

The Theory of Relational Cohesion: Review of a Research Program

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Abstract

In this paper we analyze and review the theory of relational cohesion and attendant program of research. Since the early 1990s, the theory has evolved to answer a number of basic questions regarding cohesion and commitment in social exchange relations. Drawing from the sociology of emotion and modern theories of social identity, the theory asserts that joint activity in the form of frequent exchange unleashes positive emotions and perceptions of relational cohesion. In turn, relational cohesion is predicted to be the primary cause of commitment behavior in a range of situations. Here we outline the theory of relational cohesion, tracing its development through the present day, and summarize the corpus of empirical evidence for the theory's claims. We conclude by looking ahead to future projects and discussing some of the more general issues informed by our work.

Introduction

This paper reviews a program of research on the development of relational cohesion in exchange relations (Lawler, 2001, 2002; Lawler & Thye, 1999; Lawler, Thye & Yoon, 2000; Lawler & Yoon, 1993, 1996, 1998). Relational cohesion is defined as the perception by individuals in an exchange relation that their relationship is a unifying element or force in the social situation (Lawler & Yoon, 1996). Such perceptions lead to higher levels of commitment and collectively-oriented behavior. Commitment here refers to the strength of the tie between a person and a social unit. The social unit may be a relation, group, network, organization, ethnic community, and so forth. Commitment is empirically manifest in behaviors such as staying in the social unit despite alternatives, providing unilateral benefits to others in the social unit, or collaborating with others to produce joint goods. In our theoretical research program, the focus is on how commitment behaviors develop within social exchange relations.

The theory proposes an emotional-affective explanation for the development of cohesion and commitment in exchange relations (Lawler & Yoon, 1996). This explanation was adapted from a theory of affective attachments published in 1992 (see Lawler, 1992a). According to that theory, emotional-affective attachment to a collective unit develops to the extent that the unit fosters a “sense of control.” Sense of control is based on structural variations in the degree of choice, and the capacity for actors to engage in “means-ends” deliberation (Elster 1986). Groups, relations, or organizations that enhance actors’ sense of control become objects of affective attachment, and those that constrain or limit actors’ sense of control become objects of affective detachment (Lawler, 1992a, 1997; Mueller & Lawler, 1999). The rationale is that a sense of control fosters positive emotions that are partially attributed to the social units perceived as responsible for the sense of control.

The theory of relational cohesion adapts the aforementioned principles to social exchange relations. Social exchange structures and situations entail considerable uncertainty and ambiguity (Molm & Cook, 1995). As such, the formation of exchange relations should heighten actors' "sense of control" in these situations. If so, according to the theory of affective attachments, social exchange should generate positive emotions and feelings that are attributed to the exchange relation. These ideas were the backdrop and starting point for our program of theory and research on relational cohesion.

Over the past decade, our work has evolved to provide a number of insights regarding the emergence of commitment in exchange relations. The research focuses on a number of questions including: (1) Under which *structural conditions* do purely instrumental exchange relations develop into expressive ones that are valued in their own right? (2) *What kinds of exchanges* are most likely to elicit relational cohesion and commitment? (3) How do *emotions* impact the psychological sense of coming together and the perception of a shared identity? (4) How do *structural properties* such as the shape of the network affect the prospects for cohesive dyadic relations? (5) Whether and how do overarching group or *common identities* influence cohesion and commitment in exchange? The purpose of this paper is to pull together our published research on these questions, demonstrate the theoretical progression over time, and extract some general principles applicable beyond the program. We intend this review for those who seek a sense of the research program as a whole, and for those who are unfamiliar with the research or familiar with only select pieces of it.

Background

The theory of relational cohesion and attendant research program are anchored *in social exchange theory*, a tradition of micro-sociology in which interpersonal encounters are modeled as exchanges. Beginning in the late 1950s, social exchange theory included a number of theoretical statements connecting social structure, individual action, and the distribution of valued resources (Blau, 1964; Ekeh, 1974; Emerson, 1972a, b, 1976; Homans, 1961; Thibaut & Kelley, 1959). Early work in this tradition focused primarily on power and related processes in dyadic encounters (Blau, 1964; Cook & Emerson, 1978; Emerson, 1964; Homans, 1961; Molm, 1994; Thibaut & Kelley, 1959). But later, Emerson (1972a, b, 1981) proposed a network-oriented view that quickly gained prominence. Emerson's basic point was that dyadic exchanges occur in the context of larger *networks* and cannot be understood in isolation of them. This shift in perspective shed new light on the complexity of social exchange and posed important challenges for the field. An enduring issue has been to understand the interplay between social structures, the strategies and tactics used in negotiating an exchange, and the allocation of resources among individuals embedded in networks.

For more than two decades, researchers intrigued by power dynamics and exchange processes have spawned a number of theoretical statements and empirical tests (Bacharach & Lawler, 1981; Bonacich & Bienenstock, 1993; Burke, 1997; Cook, Emerson, Gillmore & Yamagishi, 1983; Cook & Yamagishi, 1992; Ekeh, 1974; Friedkin, 1992; Markovsky, Wilier & Patton, 1988; Markovsky et al., 1993; Skvoretz & Wilier, 1993; Thye, 2000; Thye, Lovaglia & Markovsky, 1997; Walker et al., 2000; Wilier, 1999; Wilier & Anderson, 1981). And while these theories differ in their theoretical assumptions and methods of prediction, all assert that exchange transpires when two or more actors seek to jointly produce benefits they cannot produce alone.

The search for benefit implies that actors are *self-interested*; that benefit cannot be produced alone implies that actors are *interdependent*. Self-interest and interdependence are key properties of virtually all contemporary theories of exchange. This is also our theoretical point of departure. We seek to understand a phenomenon that has fallen beyond the purview of traditional exchange theory (see Cook & Emerson, 1984 for an exception) - namely, the way that social relations become salient objects toward which actors orient their exchange behaviors.

Commitment is broadly defined as the strength of an attachment to another social unit such as a group, organization, or community (Kanter, 1968, 1972). In the abstract, commitment represents a person-to-group bond that is distinct from inter-personal bonds. Parsons (1951) suggested that person-to-group attachments could involve instrumental (i.e. utilitarian), affective (i.e. emotional), or normative (i.e. legitimated) bonds and saw these as an important foundation for social order. Kanter (1986, 1972) echoes these distinctions in her discussion of commitment as continuance, cohesion, and control. Important for the development of our research program is that both Parsons (1951) and Kanter (1968, 1972) recognize the importance of instrumental and affective foundations for commitment. Building on and elaborating these ideas, we explicitly show how affective attachments can develop from behavior that is initially instrumental.

The traditional exchange-theory explanation for commitment focuses on instrumental conditions, in particular, uncertainty reduction (Cook & Emerson, 1984). The argument is that commitment develops because repeated exchanges foster a sense of predictability in the situation (Emerson, 1981; Kollock, 1994). Consider a car manufacturer who repeatedly buys parts from a supply dealer. Given a series of successful transactions, the two should come to learn more about one another, develop a common set of procedures or expectations for the exchange, and perhaps learn to trust one another given a history of successful encounters. These represent “benefits” in

an uncertain market where the properties of alternative partners are unknown or unknowable (Kollock 1994). Recent work by Kollock (1994, 1999) confirms that uncertainty reduction is one basis for commitment in exchange relations.

In contrast, the theory of relational cohesion is centered on an emotional-affective explanation for commitment in exchange. Like other exchange theories, the actors of relational cohesion theory are driven initially by self-interest. That is, the theory presumes that actors are motivated to exchange so they can produce benefits not otherwise attainable. The theory also recognizes, however, that actors have the ability to experience, interpret, and reproduce emotional reactions to exchange outcomes. The orienting idea is that the very act of exchange represents joint social activity characterized by problems of coordination and uncertainty. As such, when exchange is successful, actors should experience positive emotional reactions; when exchange is unsuccessful, actors should experience negative emotional reactions. It is these emotional reactions that determine the bonds of individuals to one another and to the relation itself.

The notion that emotions are integral to the development of social relations is as old as sociology itself. Durkheim (1915) was perhaps the first to explicate this idea in *The Elementary Forms of Religious Life*. He noted that when individuals engage in joint social activity, they experience an emotional uplift which heightens their sense of group membership and collectively-oriented behavior. More recently Collins (1981, 1989) has elaborated and further developed this idea in his theory of interaction ritual chains. For Collins (1975, 1981), an *interaction ritual* is a basic unit of interaction that involves two or more participants who have a mutual focus on an object or action. He asserts that a sense of group membership is most likely to emerge when the participants experience a common mood or emotion that strengthens over

time. Lawler and Thye (1999) suggest that most exchange relations involve a common focus and shared emotion. As such, exchange relations contain the basic seeds for incipient group membership and commitment. Our relational cohesion research program brings together these ideas to explain how joint social activity generates salient person- to-group bonds in the context of exchange.

In the following pages, we review the early research on negotiated exchange that set the stage for the theory of relational cohesion. We then describe the basic theory as proposed by Lawler and Yoon (1996) and the first series of empirical tests. Next we summarize new directions the theory has taken and trace its development through the present day. We conclude by extracting and discussing some general propositions and issues around which our current research is organized.

Early Research

Early work in the relational cohesion research program established the theoretical and empirical importance of emotions in the commitment process. Lawler and Yoon (1993) posit four mechanisms through which exchange induces commitment. First, as noted above, frequent exchange reduces the level of uncertainty associated with the focal relation (Cook & Emerson, 1984; Williamson, 1975). Second, frequent social exchange often leads actors to expand the types of goods exchanged, thereby providing multiple sources of benefit from a single relation (Emerson, 1981; Foa, 1971; Tallman, Gray & Leik, 1991). Third, frequent exchange enhances the satisfaction with or attraction to the exchange *partner* who is providing benefit (Byme, Clore & Smeaton, 1986; Homans, 1961). Finally, frequent social exchange should make the *relationship* a salient object of awareness to which actors attribute their positive emotions (Lawler 1992b).

Based upon the fourth idea, Lawler and Yoon (1993) offer a model of commitment that set the stage for the theory of relational cohesion. The overarching idea of this model can be abstracted as follows: *Exchange conditions that maximize the potential for joint benefit result in: (i) repeated agreements; (ii) positive emotions; and (iii) commitment behavior.* The model postulates a process that begins at the point where structural conditions promote frequent agreement. Specifically, Lawler and Yoon (1993) assert that equal relative power and integrative bargaining are important structural factors that result in frequent exchange. Equal power is defined in terms of relative dependence, i.e. actors have equal or unequal alternatives available to them. Integrative bargaining is defined as negotiations where the contract zone is not fixed (unlike distributive bargaining), and joint-problem solving is possible (Walton & McKersie, 1965). Whereas equal power is likely to promote mutual concessions along a zero- sum dimension of profit, integrative bargaining allows subjects to engage in logrolling strategies that foster jointly-beneficial outcomes.¹ Both forces should promote frequent agreements between the parties to negotiated exchange.

A key idea is that the very act of reaching an agreement will produce mild, everyday positive emotions. Two kinds of emotion are considered important in the relational cohesion program: pleasure/satisfaction and interest/excitement (see also Izard, 1971, 1977; Larsen & Diener, 1992; Russell et al., 1980). Pleasure/satisfaction is defined as a state of “feeling gratified” while interest/ excitement represents a state of “feeling energized.” The idea that social exchange produces positive emotions coheres with Homans’ (1961) account of “sentiment” in social relations. Modern theories of emotion broadly recognize these two dimensions of positive

¹ Logrolling is a bargaining strategy that occurs when subjects trade off concessions across multiple commodities. For instance, logrolling occurs if subject A concedes more of commodity x, while subject B concedes more of commodity y.

emotion as having distinct effects on attributions and behaviors (Izard, 1977; Russell, 1980; Weiner, 1985, 1986).

At the heart of the commitment model is the notion that positive emotions produce commitment behavior (Lawler & Yoon, 1993). Two kinds of commitment behavior initially were studied, stay behavior and gift giving. Stay behavior refers to remaining in a focal relationship despite available alternatives. Staying in a relationship, given an alternative, is the most widely recognized indicator of commitment in the organizational literature (Halaby & Weakliem, 1989; Kanter, 1972; Mueller & Price, 1990). Gift giving refers to a unilateral, noncontingent, symbolic gesture such as sending a flower or card to a friend. The theory asserts that individuals who experience positive emotion are likely to stay in the focal relationship and to give each other small token gifts.

Lawler and Yoon (1993) reported the first experimental test designed to evaluate the emotional/affective core of the model. Briefly, the experiment involved dyadic negotiations in which each person had a fixed, standing alternative partner. The negotiations transpired between two subjects in separate rooms, each of whom attempted to maximize their benefit in the focal relation. In the event two subjects could not reach an agreement, each subject automatically earned some level of profit from their standing alternative partner. This alternative was a simulated other with whom the focal subject did not negotiate. The primary independent variables (see Lawler & Yoon, 1993 for details) were power/dependence (equal vs. unequal) and the type of bargaining (integrative vs. distributive). The primary dependent measures suggested by the theory were agreement frequency, positive emotions, and commitment behavior.

The results of the experiment provide strong support for the model. Under conditions of equal relative power, subjects were more likely to make mutual concessions and these resulted in

significantly more agreements. Furthermore, there was some evidence that integrative bargaining had a positive impact on the degree of logrolling, which in itself, also fostered higher mutual agreements. This was particularly the case early in the negotiation process. In turn, agreement frequency was significantly related to interest/excitement though not pleasure/satisfaction. Finally, the results of this study found positive emotion to be a good predictor of commitment behavior. Specifically, interest/excitement had large direct effects on continuance (i.e. stay behavior) and symbolic (i.e. gift giving) forms of commitment. Overall, the experiment provided support for the notion that emotions mediate the impact of exchange on commitment.

Two years later, a second experimental study was conducted to investigate the role of total power in the commitment process (Lawler, Yoon, Baker & Large, 1995). *Total power* is defined as the sum of each actor's power (see Bacharach & Lawler, 1981; Molm, 1987). Total power is essentially "mutual dependence" in Emerson's (1972a, b) terms, which he conceived of as the structural foundation for social cohesion. In relations where total power is high, actors are more dependent on one another for valued goods compared to relations wherein total power is low. In this research, the main hypothesis was that greater total power generates more commitment in the form of gift giving through the exchange-to-emotion intervening process. This hypothesis was affirmed, and thus provided additional support for the importance of the *exchange-to-emotion* link. Importantly, the results from a post-experimental questionnaire measure indicated that more frequent exchange increased the "perceived closeness" of the relation. This finding raised the question of whether a sense of cohesion should be theorized as part of the commitment process.

To summarize, early research in the relational cohesion research program established the importance of emotions in the commitment process. The first empirical test indicated that

structural bargaining conditions—equal power and integrative bargaining issues—produced more frequent agreement between actors in negotiated exchange. The second showed that higher total power in the relationship (i.e. mutual dependence) also generated more frequent exchange. The importance of these findings is that frequent exchange represents a joint social activity that has emotional effects on actors. Of special significance is that both empirical studies found that more frequent exchange produced more positive emotions; in one study the key emotion produced was interest/excitement (Lawler & Yoon, 1993) and in the other it was pleasure/satisfaction (Lawler, Yoon, Baker & Large, 1995). Which emotion was most important was unclear at that point. Finally, emotional reactions were shown to be the proximate cause of commitment behaviors in both studies. These initial experiments set the stage for the theory of relational cohesion, to which we now turn.

The Theory of Relational Cohesion

The theory of relational cohesion emerged as a more general account of the commitment process (Lawler & Yoon, 1996). It included a number of important shifts or departures from earlier work. First, whereas earlier work focused on the bargaining process itself and the offer strategies actors employ (i.e. concession making and logrolling), the theory of relational cohesion was more explicitly focused on structural power conditions (i.e. both equal and total power as determined by the quality of alternatives). Although this shift was relatively subtle, it had important effects on the subsequent theory development. Second, there was more theoretical emphasis on the process whereby individuals come to see themselves as members of a common social unit, and a clear distinction between person-to-person and person-to-group bonds. Thus, the concept of “relational cohesion”—the sense of coming together, of something larger that unifies actors and actions—became the central focus of our theorizing. This change was inspired

not only by some of the results discussed above, but also by theories of group formation and social identity, where the movement from individual (or interpersonal) to collective (or group) orientations is well understood (Brown, 2000; Tajfel & Turner, 1979, 1986). Finally, the behavioral indicators of commitment were expanded to include stay behavior, unilateral gift giving, and partaking (investment) in a new joint venture involving the potential for malfeasance. These behavioral indicators parallel the three dimensions of commitment identified by Kanter (1968, 1972).

The main propositions of the theory can be expressed as a causal model depicted in Fig.

1. *Power* is conceptualized as an exogenous structural potential that is distinct from *power use* (i.e. behavioral tactics or strategies) and *power outcomes* (i.e. the division of profit in exchange) (Bacharach & Lawler, 1981; Emerson, 1972a, b; Lawler, 1992b; Molm, 1987, 1990). The theory conceptualizes dyadic power in terms of relative dependence. According to Emerson's (1972a, b, 1981) power dependence theory, the power of A over B (P_{AB}) is equivalent to the dependence of B on A (D_{BA}). The dependence of B on A, in turn, is a joint function varying: (i) directly with the value of resources controlled by A; and (ii) inversely with the availability of resources outside the A - B relationship. The theory of relational cohesion predicts that when actors A and B are equally dependent on one another for valued goods (i.e. relative power is equal), and their mutual or average dependence is high (i.e. total power is high), then A and B should find it easy to reach agreement. These dimensions of power (relative and total) are exogenous structural conditions that create the incentive for A and B to exchange.

Insert Fig. 1 about here

The core of the theory describes an endogenous process, whereby frequent social exchange unleashes emotions, perceptions, and cognitions that bind group members together and to the group as a whole. Emotions are defined as relatively short-lived positive or negative feeling states (Izard, 1991; Kemper, 1978). Frequent social exchange is predicted to elicit emotion; it should lead to *positive emotion* in much the same way that jointly accomplishing a task with another person leads to satisfaction, enjoyment, or excitement. Collins (1981, 1989) also recognizes that emotions are important in social relations, asserting that emotional energy is one type of “glue” that can bind members together when they share a common focus (such as a joint social exchange). Consistent with earlier research, the theory of relational cohesion focuses on two dimensions of positive emotion: pleasure/satisfaction and interest/ excitement (Lawler & Yoon, 1993; Watson & Tellegen, 1985).

The theory asserts that emotions are generalized responses that immediately follow a positive exchange outcome, and these responses are themselves stimuli that lead to further cognitions and attributions regarding the group (Bandura, 1986; Izard, 1977; Weiner, 1985, 1986). Specifically, the theory asserts that positive emotions cause actors to seek attributions for the causes of those emotions. Actors may attribute their positive emotions to their own actions (e.g. “I contributed much to the exchange”), the actions of the other party (e.g. “my partner contributed much to the exchange”) or the relation between them (e.g. “We worked well together to accomplish the exchange”). The theory presumes that since exchange is inherently a *joint* social activity, actors will partially attribute their emotions to their relation. This implies that the actors will come to perceive the exchange relation itself as a salient object of awareness, and the concept of relational cohesion captures this idea. The theory claims that positive emotions induce

a shift in cognitive awareness, such that actors come to see their relation as being more important, stable, and valued over time.

Finally, the theory predicts that relational cohesion is the proximate cause of commitment behavior. The theory asserts that perceptions of relational cohesion lead the exchange relation to become an expressive object of attachment. In Berger and Luckmann's (1966) terms, the relation becomes "objectified" as actors become more aware of the relation as a distinct source of positive emotions. As this occurs, actors are more likely to engage in a variety of prosocial activities such as giving one another small token gifts, continuing to stay in the exchange relation, and initiating new collaborations that involve risk of opportunism or malfeasance. The effect of this is to further expand and strengthen the exchange relation. In this way, commitment behaviors emerge from and reflect the positive emotional impact of social exchange.

The initial test of the theory was conducted by Lawler and Yoon (1996). They reported data from a series of three experiments, each addressing a different form of commitment behavior (i.e. gift giving, stay behavior, and contribution to a joint venture). They also directly tested the chain-process specified by the theory. Each experiment involved two subjects who negotiated exchange for twelve episodes under conditions of (high vs. low) total power and (equal vs. unequal) relative power. The subjects represented two companies, one attempting to buy a resource from the other. The setting simulated negotiations across a large number of "years" or episodes. At select points, and in accord with the theoretical model (Fig. 1), Lawler and Yoon measured each "moment" of the theorized sequence. These measures included: (i) agreement frequency; (ii) positive emotions in the form of interest/excitement and pleasure/satisfaction; (iii) relational cohesion; and (iv) commitment behavior. The temporal sequence

specified by the theory was created in the experimental context, and the research tested the set of relations predicted by the model.

The results of the experiments provide strong and consistent support for the theory (Lawler & Yoon, 1996). High total power and equal relative power produced more frequent agreement in exchange. Frequent exchange, in turn, had a positive direct effect on both pleasure/satisfaction and interest/excitement, as predicted. Positive emotions had a positive direct effect on relational cohesion, also as predicted. The data revealed that both interest/excitement and pleasure/satisfaction had direct positive effects on relational cohesion, when *each* emotion was included as the sole predictor of relational cohesion. However, when *both* emotions were included simultaneously to predict relational cohesion, only pleasure/satisfaction was significant. Overall, while both emotions are important, pleasure/satisfaction played a stronger role in the commitment process. Finally, there was uniform support for the notion that relational cohesion is the proximate cause of commitment. In fact, with all variables in the model included, relational cohesion was the strongest and most significant predictor across all three forms of commitment - stay behavior, gift giving, and contribution. The theory makes strong claims about the sequence of indirect steps through which structural power conditions promote commitment, and these were confirmed at each step by the research.

To summarize, the theory and research on relational cohesion identifies an *endogenous* process through which structures of dependence affect the relational commitment. The first moment in the process is the frequency of exchange; the second is positive (or negative) emotions and feelings; and the third is a perception of the relation as a cohesive object. These three moments are tied together as a conceptual unit. By implication, a structural condition that changes the frequency of exchange should change correspondingly the strength of this

endogenous process; a structural condition under which exchanges do not produce positive emotions should inhibit or prevent the process from operating; and if the emotions experienced are not attributed in part to the relation, they will not generate perceptions of cohesion. This endogenous process can be used to compare different relations within a network, or the same relation across time. It also helps to understand when the exchange relation, as such, takes on value.

The endogenous process can be construed as “creating value” internally, within a given relation, and in the context of repeated interactions. The stronger the endogenous process, *ceteris paribus*, the more intrinsic or expressive value actors accord their exchange relation. Our emphasis on the endogenous process represents a departure from traditional rational choice theory, where the value (or expected utility) of a social relation is imposed exogenously through pecuniary motives (Elster, 1986; Heath, 1975). In contrast, our theory assumes that pecuniary value associated with structural power conditions is imposed exogenously, while nonpecuniary value develops through the endogenous process. This has potentially important implications for the role of emotions in contracting and trading relations among economic or political organizations, when the same individuals repeatedly negotiate for their respective organizations.

Extension 1: Relational Commitments Within Networks

The next significant development in the relational cohesion research program occurred just two years after the initial publication of the theory. In 1998, Lawler and Yoon applied the theory to a more complex problem: How and when do dyads embedded in a larger social network become committed to one another? Whereas previous work explicitly focused on single dyadic exchange relation, the move to “network embedded” dyads broadened the scope of the theory and forged deeper connections to other branches of exchange theory (e.g. Cook &

Emerson, 1978; Cook et al., 1983; Markovsky et al., 1988) and to social identity theory (Rabbie & Horowitz, 1988; Tajfel & Turner, 1979, 1986). It enabled us to address whether “pockets of relational cohesion” develop in exchange networks, particularly for dyads that have the highest frequency of exchange. This is a direct implication of the relational cohesion theory reviewed above.

This extension dealt with dyadic-level commitments in two networks: the branch and the stem (see Fig. 2). In the Fig. 2 networks each letter represents a person and each line represents an opportunity to exchange. Assuming that each position can make only one exchange per round, the branch is a *strong power network* because A can never be excluded while two of the more peripheral actors (B, G or D) must always be excluded (Simpson & Wilier, 1999). Strong power networks such as the branch tend to produce a “bidding war” wherein the low power actors make increasingly favorable offers to A in order to avoid exclusion. This results in large profit advantages for the central actor A. Important for our purpose is that the branch can be viewed as a network consisting of three dyadic relations (A–B, A–G, and A–D) in which A has a relative power advantage.

Insert Fig. 2 about here

In contrast, the stem represents a weak power network because no single individual can, without cost, consistently exclude others from exchange (Lovaglia et al., 1995; Markovsky et al., 1993; Thye et al., 1997). Weak power networks are characterized by more moderate profit differences across positions, and the tendency for some positions to be included more frequently than others. As a result of these forces, the stem network tends to “break” into two distinct exchange relations: an equal power dyad (B–G) and an unequal power dyad (A–D). Thus, the stem represents a network that contains both equal and unequal relative power dyads embedded in the same social context. One question addressed in this research is whether and how network-based power alters the commitment process of relational cohesion theory.

A second purpose is to determine whether relational cohesion, as a form of social bonding, is affected by an exogenous group identity. Research in the social identity tradition indicates two distinct mechanisms that produce group identities: *social categories* and *interdependence*. A central finding is that when social identities are activated in a group context, a variety of prosocial behaviors are likely to ensue. For instance, individuals sharing a common group identity are more likely to be cooperative, collectively-oriented, altruistic, and responsive to group goals rather than purely personal interests. Applied to relational cohesion theory, this implies that commitment is more likely to emerge when the individuals of a network share a common group identity.

Lawler and Yoon (1998) tested these ideas using four experimental conditions in which subjects negotiate exchange in either the branch or stem network, and with or without a common group identity. The main predictions were that: (1) all dyadic relations in the branch will exchange with equal frequency; and (2) the G–D relation of the stem will exchange with greater frequency than A–B. The more frequent exchange along G–D should, according to the chain

logic of relational cohesion theory, produce greater positive emotion, a heightened sense of relational cohesion, and more behavioral acts of commitment relative to the A–B relation.

Lawler and Yoon (1998) also predicted that commitment and cohesion would be stronger when a common group identity is evoked. To implement this idea, in half of the experimental sessions the members of the network were portrayed as “departments” within a larger organization. In the other half, the participants were simply told they were competitors that had an interest in trading with others (Lawler & Yoon, 1998).

The main findings were as follows. First, as predicted, there were no differences in exchange frequencies across the three dyadic relations of the branch network. However, when the members of the branch shared an exogenous group identity, profit differences were reduced. It appears that if network members have a common group identity, they take this into account such that low power actors yield less than they otherwise would, and high power actors are more conciliatory. Second, in the stem network, actors in the equal power relation (G–D) found it somewhat easier to reach agreement than those in the unequal power relation (A–B). Moreover, the commitment process was stronger in the equal than the unequal relation. That is to say, there was greater pleasure/ satisfaction, interest/excitement and relational cohesion in the equal power G–D relation compared to the unequal power A–B relation. Further, regressions within the unequal power A–B relation of the stem indicate frequent exchange did not produce positive emotions; the endogenous process broke down at this point. Unequal power relations generated weaker effects than equal power relations along each moment of the endogenous process. Of particular note, the crucial effect of exchange frequency on positive emotion was present only under equal power. In sum, support for the theory was quite strong.

An unexpected finding of this study was that the low power actor in the stem (D) seemed to respond to the fact that s/he had no alternative partners. Actor D reported negative emotional reactions to exchange, and there was a marginal negative relationship between this actors' perception of cohesion and commitment behavior (stay behavior). That is to say, higher cohesion actually reduced commitment. Our interpretation for these patterns was that for actor D in the stem, exchanges with A are essentially "forced" and involuntary. Some degree of choice or voluntarism may be important to the development of cohesion and commitment in exchange relations (Deci, 1975). In fact, this is implied by a classic idea from Homans (1961). He argued that sentiment develops in relations especially if each actor has an alternative partner, but their alternative relation is likely to generate lower benefits than the focal relation. Having the option of another partner (however poor) may be necessary for the emotional/affective process to operate. This would explain the response of the low-power actor in the stem network (Lawler & Yoon, 1998).

The importance of having choices or options also is suggested by the theory of affective-attachments (Lawler, 1992a, 1997). That theory suggests that a voluntaristic exchange relation should generate a heightened sense of control, more positive emotions, and stronger affective attachment to the relevant social unit, in this case, the exchange relation. In order to examine the role of choice or voluntarism, we recently conducted another experiment to compare the relational-cohesion process in voluntary vs. involuntary exchange relations (Lawler, Thye and Yoon unpublished).

The box network shown in Fig. 3 created the appropriate experimental conditions. Here: (i) each actor had two potential exchange partners; (ii) the prospective exchanges had different value so that each actor had a clear partner preference; and (iii) of the two key exchange

relations, A–B was voluntary (i.e. actors A and B were each other's first choice) and G–D was involuntary (i.e. actors G and D were each other's second choice). The G–D relation essentially formed “on the rebound,” because preferred partners A and B were exchanging with one another. The results of this study showed that the commitment process was present *in both* the voluntary A–B and the involuntary G–D exchange relations, but it was consistently stronger in the voluntary A–B relation. Thus, there is support not only for the role of relational cohesion in equal-power relations, as shown in the stem network, but also for the affect theory notion that the emotional process is stronger when actors perceive control over the choice of an exchange partner (Lawler, 1992a, 1997).

Insert Fig. 3 about here

Extension 2: Group Cohesion in Productive Exchange

The next significant development in the relational cohesion research program simultaneously expanded the theory along two fronts. First, the theory was tested in a *new productive exchange context*. Productive exchange is one of four basic forms of exchange identified by exchange theorists (see Emerson, 1976, 1981; Molm & Cook, 1995), the others being negotiated, reciprocal, and generalized. Productive exchange is group-oriented and indirect. That is, the exchange occurs from person-to-group. Negotiated exchange and reciprocal exchange are inherently dyadic. Negotiated exchange entails the direct exchange of offers and counter offers and explicit, binding agreements before benefits transfer. Reciprocal exchange involves sequential giving over time, without an agreement, and with unspecified obligations for reciprocity. Generalized exchange is comprised of a sequence of unilateral giving, over time, among three or more actors in which they give and receive from different others. A common form is a closed chain of giving, in which A gives to B, B gives to C, and C gives to A. This is often termed “chain generalized” in the exchange literature (Ekeh, 1974; Yamagishi & Cook, 1993). Like productive exchange, generalized exchange is a multi-actor form involving three or more individuals. These different forms of exchange are themselves underlying structural conditions, capable of generating variations in cohesion and solidarity (see Lawler, 2001 for a theoretical analysis).

To date, almost all of the research on social exchange involves “direct exchange” in the form of negotiated or reciprocal transactions (Cook & Emerson, 1978; Markovsky, Wilier & Patton, 1988; Thye, 2000; Wilier, 1999; see Yamagishi & Cook, 1993 for an exception). Productive exchange has received very little attention from exchange theorists; yet, it can have important implications for how exchange processes lead to group formation. We first clarify the

distinct properties of productive exchange, and then describe an extension of relational cohesion theory and empirical test in a productive exchange context.

Lawler, Thye and Yoon (2000) conceptualize productive exchange in terms of four basic properties. First, productive exchange involves two or more individuals who combine resources to produce a single, socially produced outcome. This outcome can be an object (such as a book chapter authored by three colleagues) or another event (such as a department potluck dinner). Second, productive exchange entails higher degrees of interdependence compared to the other forms of exchange (Molm, 1994). The reason is that productive exchange relations can be disrupted by any single member, and thus, require the assent of *all* members to be successful. Third, productive exchange poses significant coordination problems for the actors. Given the high levels of interdependence and the multi-actor nature of the productive exchange context, the production of joint activity is simply more challenging than in dyadic exchange. Finally, in productive exchange, inputs flow from person-to-group and benefits flow from group-to-person. All other forms of exchange entail person-to-person inputs and flows of benefit.

The second major contribution of this research is that we empirically compare the emotional-affective process of relational cohesion theory to an uncertainty reduction process (Lawler, Thye & Yoon, 2000). Recall that the traditional exchange theory explanation for commitment is that frequent exchanges reduce uncertainty (Cook & Emerson, 1984). That is, actors who exchange frequently should learn more about one another, come to find each others' behavior more predictable, and come to learn they are similarly oriented to the exchange (Cook & Emerson, 1984; Emerson, 1981; Kollock, 1994, 1999). Building on this idea, we expanded the relational cohesion model to test whether uncertainty reduction is a distinct, yet complementary, pathway to commitment vis-a-vis emotion.

Insert Fig. 4 about here

Figure 4 shows the revised theoretical model tested in this research. In general terms, the pathway through uncertainty reduction can be construed as a *boundary defining* process through which exchange partners become salient, distinctive, and set off relative to other potential partners. Social identity theorists frequently use the term “distinctiveness” to describe the property of being attached to a group or larger social category (Brewer, 1991, 1993). Our boundary defining process can be construed as a process through which a sense of distinctiveness emerges. Moreover, as the focal exchange relation becomes more familiar and predictable, it should be perceived as less risky relative to others. It has long been established in cognitive psychology that, all else being equal, individuals tend to become more risk averse when the decision context is “framed” positively (Tversky & Kahneman, 1981). In our study, the negotiations among actors are framed positively because they stand to gain more in the focal group or relation than elsewhere. As such, risk aversion processes should render the focal group or exchange relation a salient object of awareness.

At the same time, the pathway through positive emotion can be construed as a *social bonding* process. The positive emotion from frequent exchange is, in part, generated by the other actors and the group context itself. Such emotions are “rewards” generated by the exchange and completion of joint activity. As such, actors should strive to reproduce these rewards and also think about their proximate causes. To the extent that the group is perceived as a cause of the positive emotional experience, the group itself should come to take on expressive value in its own right (Tyler, 1990, 1994). It is now generally understood that boundary defining and social bonding are distinct, complementary mechanisms that produce group cohesion (Yoon & Thye, 2002). The theory of relational cohesion reflects this logic.

The revised theoretical model was tested using a new productive exchange experimental protocol. In this context, three actors faced a task in which they could produce greater joint benefits if they all collaborated than if they operated alone or worked with another group. Consistent with the concept of productive exchange defined above, the exchanges were structured such that: (i) actors in this context were deciding whether to engage in a single collaborative effort that would produce a pool of joint profit; (ii) for an exchange to be consummated, all actors had to agree to the exchange; (iii) the exchange would allocate the pool of profits across actors; and (iv) offers were made simultaneously and independently which posed significant coordination problems. Overall, joint efforts produced joint profits (actor-to-group flow of benefits) and the joint profit benefited each of the actors (group-to-actor flow of benefits).

Structural power conditions were manipulated by varying the relative (equal vs. unequal) and total (high vs. low) dependence of each member on the group (see Lawler, Thye & Yoon, 2000). Consistent with the earlier tests of relational cohesion theory, dependence was operationalized as the quality (expected value) of a fixed outside offer that could be accepted in the event the focal group did not reach agreement. Under these conditions, subjects exchanged for a total of 16 episodes. At several points in time exchange frequency, positive emotion, predictability, and relational cohesion were measured. Additionally, two kinds of commitment behavior were studied. After the 13th episode, subjects could either give one another small token gifts as a symbol of their relationship (i.e. gifts of small pieces of candy) or they could invest some of their earnings in a new joint venture that involves considerable risk but could provide substantial benefits (i.e. investment in a 3-person prisoner's dilemma game).

The analysis focused on whether or not behavioral commitment emerges through the sequence of steps shown in the model. Here we briefly review the main findings for each step in turn. First, as predicted, the data indicate that structural power conditions have a significant effect on exchange frequency. Under conditions of high total dependence (i.e. the expected payoff from the alternative group is smaller than the expected payoff from the focal group) and equal relative dependence (i.e. the expected payoff from the alternative group is the same for each member of the focal group), the actors found it easier to reach agreement. In turn, frequent social exchange had a significant direct effect on *both* positive emotion and uncertainty reduction (i.e. predictability). These findings are important because they: (i) replicate and further verify the emotional effects of frequent exchange; and (ii) support the hypothesis that exchange also generates uncertainty reduction or predictability. The latter finding is consistent with standard exchange-theoretic explanations for commitment and recent empirical tests (e.g. see Kollock, 1994).

The next step in the theorized causal chain indicates that both uncertainty reduction and positive emotion increase perceptions of group cohesion. The results indicate that positive emotion has a significant effect on perceptions of group cohesion, as hypothesized, but uncertainty reduction does not. In short, the data indicate that positive emotions are more important to the development of group cohesion than uncertainty reduction. If uncertainty reduction is an important factor in the development of commitment, then it must operate through a pathway other than perceptions of cohesion. The emotional affective process at the core of relational cohesion theory receives significant support, whereas the role of the uncertainty reduction process is questioned.

Finally, the theory predicts that group cohesion is the proximal cause of both gift giving and contributions to a social dilemma, our measures of commitment. The results for this prediction are mixed, but yield interesting implications. Consistent with virtually all research in the relational-cohesion program, perceived cohesion had a significant effect on gift giving. However, group cohesion did not significantly affect the propensity of actors to invest in a new venture (i.e. cooperate in the social dilemma). In previous work on dyads, relational cohesion effects have been found for this form of commitment behavior (Lawler & Yoon, 1996). The difference could be due to the fact that the obstacles to cooperation are known to be more difficult in a three-person prisoners' dilemma than in a two-person prisoners' dilemma. The addition of a third person heightens uncertainty and makes trust more difficult for actors under these conditions. We suspected initially that this would make it even more likely that the uncertainty-reduction pathway would be present and operate through group cohesion. Another possibility is that uncertainty reduction does indeed operate, but not through perceived group cohesion or, by implication, the assumed boundary-defining process.

To investigate this, we changed the original theoretical model to include several new pathways suggested by prior theory and by our data. The results revealed a direct effect of perceived predictability on the investment-dilemma form of commitment. Thus, uncertainty reduction does operate in the productive exchange context, but not in the way we originally theorized. What makes this alternative pathway to commitment important is that it can be interpreted in terms of trust. *Trust* — defined as expectations of cooperation by others (Pruitt & Kimmel, 1977) — is a key concept in theory and research on social dilemmas and how they are resolved (Axelrod, 1984; Kollock, 1994, 1999; Komorita & Parks, 1996; Yamagishi, 1986). To be trusted, one must first be predictable, so in this regard, predictability can be construed as a

necessary (though not sufficient) condition for the emergence of trust. If so, we should observe a direct relationship between predictability and investment, as we did.

To summarize, we find considerable evidence for a dual-process conception of commitment wherein emotional-affective and uncertainty-reduction mechanisms promote different forms of commitment behavior. Of particular importance for relational cohesion theory is that the emotional/affective process operates as a separate and independent mediating process leading to commitment behavior. Other processes - such as uncertainty reduction, trust and norm formation - have been emphasized in research on exchange, contracting, and social dilemmas (e.g. Cook & Emerson, 1984; Macy & Skvoretz, 1998; Williamson, 1975, 1981; Yamagishi, 1986). Relational cohesion theory is unique in its emphasis on the emotional aspects of social exchange, and in demonstrating how relations become salient and valued in and of themselves.

Summary of Implications

Over the past decade our research program has evolved to include new theoretical concepts and empirical phenomena on how relational cohesion and commitment develop in exchange relations (Lawler, 1992a, 1997, 2001, 2002; Lawler & Thye, 1999; Lawler & Yoon, 1993, 1996, 1998; Lawler, Thye & Yoon, 2000). There are both implicit and explicit implications that capture what we have done, and are a springboard for moving beyond the domains we have specifically studied. Below, we set forth a series of general principles that abstract the program's broad implications, and foreshadow our current and future directions.

Proposition 1: Structures of equal power and of high total power (mutual dependence) are most prone to relational or group commitment.

Power is typically seen as a dark, negative, destructive force that divides, differentiates, and stratifies human actors. Using a power-dependence perspective (Emerson, 1972a, b), we

theorize a positive side to power, suggesting how and when structural power conditions promote cohesion in and commitment to social units. Virtually all of our research since 1993 indicates that, *ceteris paribus*, equal power relations are more likely to yield exchanges, positive emotions, perceptions of relational cohesion, and behavioral acts of commitment. The same notions apply to relations of higher total power or mutual dependence in social structures. While we have applied these notions to particular exchange networks (modified line, branch, stem, and box networks), the underlying principles should be broadly applicable to social networks.

A question that needs to be addressed is whether the notion of cohesion at the dyadic level can be extended to the network level. Are there network conditions likely to generate positive emotions, perceptions of cohesion, and a sense of coming together across the entire network? We have developed a concept of *network cohesion* that specifies two such network conditions: (i) the proportion of relations within a network that are equal power, and (ii) the degree of relational density in the network (Thye & Lawler, 1999). The main assertion is that exchange networks containing a high degree of equal power relations and many direct ties among actors will unleash the endogenous process of relational cohesion theory at the *network level*. This could help us understand if, and when, exchange networks become minimal groups (Tajfel & Turner, 1986).

Proposition 2: Joint social activities produce positive emotions; and positive emotions are an important mechanism producing micro social order or solidarity.

This casts the endogenous process more broadly. An important underlying assumption is that social exchange is a joint activity par excellence. That is, it can only be accomplished with others. As task-oriented behavior, exchange is likely to make people feel good or bad after the fact, and as a joint task, they may infer similar or shared emotional experiences (Collins, 1981).

One can understand the conditions under which structures generate commitment behavior (via emotions) in terms of jointness and shared experience (Lawler & Thye, 1999; Lawler, Thye & Yoon, 2000; Lawler & Yoon, 1996). Equal power may generate more sense of a joint task and shared emotions than unequal power relations, and the same can be said for higher levels of total power or mutual dependence. Perhaps the most unique feature of our research program, compared to others that focus on cohesion and commitment, is that positive emotion is the primary mechanism connecting exchange to outcomes such as cohesion, commitment, and solidarity (cf. Doreian & Fararo, 1998; Markovsky & Lawler, 1994).

A next step is to look more closely at the nature of exchange tasks, how they generate emotion, and the conditions under which social-unit attributions are made to relations and networks. This step is undertaken in recent theorizing (Lawler, 2001, 2002). Lawler (2001) has proposed an *affect theory of social exchange* that places an emoting actor at the center of exchange theorizing. He argues that different structural forms of exchange - productive, negotiated, reciprocal, and generalized (Emerson, 1981; Molm & Cook, 1995) - entail tasks with different degrees of jointness; and, this effects the solidarity of resulting relations or groups. Tasks that involve more jointness ostensibly promote a stronger sense of shared responsibility for the results of exchange. Shared responsibility, in turn, promotes attributions of emotion to relevant social units, because these are the context for actors' common focus and activity. This theory can help explain when and how networks become groups on a cognitive or behavioral level (see Lawler, 2001). For example, the conditions for high network cohesion - dense ties of equal power (Thye & Lawler, 1999) - may also generate a greater sense of shared or collective responsibility at the network level. Future research will test these and other predictions of the affect theory of social exchange.

Proposition 3: Social identity processes undergird and strengthen cohesion and commitment.

Over the past decade, the theory of relational cohesion has forged closer connections to the principles of social identity (Brewer, 1993; Brown, 2000; Tajfel & Turner, 1986).

Emphasizing the interdependence and common fate underlying exchange relations, and the distinctiveness of focal vs. alternative relations, it is not difficult to imagine that relational cohesion involves “incipient group formation” (Lawler & Thye, 1999; Lawler & Yoon, 1996).

Whereas early research established the importance of emotions (Lawler & Yoon, 1993), later research added “relational cohesion” to the endogenous process, and suggested that the emotions are a source of incipient group formation. Relational cohesion might be construed as a form of “group identity” driven by common emotional experiences of actors (Collins, 1981, 1989).

An important next step is for us to investigate the conditions under which larger and more complex exchange networks develop into groups. This is a fundamental question posed by Emerson (1972a, b, 1981) and never fully answered by social exchange theorists. At this stage we now have the theoretical apparatus to undertake this task, given: (i) strong and cumulative support for relational-cohesion theory (Lawler, Thye & Yoon, 2000; Lawler & Yoon, 1993, 1996); (ii) the theoretical extension to network-level cohesion (Thye & Lawler, 1999); and (iii) principles of the affect theory of social exchange (Lawler, 2001). With this framework already in place, there is little doubt our research can move toward answering Emerson’s (1972a, b, 1981) question: When do networks of self-interested actors develop into groups of collectively-oriented actors?

The theory of relational-cohesion is unique in its emphasis on the role of emotions in social exchange and its focus on the mediating processes through which social structures

strengthen or weaken the cohesiveness of exchange relations. There are a wide variety of ways that emotions can play a role in social exchange (see Lawler & Thye, 1999 for an analysis of these). In the theory of relational cohesion, the primary focus is on how emotions induce "social formations." We argue that when emotions mediate social formations, the relevant social units take on value in and of themselves. For this reason, emotion-based cohesion renders social units - be they relations, networks, or groups - expressive and symbolic of shared activity, common experience, and collective affiliation. Emotions offer a way to understand how social exchange processes generate social formations with considerable resilience, for good or ill.

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Figure 1. The Theory of Relational Cohesion.

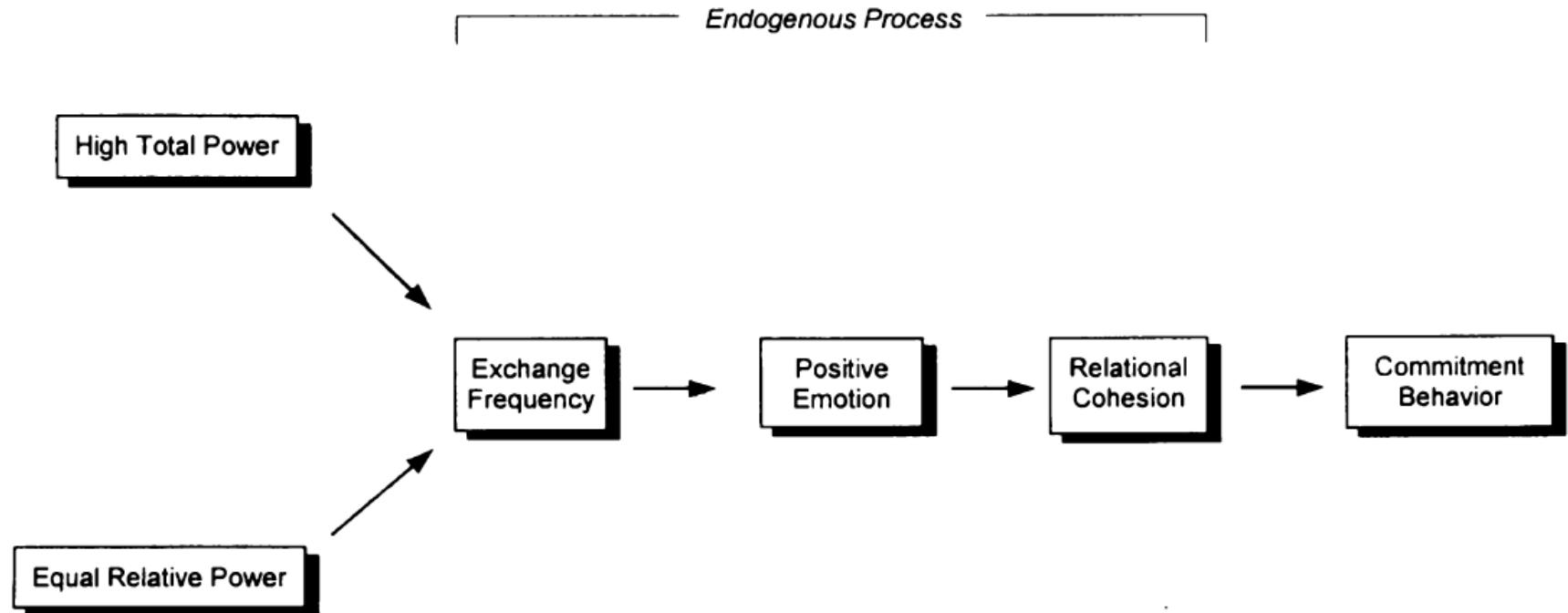
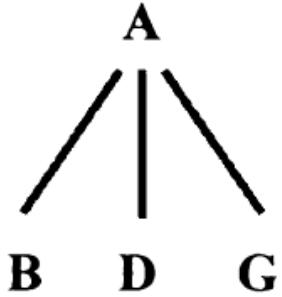
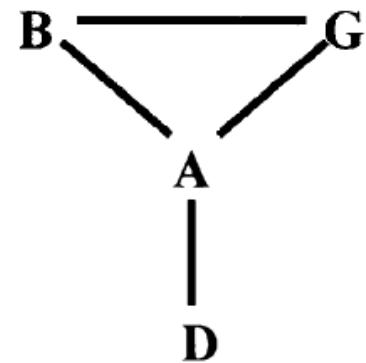


Figure 2. Two Exchange Networks.



Strong Power - Branch



Weak Power - Stem

Figure 3. The Box Network.

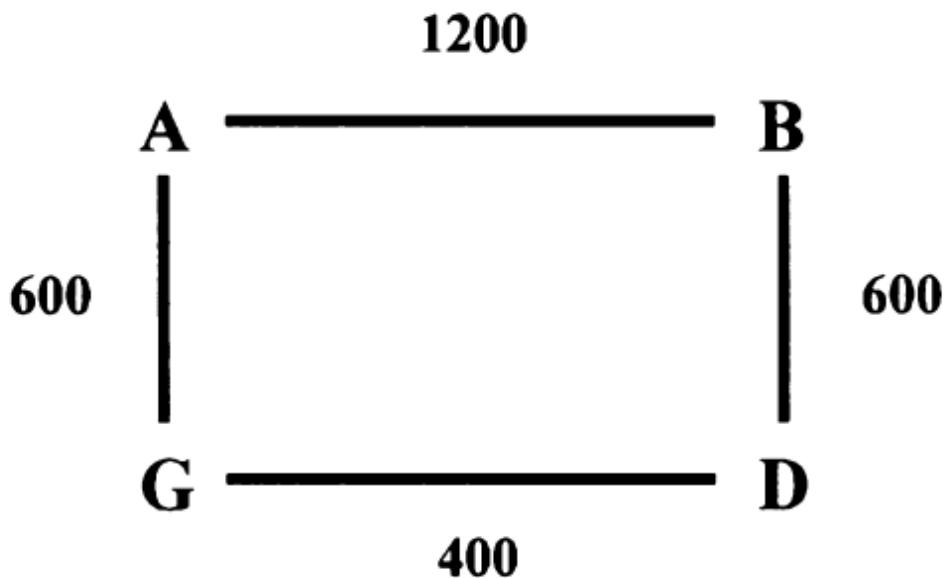


Figure 4. Model Tested in Productive Exchange Study.

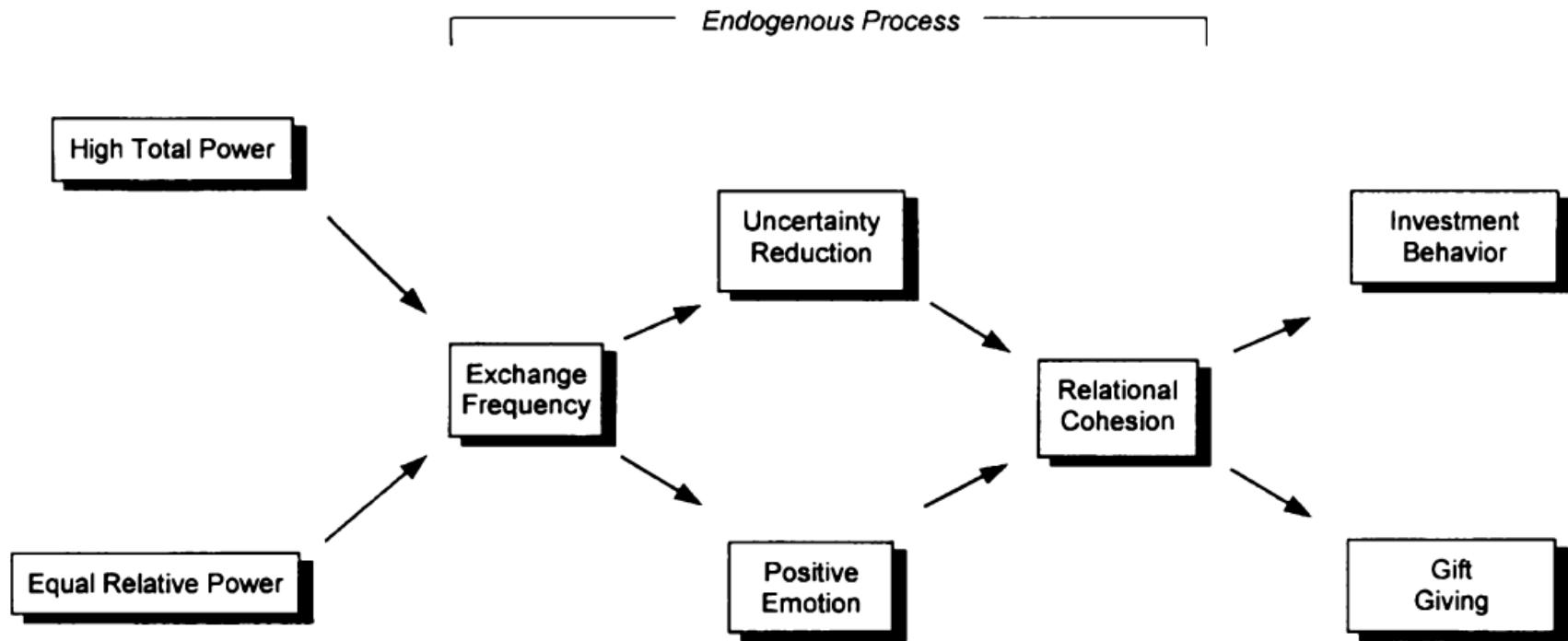


Figure Captions

Fig. 1. The Theory of Relational Cohesion.

Fig. 2. Two Exchange Networks.

Fig. 3. The Box Network.

Fig. 4. Model Tested in Productive Exchange Study