, promises, and information persuasion increased. Thus, H_5 is partially supported by the manufacturer results, and H_{5ALT} is supported by the distributor results.

Coercive strategies. The test results relating coercive strategies and asymmetry provide limited support for H_6 and do not support H_{6ALT}. Manufacturer use of demands and

negative normative statements increased as relative power increased, as did distributor use of negative normative statements. Neither party significantly increased its use of threats and punishments.

Effects of Magnitude and Relative Asymmetry on Conflict

Support is provided for the hypothesized negative relationship between magnitude of interdependence and conflict aftermath (H_3). Both manufacturers and distributors experienced fewer residual feelings of conflict as the magnitude of their relationship increased. The proposition that residual conflict will diminish as relative dependence decreases (power increases) (H_7) is supported for distributors. A further implication is that a more dependent distributor will harbor greater feelings of conflict. Manufacturers have a similar pattern, but the coefficient is not significant.

Effects of Magnitude and Asymmetry on Performance

The hypothesis that increasing joint dependence is associated with more favorable evaluations of exchange partners (H_4) is supported. Support is also provided for the hypothesis (H_8) that less dependent (i.e., more powerful) parties devalue the performance of dependent partners and more dependent parties hold an elevated perception of their powerful counterparts.

DISCUSSION

Our objective was to enhance our understanding of interdependence and its relationship to exchange interaction. Hypotheses relating magnitude and relative asymmetry to interfirm influence, conflict, and business performance were tested in a simulated channel setting employing ongoing manufacturer and distributor exchange relationships.

Magnitude of Interdependence

Results from the dyad suggest that increasing magnitudes of interdependence are associated with more frequent use of noncoercive strategies, lower levels of residual conflict, and

Table 4
REGRESSION ANALYSIS: DISTRIBUTOR

Dependent Variables	R^2	Magnitude of Interdependence $(Dep_M+Dep_D)/2$	Relative Asymmetry of Interdependence Dep_M-Dep_D
Distributor use of			
Noncoercive Strategies			
Rewards	.56	.68[c]	.18[b]
Promises	.27	.37[c]	.30[b]
Information persuasion	.17	.28[b]	.23[a]
Coercive Strategies			
Punishments	.18	-.43[c]	.15
Threats	.09	-.29[b]	-.01
Demands	.09	-.30[b]	.14
Negative normative	.05	-.15	.21[a]
Distributor perceptions of			
Conflict	.14	-.28[b]	-.20[a]
Manufacturer performance	.16	.37[c]	-.27[b]

[a]$p \le .10$ (one-sided test)
[b]$p \le .05$ (one-sided test)
[c]$p \le .01$ (one-sided test)

more favorable evaluations of partner performance. Partial support is also provided for less frequent use of coercive strategies at higher magnitude levels.

These findings underscore the conflict paradox and support the relational exchange paradigm offered by Dwyer, Schurr, and Oh (1987) and others (e.g., Macneal 1980). Increasing dependence between exchange partners promotes cooperation rather than conflict. In the current study, we suspect high-magnitude exchange partnerships were in more advanced stages of relational development, with each partner cognizant of the need for cooperation. Firms appear to have opted for a more supportive channel climate and equitable resolution of issues rather than actions leading to conflict as the magnitude of interdependence increased. These conditions promote the convergence of goals, values, and perceptions. Individual evaluations of conflict and partner performance would reflect this consensus. Interestingly, the corollary to these findings is that low magnitude relationships are less desirable as evidenced by less noncoercive influence, higher felt conflict, and lower perceptions of business performance.

Relative Asymmetry of Interdependence

Our findings for relative asymmetry were unexpected yet are possibly informative. First, the use of threats and punishments did not significantly increase as the power of the focal organization increased relative to the target, though demands and negative normative statements did. One explanation may be that highly asymmetric relationships were not present. Although organizational units could dominate certain segments or geographic markets, a team generally required other relationships to satisfy its market and financial goals. These conditions may have resulted in more balanced dependence structures.

The political economy of the channel setting may also have contributed to the differences observed. Each organizational unit had to seek out and cultivate voluntary exchange relationships within a bilateral oligopoly. With so few potential partners, it would be prudent to avoid heavy-handed tactics that could alienate current and potential channel partners. This reluctance to use coercive tactics is reflected in their lower incidence relative to noncoercive tactics. As Ganesan (1993) found, aggressive tactics may be reserved for only the most important issues.

Second, results for noncoercive strategies and relative dependence were surprising in that they provided some support for both competing hypotheses. Manufacturers reduced their use of rewards as the dependence of their partners increased. In contrast, distributors increased their reliance on rewards, promises, and information persuasion. How could both hypotheses be supported, albeit on opposite sides of the dyad? The answer again may lie in the political economy underlying the research setting. During much of the simulation, manufacturers experienced cash flow constraints due to (1) investments in research and development for next-generation products, (2) consignment sales to obtain distributor purchases, and (3) expanding production volumes to satisfy an expanding market. Distributors did not need to make comparable investments.
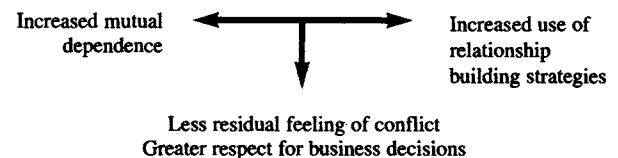
Although speculative, these conditions may have affected exchange interaction. Manufacturers experienced a lean environment, and distributors, a comparatively munificent one. As a result, the real and opportunity costs of making promises and granting rewards may have been disproportionate (i.e., greater for manufacturers than for distributors). In an effort to gain compliance, manufacturers may have been constrained in their influence strategy options—having to resort to their comparative power (i.e., demands)—whereas distributors may have found the use of rewards and promises more advantageous. Distributors were in a better position to share their resources (e.g., grant rewards, make promises) as the dependence of their partners increased. Together, these conditions may have mediated the choice of influence strategy.

The findings regarding relative asymmetry, conflict, and perceived business performance follow a consistent pattern. A less dependent (i.e., more powerful) party is more likely to get its way and thus be less sensitive to resultant conflict. It is also prone to attribute success to its own efforts, consequently devaluing the contribution of a lesser channel partner. The latter's lower status may also reflect poorer performance compared with more important partners. In contrast, the more dependent party probably chose to increase its dependence because of the superior business skills of its partner. At the same time, it opened itself up to greater frustration if the goals, behaviors, and attitudes of its more powerful partner were not entirely consistent with its own.

Other Observations

Although not hypothesized, we also found that noncoercive strategies were used with much greater frequency than coercive ones (cf. Dant and Schul 1992). Within this simulated channel setting, it would appear that a preponderance of the organizational units independently concluded that it was wise to employ primarily relationship-building tactics, and this tendency increased as pairs of organizations intentionally developed higher levels of mutual dependence. The latter behavior was further associated with lower levels of felt conflict and greater respect for the business skills of the partner. Whatever the mechanisms, it would appear that the following behavior pattern is self-reinforcing:

Increased mutual dependence ⟷ Increased use of relationship building strategies

Less residual feeling of conflict
Greater respect for business decisions

Although noncoercive strategies predominated, we still observed the infrequent but deliberate use of coercive strategies. We suspect that coercive tactics are strategically employed in situations involving high financial stakes or high precedence-setting potential (cf. Dant and Schul 1992) or that are perceived to have a long-term impact on the viability or strategy of the firm. In general, researchers should look more closely at the use of specific influence tactics. (e.g., Which tactics are used and under what circumstances?). We might expect that the utilization of a tactic would be inversely related to its cost (measured in time, money, or commitment) and that coercive tactics are reserved for issues thought to be more important.

CONTRIBUTIONS AND LIMITATIONS

To our knowledge, this study represents the first attempt at characterizing the structure of interdependence within exchange. Although interdependence has been viewed as important for understanding exchange interaction, its presence in empirical research has been limited. It is particularly relevant, given the current interest in the relational paradigm.

Two dimensions of interdependence were introduced and measured with archival data—magnitude and relative asymmetry. It was discovered that both play a role in the use of influence strategies, felt conflict, and perceived business performance. Within the simulated channel context, the magnitude of joint dependence appears to have had the dominant affect on exchange interaction.

We were surprised by the differences between manufacturers and distributors regarding the use of rewards and promises. However, this anomaly may be instructive. Disparate environments may account for differences in the deployment of strategies. A resource-constrained environment favors a more selfish deployment of influence strategies, and a munificent environment allows greater use of rewards and tempers coercive strategies. This line of thinking underscores the importance of the political economy in understanding channel relationships.

Measurement contributions include our focus on both influence communication and overt action strategies. Operationalization of these strategies through tactical items provided a richer mapping of their domain than did prior global measures. Finally, the simulation represents an advancement in gaming environments as research settings. The key distinction is that dyadic interdependence, and hence the power structure, develops between self-selected partners through the natural course of recurrent exchange. Under these conditions, we found a more realistic use of relationship-building tactics vis-à-vis coercive tactics when compared with prior laboratory studies. Other advantages include the ability to manipulate the political economy by changing the number of negotiating partners and/or economic conditions and to gather information easily.

Considerations of our findings should be made within the context of the practical limitations of the research setting and procedures employed. First, the theoretical nature of the study and use of a simulated environment with student participants limits the generalizability of the findings. Second, it is possible that participants in this study were affected by fatigue or halo effects in their responses. Third, we employed percentage of gross margin as an indicator of dependence or power. Although it is objective and independently verifiable, it may not capture all elements of dependence or power. Finally, we measured influence strategy use through target firm perceptions. As a result, respondents had to be sensitive to an influence attempt being made. Some participants may have failed to recognize these attempts. Consequently, our measures may underestimate the true frequency of influence within exchange relations.

Appendix A
MEASURES

Manufacturer	Distributor
Measures of Influence Strategies[a]	

Rewards
"How often (name) has given your organization the following rewards/benefits in order to get your organization to do as they wanted:"

Manufacturer	Distributor
Operational	*Operational*
Give you first choice in the brands you wanted	Purchase a brand they do not want to benefit you
Sell you additional inventory you wanted	Buy additional inventory beyond their intended amount
Produce brands exclusively for you	Give you free/discounted market research
Engage in R & D in order to produce brands you desired	Open stores critical to your brand markets
Give you market research	Give you exclusive arrangements in sales territories
Give you first choice on their POP displays	Increase the overall number of salespeople in their stores
Place their ads in media which would benefit your markets	Dedicate additional salespeople to your brands
Increase their advertising expenditures to your benefit	Give you better shelf locations for your brands than competitors
Economic	*Economic*
Charge a lower wholesale brand price in order to benefit you	Set a retail brand price which increased the sale of your brand
Give you inventory on consignment	Prepurchase inventory
Increase their research and development expenditures to benefit you	Finance inventory production
Pay/share your market research expenses	Share/pay for expenses of increasing your plant capacity
Give you free/discounted POP displays	Pay/share research and development expenses
Pay/share your store opening/operating expenses	Pay/share market research expenses
Pay/share your salespeople salaries	Pay/share expenses of POP displays
Pay/share for the dedication of salespeople	Pay/share your advertising expenses
Pay/share expenses of any kind	Pay/share expenses of any kind
Give you a loan or financial support of any kind	Give you a loan or financial support of any kind
Relational	*Relational*
Do business with you exclusively	Same as manufacturer
Give you preference over competitors in negotiations	
Change a decision in your favor	
Give you better cooperation	
Give you better service	
Help/assist your decision making	
Give you favors/rewards/benefits of any kind	

Manufacturer	Distributor
Measures of Influence Strategies[a]	

Promise
"In order to get your organization to do as they wanted, how often did representatives of (name) promise:" [For both manufacturer and distributor, items were the conceptual equivalent of rewards]

Information Persuasion
"In order to get your organization to do as they wanted, how often did representatives of (name) argue/make a case:"

Based upon financial payoff/outcome that you should comply	Same as manufacturer
Based upon past experience that you should comply	
Based upon good sound business judgment that you should comply	
Based upon market research that you should comply	

Recommendation
"In order to get your organization to do as they wanted, how often did representatives of (name) directly:"

Recommend that you comply	Same as manufacturer
Suggest that you comply	

Request
"In order to get your organization to do as they wanted, how often did representatives of (name) directly:"

Ask you to comply	Same as manufacturer
Request that you comply	

Positive Normative
"In order to get your organization to do as they wanted, how often did representatives of (name) state or imply:"

That a good or loyal organization would comply	Same as manufacturer
That you would be following agreed upon policy/goals/objectives if you would comply	
That your personal relationship would improve if you would comply	
That you would gain their respect or gain their approval if you would comply	

Punishments
"How often (name) has implemented the following sanctions/punishments against your organization in order to get your organization to do as they wanted:"

Operational	*Operational*
Give you last choice in the brands you wanted	Refuse to carry your brand
Not sell you inventory you wanted	Reduce the amount of inventory they intended to purchase
Not produce brands you wanted	Cut off/not give you market research you expected
Not engage in R & D in order to produce brands you desired	Pull your brands out of important territories
Not give you market research	Reduce the overall number of salespeople in their stores
Not give you their POP displays	Reduce/not dedicate any salespeople to your brand
Not place their ads in media which would benefit your markets	Give your brand a bad shelf location
Not increase their advertising expenditures	

Economic	*Economic*
Charge a higher wholesale brand price in order to punish you	Set a retail brand price which reduced your brand sales
Stop/not give you inventory on consignment	Stop/not prepurchase inventory
Stop/not increase their research and development expenditures	Stop/not finance inventory production
Stop/not pay for market research expenses	Stop/not pay for expenses of increasing your plant capacity
Stop/not give you free/discounted POP displays	Stop/not pay for research and development expenses
Stop/not pay for store opening/operating expenses	Stop/not pay for market research expenses
Stop/not pay for salespeople salaries	Stop/not pay for POP displays
Stop/not pay for the dedication of salespeople	Stop/not pay for your advertising expenses
Stop/not pay for expenses of any kind	Stop/not pay for expenses of any kind
Stop/not give you a loan or financial support of any kind	Stop/not give you a loan or financial support of any kind

Relational	*Relational*
Take their business elsewhere	Same as manufacturer
Give your competitors preference in negotiations	
Implement legal action against you	
Make a decision knowlingly adverse to you	
Give you poorer cooperation	
Give you poorer service	
Stop/not assist you in your decision making	
Punish/retaliate against you in any way	

Threats
"In order to get your organization to do as they wanted, how often did representatives of (name) threaten:" [For manufacturer and distributor, items were the conceptual equivalent of punishments]

Appendix A—(Continued)

Manufacturer	Distributor
Measures of Influence Strategies[a]	

Demands

"In order to get your organization to do as they wanted, how often did representatives of (name) directly:"

Tell you to comply   Same as manufacturer
Demand that you comply
Command you to comply

Negative Normative

"In order to get your organization to do as they wanted, how often did representatives of (name) state or imply:"

That only a bad or disloyal organization would not comply   Same as manufacturer
That you would not be following agreed upon policy/goals/objectives if you
   would not comply
That your personal relationship would worsen if you would not comply
That you would lose their respect or not gain their approval if you did not
   comply

Measure of Conflict[b]

"Recalling your organizations negotiations/dealings with (name), please indicate your response to the following: All things considered, (name) is:" [Same for
   manufacturer and distributor]

Generous – Selfish	Fair – Unfair	Open – Closed
Willing – Stubborn	Friendly – Hostile	Honest – Dishonest
Benevolent – Tyrannical	Encouraging – Discouraging	Realistic – Unrealistic
Likeable – Dislikeable	Conciliatory – Vindictive	Helpful – Harmful
Supportive – Obstructive	Flexible – Rigid	Cooperative – Uncooperative
Not Greedy – Greedy	Compromising – Uncompromising	Permissive – Resisting

Measure of Performance[c]

Respondents were asked, "Recalling your dealings and experiences with (name), please indicate your responses to the following:

Overall, the quality of the decisions made by (name) was   Same as manufacturer
Overall, the ability of (name) to outsmart competitors was
Overall, the ability of (name) to understand the needs of the market was
Overall, the ability of (name) to make good financial decisions was
Overall, the ability of (name) to work toget her towards a common purpose
   was
Overall, the ability of (name) to make good business judgments was
Overall, the ability of (name) to display "market savvy" was
Overall, the ability of (name) to win in the marketplace was

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[a]All responses were recorded by circling a number on the following scale:

Never					Extremely often	
1	2	3	4	5	6	7

[b]All responses were recorded by circling a number on the following scale:

"Bipolar adjective"					"Bipolar adjective"	
1	2	3	4	5	6	7

[c]All responses were recorded by circling a number on the following scale:

Extremely poor							Extremely good		
1	2	3	4	5	6	7	8	9	10

Appendix B
INTERCORRELATIONS OF VARIABLES DATA FOR MANUFACTURER

		Mean	S.D	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}
Archival Data																	
Magnitude of interdependence	X_1	—	—														
Relative asymmetry of interdependence	X_2	—	—	-.23 (.13)													
Survey Data																	
Manufacturer use of																	
Rewards	X_3	2.97	1.13	.61 (.00)	-.34 (.02)												
Promises	X_4	2.75	1.00	.48 (.00)	-.27 (.08)	.93 (.00)											
Information persuasion	X_5	3.00	.94	.26 (.09)	.10 (.53)	.42 (.00)	.50 (.00)										
Recommendations	X_6	3.11	1.22	.04 (.81)	.10 (.52)	.22 (.15)	.36 (.02)	.64 (.00)									
Requests	X_7	3.60	.95	.12 (.46)	.05 (.75)	.33 (.03)	.47 (.00)	.73 (.00)	.79 (.00)								
Positive normative	X_8	2.03	.73	.04 (.80)	.19 (.22)	.21 (.17)	.38 (.01)	.57 (.00)	.62 (.00)	.63 (.00)							
Punishments	X_9	1.47	.63	-.30 (.05)	.15 (.34)	-.24 (.12)	-.13 (.41)	.10 (.50)	.20 (.19)	.10 (.50)	.46 (.00)						
Threats	X_{10}	1.48	.35	-.16 (.29)	.12 (.45)	.03 (.84)	.15 (.34)	.35 (.02)	.57 (.00)	.45 (.00)	.62 (.00)	.72 (.00)					
Demands	X_{11}	1.65	.92	-.01 (.96)	.34 (.02)	.04 (.79)	.12 (.42)	.55 (.00)	.67 (.00)	.68 (.00)	.53 (.00)	.21 (.16)	.56 (.00)				
Negative normative	X_{12}	1.68	.58	-.02 (.88)	.23 (.13)	.06 (.69)	.21 (.16)	.50 (.00)	.57 (.00)	.57 (.00)	.81 (.00)	.44 (.00)	.63 (.00)	.67 (.00)			
Manufacturer perception of																	
Conflict	X_{13}	2.99	1.02	-.48 (.00)	-.01 (.96)	-.50 (.00)	-.38 (.01)	-.22 (.16)	-.16 (.29)	-.10 (.51)	-.08 (.59)	.50 (.00)	.22 (.15)	.00 (.98)	.03 (.84)		
Performance by distributor	X_{14}	4.49	1.12	.39 (.01)	-.28 (.07)	.43 (.00)	.34 (.02)	-.05 (.76)	-.09 (.57)	-.08 (.59)	-.03 (.85)	-.40 (.01)	-.28 (.07)	-.19 (.22)	-.09 (.56)	-.55 (.00)	

Appendix B—(Continued)
DATA FOR DISTRIBUTOR

	Mean	S.D	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}
Archival Data																
Magnitude of interdependence X_1																
Relative asymmetry of interdependence X_2			.23 (.13)													
Survey Data																
Distributor use of																
Rewards X_3	2.24	.88	.73 (.00)	.34 (.02)												
Promises X_4	2.11	.72	.43 (.00)	.38 (.01)	.82 (.00)											
Information persuasion X_5	2.67	1.00	.34 (.02)	.30 (.05)	.52 (.00)	.68 (.00)										
Recommendations X_6	3.02	1.03	.10 (.50)	.15 (.34)	.26 (.09)	.38 (.01)	.65 (.00)									
Requests X_7	3.37	1.08	-.04 (.81)	.11 (.46)	.08 (.60)	.31 (.04)	.63 (.00)	.74 (.00)								
Positive normative X_8	2.20	.76	.04 (.77)	.13 (.41)	.32 (.03)	.59 (.00)	.48 (.00)	.53 (.00)	.61 (.00)							
Punishments X_9	1.44	.37	-.39 (.01)	.05 (.74)	-.19 (.21)	.01 (.92)	.14 (.36)	.27 (.07)	.31 (.04)	.37 (.01)						
Threats X_{10}	1.43	.38	-.30 (.05)	-.08 (.60)	-.05 (.75)	.27 (.08)	.23 (.14)	.37 (.01)	.34 (.02)	.55 (.00)	.66 (.00)					
Demands X_{11}	1.64	.65	-.27 (.08)	.07 (.66)	-.22 (.16)	.01 (.97)	.16 (.31)	.34 (.01)	.30 (.05)	.43 (.00)	.64 (.00)	.71 (.00)				
Negative normative X_{12}	1.84	.74	-.10 (.51)	.17 (.26)	-.10 (.52)	.10 (.53)	.11 (.49)	.31 (.04)	.34 (.03)	.60 (.00)	.45 (.00)	.66 (.00)	.63 (.00)			
Manufacturer perception of																
Conflict X_{13}	2.97	1.14	-.33 (.03)	-.26 (.09)	-.25 (.10)	-.10 (.52)	-.01 (.97)	.20 (.19)	.11 (.48)	.21 (.18)	.17 (.26)	.29 (.05)	.24 (.12)	.32 (.03)		
Performance by distributor X_{14}	4.64	1.11	.30 (.05)	-.19 (.22)	.22 (.15)	.10 (.53)	-.07 (.65)	-.19 (.22)	-.21 (.18)	-.25 (.10)	-.61 (.00)	-.40 (.01)	-.68 (.00)	-.47 (.00)	-.27 (.08)	

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