Testing a Life-Cycle Theory of Cooperative Interorganizational Relationships: Movement Across Stages and Performance

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This research examines the evolution of cooperative interorganizational relationships and provides an empirical test of four propositions from the DSO (Dwyer et al. 1987) life-cycle theory, and one proposition from the RV (Ring and Van de Ven 1994) theory of relationship development. Using primary data from over 1,500 resellers in a channel of distribution, we find that the mature phase is not the pinnacle of the relationship lifecycle; relationship properties (e.g., relationship harmony, overall dependence, and the reseller's trust in the manufacturer) in this stage are no different than in the build-up phase. However, relationship properties that support relationship expansion (e.g., goal congruence and information exchange norms) reach their zenith in the build-up phase and afterwards fade into the background. All of the various relationship properties hit their nadir in the decline phase.

We also examine the development of relationships over a five-year period and consider whether movement across the stages in accordance with DSO's theory has the same association to overall performance evaluations as movement through regressive patterns. We find that a negative history extracts a price: Movement through regressive patterns is negatively related to performance, and these relationships *do not* enjoy a fresh start. Instead, these movements can last for an extended period of time and are negatively related to performance outcomes during the decline phase. Thus, the development path taken appears to be related to the results achieved. Finally, we also find evidence of the critical role that individual sales representatives play in creating successful interorganizational relationships.

Key words: interorganizational relationships; cooperative relationships; life-cycle theory; path dependence; performance; relationship decline
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Introduction

Cooperative interorganizational relationships are critical to business practice worldwide and used for a variety of purposes, including product supply, research, new product development, market entry, production, and the exploitation of complementarities. As a result, interorganizational relationship research has mushroomed, challenging the traditional centrality of the firm (Koza and Lewin 1998). Despite this, relatively little is known about how relationships develop over time (Ariño and de la Torré 1998). Interest is growing: A special issue of *Organization Science* on cooperative interorganizational relationships contains no fewer than five articles taking evolutionary, lifetime views of relationships between organizations (Koza and Lewin 1998). However, constructing a lifetime theory of relationships is exceptionally difficult. Empirically, the challenge is to trace ongoing processes (often unnoticed by the participants them-

selves) over a long time period (because cooperation between organizations builds slowly). Theoretically, the challenge is to sacrifice descriptive richness judiciously to highlight processes that are general and robust and that offer falsifiable implications. Further, considerable theory already accounts for each element of a cooperative interorganizational relationship (trust, performance, structure, incentives, and so forth). A theory of relationship development must be congenial to theories of relationship elements.

Two ambitious efforts to meet the theoretical challenge have each made considerable impact. Dwyer et al. (1987) (hereafter DSO) proposed a comprehensive life-cycle theory of the development of relationships between organizational buyers and organizational sellers. DSO proposed that a relationship passes through a fairly rigid sequence of five stages and offered numerous propositions about properties of the relationship in each stage, paying relatively little atten-

tion to the individual managers representing each organization. Ring and Van de Ven (1994) (hereafter RV) proposed a theory of relationship development (for any kind of cooperative interorganizational relationship, not just buyer-seller) that is cyclical, where the steps repeat. The RV explanatory mechanism focused on the behavior of the individuals representing each organization. RV proposed that the parties cycle repeatedly through a set of four activities unless and until the relationship terminates. In contrast, DSO posited five stages that occur slowly and typically only once. Although different in their explanatory mechanisms (relationship versus individuals) and structure (a one-time sequence versus repeated cycles), both theories rest on MacNeil's (1980) relational norms approach and coincide substantially in their premises and predictions. Both are theories of relationship development, which stress unfolding events, whereas other theories stress conditions at the time of founding (Ariño and de la Torré 1998).

Both RV and DSO are heavily referenced. As of this writing, the ISI citation count is over 650 for DSO and over 350 for RV (most articles receive no more than a handful of such citations). However, both RV and DSO are typically invoked to support single hypotheses referring to correlations at one point in time, as opposed to relationship development over time. Although they are comprehensive models, neither approach has been tested comprehensively—not for lack of falsifiable propositions, but for lack of data.

A latent issue in relationship evolution concerns the operation of path dependence. Naturally, evolutionary theories such as DSO and RV highlight the importance of history. This apparent agreement masks a fundamental discord about history's role. Evolutionary relationship theories agree that constructing a cooperative relationship takes time. Once foundations are laid, an asset is in place, but what happens if (when) the relationship crumbles? Here is where cycles (RV) contradict stages (DSO). RV considers the possibility of repeated cycles of negotiation, commitment, and execution, even after violations of commitments. In contrast, DSO argues that failed relationships will be abandoned because they are a liability, difficult to revive and redirect profitably. We test this critical difference between DSO and RV. We also test the RV premise that individuals are critical, versus the DSO premise that properties of the relationship carry the day and individuals play only a minor role.

This research, based on over 1,500 relationships, makes a number of key contributions to our understanding of how relationships develop over time. We offer the first large-scale empirical test of evolving cooperative relationships between buyers and sellers. We also examine the performance of relationships that have progressed through the sequence of

stages according to the life-cycle conceptualization, and contrast these relationships with those that have regressed (faltered, then revived). These relationships have gone "backwards" in the sequence, "aberrant" by DSO standards, where RV considers the possibility of regression as a new cycle.

We find that the DSO theory is predictively valid but overly complex; we suggest the Rousseau et al. (1998) model as an appropriate simplification (from four ongoing relationship stages to three). We also find that many firms revive troubled relationships, as per RV (and counter to DSO), which appears effective—unless the relationship has gone into decline. Evidence also suggests that troubled buyer-seller relationships, once reconstituted, may never fully recover. Finally, we find that many relationships—though stable, satisfactory, or even superior to arm's-length contracting—are humdrum: The organizations find them no stronger or more satisfying than other relationships that gained momentum and are considered to be on an upward path. The growing expectations of the build-up stage do not appear to pave the way to an even better relationship later. Maturity is not *the* summit of relationships, but is *a* summit.

Given the difficulty of gathering longitudinal data, we collect data at one point in time, classify the relationships by stage, and then use a multisample modeling approach to assess different construct relationships (cf., Anderson 1995). The analysis uses extensive primary data from customers of a leading supplier of chemicals who classify their relationships into different stages of cooperative development. The relationship properties are compared across stages to test DSO predictions. A subset of over 1,300 of these relationships contains the same informant, who was in place five years earlier and can report the status of the relationship at that time. We compare the performance of relationships that took different paths to their current status, finding that the path taken exerts a lasting impact on current performance.

This paper is organized as follows. The DSO and RV approaches to relationship evolution are compared and contrasted, and the discussion turns to the development of various relationship properties across phases. We then focus on path dependence, contrasting the ideas of healing/recycling (RV) versus scarring/foreclosure (DSO). The methods section describes a rigorous measure development procedure, followed by empirical tests. We close with a revised theory of cooperative interorganizational relationship development and suggestions for management practice and future research.

Theoretical Development

The DSO and RV Frameworks

RV inductively derived a general theory of relationship development by observing a small set of interorganizational relationships, focusing on the behavior of individuals. RV structured this theory by relying on MacNeil's (1980) theory of relational norms (which is also inductively derived from observation of contracts). In contrast, DSO focused more on the behavior of organizations and rests on an eclectic combination of theory from political economy, sociology of organizations, transaction cost analysis, marketing exchange, social exchange, bargaining and conflict theory, and relational governance. In spite of their different roots, these theories are compatible in approach and coincide in most of their predictions. Both DSO and RV used relational norms as a central organizing concept. The two theories share the premises that equity and performance matter equally to participants. RV and DSO further agree that building a relationship takes time and involves creating mutual dependence and shared norms. Both approaches underscore the role of trust and idiosyncratic assets in creating superior performance.

Each framework posits a starting point of low (or no) norms. Organizations may be doing business already, but in another domain or merely as a market contract. Step 1 for creating a cooperative relationship is developing shared purposes, values, and expectations (which RV call "congruence"). From here, the theories diverge in several respects. DSO posited that relationships develop according to a predictable, stable series of events occurring in a fixed order: They began with a phase of (1) *awareness* of the possibilities another organization presents, followed by acceleration through phases of (2) *exploration*, (3) expansion (*build-up*), and finally, (4) commitment (*maturity*). Some then enter a phase of (5) *decline*, perhaps ending in (6) *dissolution*. (Like RV, we assume that there are motives to collaborate and simplify the discussion below by skipping the awareness stage.) DSO acknowledged that not all transactions move through these phases to develop into relational exchanges. In the DSO view, transactions that are not relational will be discrete—that is, classic arm's-length market contracting, with no joint efforts and no future time horizon.

In contrast, RV posited these processes: (1) *negotiation* to start a relationship, (2) commitment to an *agreement*, (3) *execution* of the agreement, (4) *assessments* of how the relationship is unfolding, and (5) terminating the relationship (*discharge*). RV explicitly noted (p. 93, Footnote 3) that this is not one sequence of stages. It is a continuous cycle of events that occurs and recurs within each of the five DSO phases: RV modeled the processes occurring within a DSO stage. Hence, RV offered a cyclical theory of development, whereas DSO offered a theory of stages of evolution ordering once in a fixed order.

A striking feature of DSO is an abundance of specific propositions about what should be happening as organizational pairs march in a linear fashion through the five stages. DSO offered a surprisingly simple proposition: A multitude of relationship properties follow the same path, rising and falling tidily because many are related over time. These properties are low in the exploration phase, rise in the build-up stage, climax at maturity, and then fall, reaching their nadir as the relationship dissolves. This pattern is not built into the definition of each stage, but is expected to appear when the stage is achieved. For example, erecting norms should eventually facilitate trust and thus enhance performance. We test the implications of this theory rather than its causal processes. The theories speak to the establishment of norms, dependence, and trust and performance as key characteristics of ongoing relationships. We now consider each of these areas in turn.

Norms and Goal Congruence Through Stages of Relationship Development

Cooperative relationships require that norms, or expected patterns of behavior, develop. A key to facilitating the establishment of these norms is goal congruence. If firms cannot sort out their priorities (long versus short term, market share versus growth, volume versus profit, and so forth), their relationship will never move beyond proclamations. However, they cannot achieve goal congruence by fiat or contract: It must grow organically via interaction, negotiation, and sense-making processes. Likewise, a norm of frank and copious communication is also critical. Although this information exchange is costly and risky, holding back will stunt an interorganizational relationship. Finally, firms learn to confront and resolve their conflicts such that relationship harmony increases steadily to maturity. Discontent and disagreement may then set in to drive decline and dissolution. This sequence leads to a first set of hypotheses:

HYPOTHESIS 1. *Each of the following properties will be low in exploration, higher in expansion, highest in maturity, and lowest in decline/dissolution:*
(a) *goal congruence,*
(b) *information exchange norms, and*
(c) *relationship harmony.*

Dependence and Idiosyncracy Through Stages of Relationship Development

One of the most important elements of an interorganizational relationship is its degree of dependence.

One party is dependent when the other offers valued benefits that are difficult to obtain elsewhere (Emerson 1962). Organizations build relationships to obtain benefits that they cannot readily create themselves. However, dependence creates exposure to opportunism (Williamson 1996), but much of interorganizational relationship theory converges in the idea that accepting, even deepening, dependence is necessary to achieve a competitive advantage. RV argued that the execution and assessment cycles largely turn on issues of building and accepting dependence. DSO argued that relationships without high overall dependence are either very young or about to dissolve.

Organizations create value in a relationship by creating assets that are idiosyncratic—that is, customized to their relationship and difficult to redeploy without significant loss of productive value such as specific adaptations in its systems, strategies, and so forth. This situation also creates dependence. As relationships deepen, an organization makes these investments, risking vulnerability. According to Williamson (1996), the best protection against opportunism in a relationship is for each side to invest heavily in assets tailored to the relationship. Such bilateral idiosyncratic investments function as credible commitments, giving each side a reason to operate in good faith to maintain the relationship. DSO argued that bilateral specific assets arise organically as a relationship progresses and that they generate value and protect the interorganizational relationship. However, this reasoning is widely disputed. For example, Ghoshal and Moran (1996) argued that Williamson's (1996) theory overplays the threat of opportunism and that the role of idiosyncratic assets is minor. In short, DSO reasoning leads to a second group of hypotheses.

HYPOTHESIS 2. *Each of the following properties will be low in exploration, higher in expansion, highest in maturity, and lowest in decline/dissolution:*

(a) *the overall dependence of the parties to the relationship,*

(b) *idiosyncratic time investments by one side,*

(c) *idiosyncratic adaptation investments of existing routines by one side, and*

(d) *bilateral idiosyncratic investments (that is, made by both sides).*

Trust and Risk Taking Through Stages of Relationship Development

As trust is a central organizing construct (McEvily et al. 2003), it plays a major role in interorganizational relationship development. Willingness to be vulnerable under conditions of risk and interdependence (Rousseau et al. 1998) is generally considered to be a crucial attribute of any relationship. The mainstream view holds that trust builds slowly from experience, but this view can be disputed; some contend that trust

arises naturally and easily in business relationships (e.g., Ghoshal and Moran 1996) and may be initially very high (McKnight et al. 1998). DSO sides with the mainstream (and with RV) in arguing that trust must be earned. The parties become increasingly willing to take risks on each other's behalf, confident that risks will turn into better performance; considerations of performance and equity are central in relationship development (Ariño and de la Torré 1998). There is a counter view that close relationships may not perform well. A close relationship with the wrong partner precludes an organization from finding a better match (Gulati et al. 2000). A dark side accompanies close relationships, which can degenerate into opportunism or shield firms from healthy competitive discipline (Soda and Usai 1999). Also, RV pointed out that unless both sides benefit, concerns over equity will ruin the relationship.

Both RV and DSO argued that as relationships develop, organizations will come to prefer and rely on them, in the expectation of benefits accruing from the specific capital that they accrue. Accordingly, organizations will be less willing to work with other firms as the relationship progresses. This reverses itself as an organization seeks to leave the relationship.

HYPOTHESIS 3. *Each of the following properties will be low in exploration, higher in expansion, highest in maturity, and lowest in decline/dissolution:*

(a) *the organization's trust in the other organization,*

(b) *the organization's willingness to take risk,*

(c) *the organization's outcomes given comparison level of alternatives, an assessment of partner attractiveness on critical performance outcomes, compared to what another partner might provide, and*

(d) *the inverse of the number of seriously considered alternative partners.*

Path Dependence and Performance

It is notoriously difficult to operationalize and measure the performance of a single organization, let alone the relationship between two of them (Lewin and Minton 1986). We proxy relationship performance as the reseller's overall evaluation of the supplier's performance (Kumar et al. 1992). This may not correspond to what the producer might have gained or what value the relationship might have generated overall. For the reseller to rate the relationship as an excellent performer, the relationship must have "grown the pie" and the reseller must have received enough of this value to consider the relationship a success from its own standpoint. This corresponds to both RV and DSO: Parties invest in moving their relationship through stages of development to further their self interests.

Evolutionary theories of the firm emphasize path dependence, the idea that a firm's past performance

and choices strongly influence its present performance and choices (Nelson 1995). History determines potential performance, and influences how social actors perceive relationship dynamics, frame relationship performance, and set their time horizon (Grewal and Dharwadkar 2002). But how? Here, the literature diverges. Much of the interorganizational relationship literature has argued that history is a hard-won asset that organizations seek to renew and redeploy. Thus, organizations tend to revive troubled relationships. RV embraced this position, arguing that players can enter a new cycle of relationship development. Gulati and Gargiulo (1999) found that current networks tend to grow out of past networks. Firms use existing partners for new activities rather than risk that a new organization's capabilities and reliability are inadequate. Gulati (1995) found that sheer familiarity appears to breed trust. However, DSO expected precisely the opposite—that firms will not revive a troubled relationship but will instead "move toward the commitment phase or dissolve along the way" (Cannon and Perreault 1999, p. 456). DSO also argued that firms can remain in a given phase for a long time. The DSO framework thus anticipates paths of stability and progression, but considers paths of regression aberrant and perilous.

Regression occurs when a relationship steps back one phase, or when it dissolves, then restarts. DSO noted the possibility that a relationship may "wind down" undramatically from expansion to exploration. However, DSO was pessimistic about a relationship regressing from a more advanced phase (such as from commitment to expansion), emphasizing psychological "scars" and arguing that heavy costs prevent recovery. Here they contradict the "business is business" maxim, often invoked to shrug off the psychological ugliness of disappointment. Following DSO, we hypothesize:

HYPOTHESIS 4. *Compared to relationships that came to their current stage by an expected path (stability or progression), relationships that regressed to their current stage (reversion to an earlier stage or restart after dissolution) will exhibit lower levels of reseller overall performance evaluation.*

The Role of Interpersonal Relationships in Driving Performance. Unlike RV, DSO failed to address the critical role of individuals in building successful long-term relationships. In buyer-seller relationships, the liaison is the sales representative, whose ongoing efforts to build and maintain the exchange can yield tremendous value and customer satisfaction (Cravens 1995, Wortruba 1991). By demonstrating benevolence toward the customer, honest communications, and extrarole efforts, the sales representative gains the customer's trust and satisfaction (Jap 2001, Smith

and Barclay 1997). Following RV, which stressed the importance of selected individual relationships, we hypothesize:

HYPOTHESIS 5. *The reseller's trust in the salesrep (the individual, not the role) boosts overall performance evaluations and offsets path dependence (i.e., regression versus progression).*

Methods

Data Collection

Research Setting. We collected primary data from customers of a leading agricultural chemical manufacturer, to whom we offered a customized analysis in exchange for designating and encouraging its customers to respond. The customers were resellers, i.e., members of the distribution channel for chemicals. Resellers can include wholesalers or retailers of varying sizes who typically take title and handle logistics and marketing to customers of their choosing, doing so within contractual limits that the manufacturer negotiates with them. They may have single locations (independents) or nationwide locations, or may be organized in cooperative groups (that buy in volume from the manufacturer). Resellers carry products from all the manufacturers in the industry and are not exclusive to any one supplier. They may sell directly to end users, and wholesalers might also sell to retailers. Competition can occur at any level or location among resellers. Manufacturers did not sell directly to end users or through online sales. The agricultural industry is a slow-growth, stable industry that moves through predictable, seasonal cycles. Turnover is minimal, mergers and acquisitions are few, and radical innovations occur infrequently. This context is appropriate for studying the development of interorganizational relationships because both parties have an interest in building cooperative relationships—or at least avoiding conflict. Channel relationships are unique in that the buyer becomes a reseller, thereby preserving and promoting the seller's brand. Further, the reseller becomes the representative of the seller to its customers. Thus, the two sides mingle identities and share a common interest in cooperating to win customers away from other brands, or from other product and service categories.

The manufacturer was one of the top five chemical producers in the world, with over $7 billion in annual sales. The firm sold herbicides, plant growth regulators, animal feed supplements, and crop chemicals to thousands of resellers. Some of the manufacturer's products were patented and in high demand among end users. Given the importance of this seller and of the product category, resellers were unlikely to treat the relationship as a discrete exchange. Hence,

the DSO stages theory should apply to all relationships. The buyer-seller relationships were comparable in many respects (one supplier, a common class of customers, all with similar operations and a motive to forge a relationship). Although this resemblance may reduce the generalizability of the test, it also reduces the threat of omitted-variable bias because many background factors were essentially constant.

Sample. The manufacturer created a stratified random sample of its 15,000 resellers, producing a sampling frame of 4,033 resellers. The sample was stratified to reflect similar proportions of various types of resellers (e.g., independent, national, and cooperative resellers). These customers purchased an annual average of $3.3 million in goods and services from the manufacturer (range: less than $100,000 to $112,000,000) and had worked with the manufacturer an average of 17 years (range: 1 to 50 years). The informants at these firms were the chief point of contact with the most regular interaction with the supplier on a range of issues.

Procedure. Questionnaires were mailed to respondents along with a cover letter from the researchers explaining the study and guaranteeing confidentiality, a cover letter from the manufacturer encouraging participation, and a postage-paid return envelope to a university address. The response rate was 41% (1,660 surveys returned). A test of nonresponse bias indicated no differences among the surveys that were returned earlier or later in the data collection process (Armstrong and Overton 1977). The informants were told that the study concerned the topic of "distribution channel relationship management" and were offered a summary of the aggregate results in exchange for their participation. They were encouraged to express their firm's true attitudes toward the manufacturer (our pretest efforts indicated that they did not hesitate to do so). The informants had, on average, 20.9 years of experience in their position with the reseller (range: 1 to 50) and had personally worked with this manufacturer an average of 14.8 years (range: 1 to 51), confirming that they were indeed knowledgeable.

The unit of analysis was the interorganizational relationship between the manufacturer and reseller, as perceived by the reseller. The questionnaire directed the informant to complete all items with respect to his/her firm's relationship with the manufacturer organization; the only exceptions were the items used to measure the customer's trust in the individual sales representative. Anderson (1995) notes the tremendous difficulty in collecting longitudinal data to examine process dynamics across relationship phases (also discussed at length in RV). His suggestion, which we incorporated here, is to employ a cross-sectional

approach in which each relationship is classified in a specific phase and a multisample analysis is used to understand specific effects across the various phases.

Using a single supplier might limit the range of measure, but this effect was minimized. First, relationships between a single supplier and multiple resellers may differ markedly due to differences in end-user characteristics, competition levels, cost of channel functions, and the nature of prior relationships (Coughlan et al. 2001). Second, interviews with resellers indicated that each one negotiated a variety of discount, shipping, packaging, and transportation terms, such that each relationship reflected specific considerations in its market area. Furthermore, multiple contracts were often negotiated among different entities of a single organization. For example, coordination difficulties among offices of national resellers would result in a national contract with the supplier and additional contracts with regional and territory offices, thus reflecting the idiosyncratic nature of reselling within the various organizations. This research surveyed all three levels of these organizations. The industry and setting created an ideal context to consider relationship development issues; the wide variety of relationship types represented was likely to reflect the relationship types that may occur across a variety of industries.

Measurement

Relationship Stages. How does one identify the stage of a relationship? In principle, participants sense their stage and can indicate it readily. This is particularly true in the agricultural sector, where the grower's activities are centered around plant and crop life cycles. A self-designation scheme was used to classify informants' relationships with the manufacturer. This instrument (see the online appendix, which is provided in the e-companion[1]) is based on Jap (2001) and Jap and Ganesan (2000). Managers were presented with the statement "Relationships typically evolve through a number of phases over time. Which of the following best describes your firm's current relationship with (named supplier)?" Managers checked the description that best applied. The instrument must contain enough description of each phase so that the informant can correctly identify and classify their existing relationship. The descriptions were parsimonious and did not completely reveal what should happen in each stage. It is important to note that there was absolutely no mention of how any of the 11 relationship properties should vary across every single phase of the life cycle, which is what

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[1] An electronic companion to this paper is available as part of the online version that can be found at http://mansci.journal.informs.org/.

we ultimately assessed. The hypotheses consider the overall pattern of 11 constructs across every phase. The fact that we observed systematic patterns for these variables suggests that the results are not random chance. This classification measure was positioned late in the survey, after respondents had completed the majority of measures of the 11 traits, making it unlikely that the classification measure primed their other responses.

Pretests indicated that informants had no difficulty understanding the differences across descriptions, felt that the five descriptions encompassed all their relationships, and did not require another choice to respond. One thousand five hundred forty informants indicated the present stage of their relationship with the supplier. None could fall in the awareness stage, as the sample is comprised of existing relationships. A few relationships fell in the deterioration phase (i.e., negotiating dissolution)—perhaps because deterioration can occur rapidly. Hence, we pooled responses in decline (at least one party becoming significantly dissatisfied, contemplating alternatives or termination, and beginning to communicate intent to leave) with those in deterioration and labeled them "decline."

Relationship properties were measured by multiple-item scales, where 1 = strongly disagree and 7 = strongly agree. All of the items for each construct were separated and mixed throughout the survey. Whenever possible, the scales from past research were used; all other measures were created specifically for this research. The overall dependence of the firms was operationalized as the sum of the reseller's dependence on the supplier and the supplier's dependence on the reseller. The online appendix lists all the scale items used, the sources of the scales, and

an overview of the construct means, standard deviations, reliabilities, and correlations among all the latent constructs. A measurement model consisting of 11 first-order latent factors, their associated item loadings, measurement errors, and intercorrelations was estimated using full-information maximum likelihood techniques in LISREL 8.51 (Jöreskog and Sörbom 1993). The chi-square for this model was 4,758.45 (979 df). The comparative fit index (CFI) and the incremental fit index (IFI) were 0.98, while the Tucker-Lewis fit index (TLI) was 0.97. The root mean square error of approximation (RMSEA) was 0.05. Collectively, these indices indicated a good fit of the model to the covariance matrix. All of the factor loadings were significant, indicating convergent validity of the items with respect to their intended constructs. Discriminant validity was stringently assessed via the procedure recommended by Fornell and Larcker (1981). This involved examination of the amount of variance extracted by each construct (taking measurement error into account) relative to the squared correlation between pairs of constructs. This is considered to be a more stringent test of discriminant validity than the more common approach of examining whether an intercorrelation is different from unity because the Fornell and Larcker test recognizes the possibility that measurement error can vary in magnitude across items. All possible pairs of factors passed this test.

Tests of Hypotheses 1–3: Patterns in Current Relationships

Part one of our analysis tests whether states of relationships, taken as a whole, follow the pattern expected by DSO: rising relationship states through exploration and build-up, peak at maturity, and drop

Table 1   Means Across Phases (Hypotheses 1–3)

Hypotheses	Variable	Effect size	Exploration	Build-up	Maturity	Decline
1(a)	Goal congruence	0.33	4.01	5.06	4.82	3.15
1(b)	Information exchange norms	0.15	4.61	5.25	5.07	4.22
1(c)	Relationship harmony	0.36	4.31	_5.52_	_5.38_	3.31
2(a)	Overall dependence	0.05	6.97	_7.63_	_7.49_	6.58
2(b)	Idiosyncratic time investments	0.02	_4.13_	_4.55_	_4.33_	_3.99_
2(c)	Idiosyncratic adaptation investments	0.03	_3.38_	4.00	3.66	_3.40_
2(d)	Bilateral idiosyncratic investments	0.10	4.13	_4.76_	_4.62_	3.89
3(a)	Reseller's trust in the manufacturer	0.32	4.04	_4.91_	_4.86_	3.25
3(b)	Willingness to take risks	0.11	3.61	_4.29_	_4.09_	3.09
3(c)	Outcomes given comparison level of alternatives	0.22	3.57	_4.44_	_4.34_	2.94
3(d)	Number of seriously considered alternatives	0.03	_2.19_	_1.94_	_1.93_	2.65

Notes. All effect sizes are significant at $\alpha = 0.0001$. Multiple pairwise Cochran comparisons are used to assess differences across phases. Row means that are significantly different are not underlined. However, means with no significant differences are indicated by a single underscore. For example, relationship harmony in the build-up phase (5.52) is not significantly different from the maturity phase (5.38).

in the decline stage. Table 1 shows the results of a multivariate analysis of variance (MANOVA) of the full set of 1,540 current relationships. In this analysis, the relationship properties were regressed on the measurement of relationship phase. The overall MANOVA is significant (Wilk's Lambda = 26.3, $p < 0.0001$), indicating that the phases are significantly associated to the relationship properties as a group. The individual effect sizes for each relationship property are also listed. This analysis ignores history, focusing only on the current stage as identified by their managers (our informants). Recall that informants were not cued as to what DSO expected in each stage, beyond the broad statements of momentum, intent, and time horizon that define a phase.

For the most part, these results indicate that relationship states are low in the exploration stage, higher in the build-up stage, and lower in decline. This finding accords with much of the DSO framework, but what occurs in the maturity stage is unexpected. Not once does a mature relationship show the expected peak. Indeed, roughly half the results show no difference between build-up and maturity. We consider these results in three groups, each exhibiting systematically different patterns. Collectively, the figures suggest an intriguing story of the "dynamics within relationship dynamics." Specifically, they demonstrate at which stage various constructs play a more prominent role in the development of the relationship.

Figure 1 ("relationship building blocks") is a group of constructs that speaks to the establishment and setup of a relationship. This figure suggests that in the build-up phase, it is critical that the parties establish congruent goals in regard to sales and profits

objectives and the relationship's purpose. Information exchange norms govern how parties will handle issues that arise and how they will share critical information. These properties enable the dyad to cope with the risks and uncertainties of expansion. These properties are significantly lower in the mature stage, consistent with the notion of fading into the background as the relationship stabilizes and the parties focus on working together. These characteristics reach their lowest states in the decline phase, as expected.

Figure 2 ("plateau effects") gives insight into the bread and butter of an enduring cooperative relationship—a positive, working relationship marked by trust, mutual dependence and bilateral idiosyncratic investments, and a willingness to take risks. It is the nuts and bolts of working with a steady partner and getting the most out of it, as opposed to constantly searching out alternatives. As the relationship broadens, the level of investments is higher. The relationship properties do not peak in the maturity phase, as predicted by DSO. However, these seven properties are positively related to the function and performance of the channel system, as seen by the reseller, and reach their nadir in the decline phase. Unlike the building-blocks group, these relationship properties take time to build and require a successful history of interaction; they speak to the core of what relationships are for.

However, this state of maturity cannot last forever, which brings us to Figure 3. We see a new pattern of discrete bonding patterns that might occur
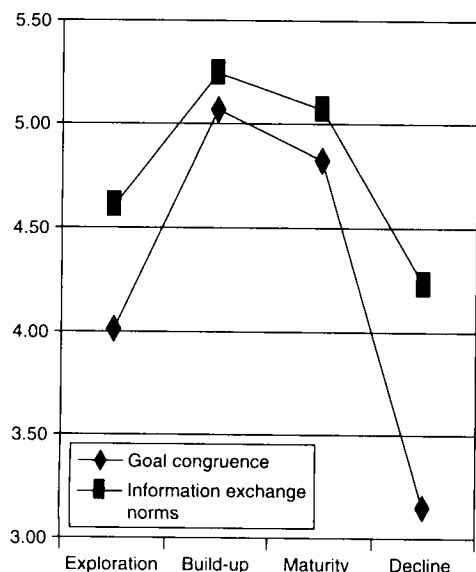
Figure 1   Relationship Building Blocks
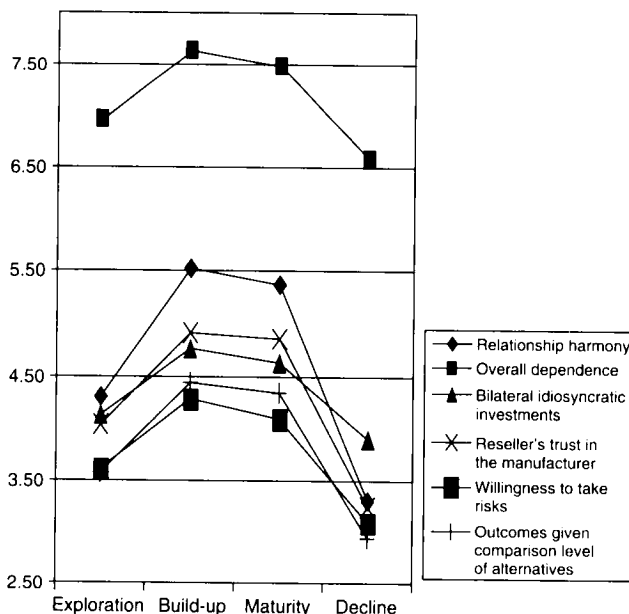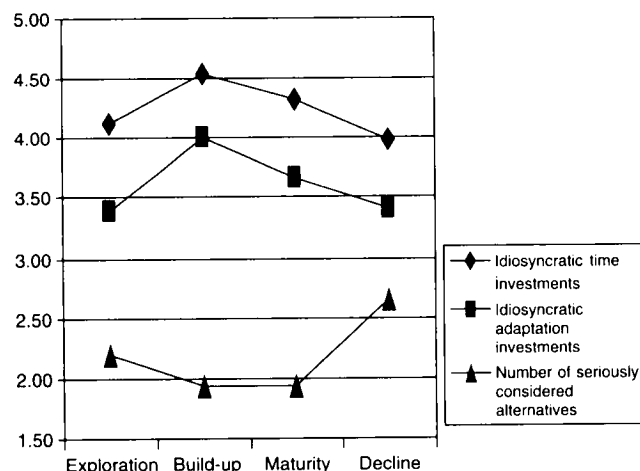

Figure 2   Plateau Effects

Note. The overall dependence measure represents the sum of the reseller's dependence on the supplier (range from 1 to 7) and the supplier's dependence on the reseller (range from 1 to 7).

Figure 3   Bonding Patterns

over the course of the life cycle. Here, one-sided idiosyncratic time and adaptation investments peak early in the relationship, but are consistently lower in every stage thereafter. This is consistent with the theoretical explanation of expanding the relationship in the long term, and is illustrative of the difficulty of dissolving idiosyncratic investments. The value of these investments is difficult to transfer to alternative relationships; hence, an incentive emerges to wring out any possible returns before permanently dismantling them in the decline phase. At the same time, the number of seriously considered alternatives is lowest in build-up and maturity. In the decline phase, investments are lower than in any other phase, while consideration of alternatives is higher than in any other phase.

Together these figures give us insight into how the various relationship factors might differentially peak and decline over life-cycle phases. Although the data are not longitudinal, these patterns are consistent with both the DSO and RV theories, which reach similar predictions, albeit by different explanatory mechanisms and methods of reasoning. Both theories argued that an interorganizational relationship is an asset that requires time and effort to build, and thus cannot be easily duplicated or transferred, in contrast to economic theories built on the assumption that assets are readily created and exchanged. We now turn to path dependence: here, RV and DSO offered conflicting predictions.

Tests of Hypotheses 4 and 5: Path Dependence

Movement. To examine how a relationship's path dependence affects one side's performance outcomes (Hypothesis 4), we analyze a subset of relationships that existed for at least five years under the same informant. Field interviews indicated that a five-year time period was typical for relationships to move

across phases, given the slow-growth, stable nature of the agricultural industry. Relationships might not change phase in a three-year period, and periods longer than five years ran the risk that it would be difficult to find qualified informants who had been in their position that long and able to comment on the state of the interorganizational relationship. The length of this time period also mitigates the possibility that movement from one phase to the next is caused by a short-term drop in performance outcomes. A review of longitudinal studies in the management literature suggests that no optimal time frame exists (Williams and Podsakoff 1989); time frames are typically chosen based on convenience, not theory.

The informants are asked to classify which phase of the relationship their firm is in currently, and was in five years ago. This raises the threat of retrospective bias, which can be minimized when informants are motivated to do the survey, when they report on concrete facts or events, when less judgment or opinion is necessary to formulate an answer, when questions are simple and nondetailed, when the phenomenon does not occur in the distant past, and when the question allows the informant to indicate "don't remember" (Miller et al. 1997). As discussed earlier, most of these conditions apply to our setting. Further, we used only informants who managed these relationships personally. Informants could indicate that their firm had no relationship with the manufacturer five years ago, or that they personally did not work with the manufacturer five years ago. Of the 1,540 informants, 1,356 informants classified their relationship into one of the relationship phases five years ago; for these informants, the relationship existed and the informant was working with the supplier, insuring that the informant was personally knowledgeable. That 88% of the relationships existed with the same informant five years ago attests to the well-known stability of reseller personnel, which is often higher than in manufacturing organizations.

Table 2 summarizes in raw numbers the movements implied by the stage five years ago versus the current stage, while Table 3 recasts them as a mobility table. While it is possible that an apparent progression from one stage to another could disguise a complete cycle through yet another stage, this possibility is mitigated by the fact that relationships tend to develop gradually, decreasing the number of likely shifts over five years. We treat relationship movements as if they encompass one cycle, although we acknowledge the possibility that some relationships could have undergone more than one cycle to reach the current state from five years earlier.

Sixty-nine percent (939) of the 1,356 relationships show some movement across the five-year period, while 31% (417) exhibit no change (Tables 3 and 4). Of

Table 2 Movement Across Relationship Stages

	Exploration	Build-up	Maturity	Decline	Total
Current relationship phase	126	281	569	380	1,356
Relationship phase 5 years ago	165	558	490	143	1,356
No change over 5 years	33	108	243	33	417

Movement over 5 years

Followed DSO pattern

Exploration to build-up	71 ———————➤				
Exploration to maturity	30 ————————————➤				
Build-up to maturity		268 ———————➤			
Exploration to decline	31 ————————————————————➤				
Build-up to decline		143 ————————————➤			
Maturity to decline			173 ———————➤		
Total					716

Followed aberrant movement

Save (from decline)				◄——————— 28	
Save (from decline)			◄————————— 53		
Restart (from decline)	◄————————————————— 29				
Reconsider (from maturity)	◄———————————— 25				
Reconsider (from build-up)	◄————— 39				
Renewal (from maturity)			◄————— 49		
Total					223

Notes. The numbers depict the number of observations in each phase or path of movement. The arrows illustrate the apparent path of movement over a five-year period.

the 417 relationships that do not exhibit any change over the five-year period, 58% of these (243) are in maturity and 26%, or 108, are in build-up. Strikingly, 8%, or 33 of these relationships, are still in decline, having avoided dissolution. Of the 939 relationships showing movement, 76% of them (716) appear to follow an expected DSO progression. Of these 716 expected-movement cases, 52% avoid decline (they progress from earlier life-cycle stages to later ones in the sequence of exploration, then build-up, then maturity), and 48% of these passed into decline from earlier stages of exploration, build-up, or maturity.

These expected relationships (progression) are indicated by arrows to the right (Table 2) or lie above the main diagonal (Table 3).

Arrows to the left (regression) are considered unlikely in the DSO framework and are indeed a minority. Nonetheless, more than a few ($n = 223$) regressing relationships are present. These relationships appear to backtrack from later stages to earlier ones, demonstrating the RV idea of salvaging their lingering value. Forty-nine percent (110) of these 223 regressive relationships reflect improvement from a decline status. They may well represent relationships that have been

Table 3 Mobility Table of Movement Across Relationship Stages

Current (column)/ Five years ago (row)	Currently in exploration	Currently in build-up	Currently in maturity	Currently in decline	Total five years ago
Exploration 5 years ago	**33** **(2.4%)**	**71** **(5.2%)**	**30** **(2.2%)**	**31** **(2.3%)**	165 (12.2%)
Build-up 5 years ago	*39* *(2.9%)*	**108** **(7.8%)**	**268** **(19.8%)**	**143** **(10.6%)**	558 (41.2%)
Maturity 5 years ago	*25* *(1.8%)*	*49* *(3.6%)*	**243** **(17.9%)**	**173** **(12.8%)**	490 (36.1%)
Decline 5 years ago	*29* *(2.1%)*	*53* *(3.9%)*	*28* *(2.1%)*	**33** **(2.4%)**	143 (10.6%)
Current total	126 (9.3%)	281 (20.7%)	569 (42.0%)	380 (28.0%)	1,356 (100%)

Notes. The top number in each cell indicates the number of relationships, and the percentages indicate the representation of those relationships in the total sample of 1,356 relationships. All boldface entries appear to follow the expected DSO pattern: Main diagonal, $n = 417$: no change; above the main diagonal, $n = 716$: progression to a later stage. All italicized entries (below main diagonal, $n = 223$) appear to be aberrant patterns according to DSO, representing regression to an earlier stage.

"saved" from a negative outcome (continuing decline or eventual dissolution). Of these 110 saves, 25% of those in declining states have been upgraded to maturity (28), while 48% of declining relationships were saved by entering a build-up phase (53). The remaining 26% of declining relationships have effectively started over and are now in a state of exploration (29). The remaining 51% of the 223 relationships that regressed from a posterior to an anterior stage, by DSO reasoning, represent various forms of reconsideration. Of these 113 cases, 22% were in the mature phase five years ago and appear to be under reconsideration: They are now in the exploration phase (25). Another 43% of these relationships were mature and now seem to be experiencing a renewal: They have returned to a state of build-up (49). The remaining 35% of aberrant relationships were in build-up and have reverted to exploration (39), in what may constitute a reconsideration of the arrangement.

The items used to measure the two latent factors, reseller trust in the sales representative (an individual-level independent variable) and overall evaluation of performance (the dependent variable) are listed in the online appendix along with the means, standard deviations, and correlation between the two constructs. A confirmatory factor analysis yields an estimated measurement model with a chi-square of 725.43 (53 df), with a CFI and IFI of 0.98 and a TLI of 0.97. The RMSEA is 0.11. Collectively, these indices suggest a good fit of the model to the data. The factor loadings are significant, indicating convergent validity of the items, and the two constructs pass the Fornell and Larcker (1981) test of discriminant validity.

To test the effects of history on the relationship's performance for one organization, a series of equations is estimated via OLS regression within each phase. These equations are compared to a baseline model estimated across the sample of 1,356 relationships, all stages combined. These equations all possess a common form, in that overall performance evaluation is regressed on a dummy variable indicating the relationship's movement through phases as well as the reseller's trust in the sales representative. We contrast all relationships that follow the expected relationship life cycle (either by remaining in the same stage over the five years or progressing in a pattern specified by DSO) with relationships that exhibit aberrant movement. See Table 2 for a graphical representation of the dummy variables. The purpose is to explore the effect of phase-specific forms of regression and deterioration patterns that might be masked when all movements are confounded within all phases. Within each phase, the intercept term always contains all relationships that DSO expect, namely, progression or stability. All other terms are dummy variables with

Table 4   Summary of Results: Path Dependence (Hypothesis 4)

Coefficient	Overall performance evaluation		
	Adj. R-sq.	Estimate	Std. error
All phases ($n = 1{,}356$)			
Intercept α_1	0.57	1.62**	0.17
Aberrant movement β_{11}		−0.21*	0.09
Build-up β_{12}		1.04**	0.11
Maturity β_{13}		0.93**	0.12
Decline β_{14}		−0.64**	0.12
Reseller trust in the rep β_{15}		0.46**	0.02
Exploration ($n = 126$)			
Intercept α_2	0.14	1.91**	0.52
Restart (from decline) β_{21}		−0.18	0.30
Reconsider (from maturity or build-up) β_{22}		0.19	0.26
Reseller trust in the rep β_{23}		0.36**	0.09
Build-up ($n = 281$)			
Intercept α_3	0.23	2.31**	0.34
Save (from decline) β_{31}		−0.37**	0.14
Renewal (from maturity) β_{32}		0.04	0.14
Reseller trust in the rep β_{33}		0.52**	0.06
Maturity ($n = 569$)			
Intercept α_4	0.38	1.42**	0.21
Save (from decline) β_{41}		−0.51**	0.17
Reseller trust in the rep β_{42}		0.66**	0.04
Decline ($n = 380$)			
Intercept α_5	0.16	1.22**	0.24
Exploration to decline β_{51}		0.32	0.26
Build-up to decline β_{52}		0.70**	0.21
Maturity to decline β_{53}		0.39*	0.21
Reseller trust in the rep β_{54}		0.29**	0.04

Notes. Adj. R-sq. is the adjusted R-squared for the regression.
*$p < 0.05$, **$p < 0.0001$.

the exception of overall performance evaluation and reseller trust in the representative. Table 4 displays the estimated coefficients.[2]

All Phases. Fifty-seven percent of overall performance evaluation is explained by the relationship phase, reseller trust in the sales representative, and regressive movement.[3] Movement that is aberrant by DSO's predictions is negatively related to overall performance evaluations (-0.21, $p < 0.05$). Compared to exploration (contained in the intercept), reseller performance evaluation is higher in build-up and maturity (1.04, $p < 0.01$ and 0.93, $p < 0.0001$), again suggesting the plateau effect of the middle stages.

[2] Similar results are obtained in analyses that disaggregate into all possible movements and consider them separately.

[3] The high adjusted R^2 occurs only for the all-phases equation. This regression has the highest number of predictors (i.e., each stage), and the stages themselves are broad categories. Here, the fact that all the relationships are in one sector with one manufacturer at one point in time undoubtedly reduces the variance to be explained by a considerable amount.

In the decline stage, performance suffers (-0.64, $p < 0.0001$). With phases controlled, resellers appear more satisfied when they trust the salesperson (0.46, $p < 0.0001$). However, aggregation often obscures opposing forces at work—particularly the impact of regressive movement on a phase-by-phase basis. When examined in greater detail, the results below suggest that the nature of the aberrant movement has an impact and is consistent with the idea that overall performance evaluation depends on some of the paths the relationships have taken. We explore these results below.

The Path Taken to the Exploration Phase. In this phase, regression is not significantly related to overall performance evaluation, relative to stability or the typical life-cycle movement. However, reseller trust in the sales representative does yield a positive, significant impact on overall performance evaluation (0.36, $p < 0.0001$) during this phase.

The Path Taken to the Build-Up Phase. In this phase, aberrant movement such as a save, which involves movement from the decline phase to build-up, has a significant negative effect on overall performance evaluation (-0.372, $p < 0.05$). However, renewal, which involves movement from maturity to build-up, is not significantly related to performance evaluation. Trust in the sales representative, controlling for regressive movement, continues to exert a substantial positive effect on overall performance evaluation (0.52, $p < 0.0001$).

The Path Taken to the Maturity Phase. In the mature phase, we consider another form of save: movement from the decline phase to maturity. This movement is negatively related to overall performance evaluation (-0.51, $p < 0.01$). Reseller performance evaluation is positively related to trust in the salesperson (0.66, $p < 0.0001$).

The Path Taken to the Decline Phase. Given our sampling frame, an unexpected right-to-left path is not possible in decline; the only way to achieve decline is to have done some business five years ago. Hence, the intercept contains all cases that reflect the most direct DSO progression—that from maturity to decline, of which there are 173. In this phase, history can have an intriguing relationship to the reseller's overall performance evaluation in a declining relationship. Although movement from exploration to decline is not significantly related to the reseller's overall performance evaluation, movement to the decline phase from build-up (0.58, $p < 0.0001$) can have a significant impact on reseller performance evaluation with the relationship. As per Hypothesis 5, the trustworthiness of the supplier sales representative is also positively related to the reseller's overall performance evaluation (0.33, $p < 0.0001$).

Discussion

Patterns of Relationship Properties Across Phases

We hypothesized (Hypotheses 1–3) that relationship properties over the life cycle would reach their pinnacle in the mature phase and their nadir in the decline phase. However, the results point to three key insights. First, the data consistently indicate that mature relationships are not usually the pinnacle of relationship development. The parties work together, share a time horizon, and think beyond the current deal; however, for the most part, maturity is never better than build-up and is often marginally inferior. This finding accords with the general conclusions of Cannon and Perreault (1999), who also found that long-term buyer-seller relationships need not be very close in relational terms. They argue that buyers and sellers are unlikely to select the optimal type of relationship for their circumstances. Instead, the actors improvise, and the successful ones find only vaguely right solutions. In this vein, prior research stresses the importance of managing expectations. If expectations do not evolve realistically and in step with a mutual learning process, disappointment and suspicion ensue, and damage the alliance (Doz 1996, Ariño et al. 2001).

The lack of empirical differences in relationship properties between the build-up and maturity phases corresponds with the viewpoint of Rousseau et al. (1998) and Madhok and Tallman (1998). The latter suggested that organizations perennially underestimate ex ante the idiosyncratic investment necessary to make a relationship perform. If and when organizations do realize how much idiosyncracy will be required, they hesitate to make the investments because they cannot calculate the return on investment. Rousseau et al. (1998) suggested that the boundaries between build-up and maturity may blur, particularly after the dyad develops a history, trust, harmony, and a comparison level of alternatives. They simplify the development of trusting relationships to only three stages: building (forming or re-forming), stability, and dissolution. These stages correspond to DSO's exploration, expansion/maturity, and dissolution/decline.

The second key insight is that some relational properties follow a different pattern, also unexpected. Those properties that provide the necessary foundations for long-term relationships—information exchange norms and congruent goals—will peak in the build-up phase, rather than in the mature phase. Apparently, once goals are congruent and information exchange is established, routines take over. These elements can then decline modestly without threatening the mature relationship. This pattern of results accords with Jap

and Anderson (2003), who also find that goal congruence becomes differentially important as levels of ex post opportunism in the relationship vary.

The third key finding provides insight into the solidification and dissolution of relationships by outlining the bonding processes that occur over the life cycle. Specifically, we see that in the build-up phase, as one party's idiosyncratic time and adaptation investments peak, their consideration of alternatives will simultaneously reach its lowest levels. However, these investments reach their nadir, and consideration of alternatives hit its zenith, in the decline phase. Collectively, it suggests that resellers do not make the effort to actively investigate many suppliers over the course of the relationship (perhaps it is costly to do so), but go into a flurry of activity as the need to get out of the relationship arises. This contradicts the classical economic argument of perfect information (economic agents know their alternatives) and fits the idea of bounded rationality (agents are imperfectly informed because it is effortful, so they do not bother until they need to). Thus, unraveling characterizes the decline phase.

We also observed that the levels of the vast majority of relationship properties are lower in this phase than in any other stage. This steep difference may occur because progression in the relationship (from exploration to build-up to maturity) differs from decline in several important ways. It takes two parties to build a relationship, but only one to tear it down. Relationship progression involves the creation of a shared history, while relationship breakdown entails managing the effects of a shared history. In other words, building occurs against a backdrop of joint context and is mutual, effortful, and relatively transparent. Decline has the opposite properties; it is a separate phenomenon, unique in its own right, and deserves more systematic research and attention.

Movement Across Phases: The Impact of History and Path Dependence

The second major portion of this research (Hypotheses 4 and 5) addresses the path dependence of patterns of relationship development across the life-cycle phases, for which DSO and RV differed in prediction. To this end, we contrast the paths of progression through the life cycle (as theorized by DSO) to "aberrant" patterns (renewal, save, and reconsideration) and consider how the paths taken to a relationship stage might influence interorganizational outcomes, *above and beyond the impact of the current relationship stage*. In general, we find that those relationships that progress through the life-cycle phases as per DSO predictions are positively related to performance.

But what about relationships that do not follow this expected pattern? Larson's (1992) case studies of relationships suggest (p. 100) that firms in relationships

should be able to reconfigure freely, to easily "forgive and forget" as circumstances and calculations of advantage change. Our results suggest that this is not the case. The reseller is significantly less positive with relationships that had gone all the way into decline before being pulled back to build-up or maturity: These relationships do not enjoy a fresh start. Instead, once heavily damaged, relationships carry over some of the negativity of their decline phase. This evidence suggests that the "psychological scars" that DSO posit are real and enduring—consistent with Anderson and Weitz (1992), which finds that organizations doubt their counterpart's current commitment when the relationship has a conflictual history. A meta-analysis by Cohen-Charash and Spector (2001) suggests a mechanism: Organizational actors see procedural and distributive injustice in troubled relationships, and decline is surely accompanied by bitterness and disappointment. History matters: The outcome of today's mature or built-up relationship is related to the path taken to reach this phase of development. As a caveat, our sampling frame favors finding psychological scars. RV point out that turnover clears out psychological contracts, which is useful when restarting a negative relationship. However, we only sampled relationships that had the same informant over time to ensure that informants were knowledgeable. Perhaps relations involving fresh personnel are easier to reinvigorate.

We also find that relationships that moved into the decline phase from build-up are more positively associated with performance evaluations than those that moved to decline from maturity. A possible speculation is that these parties may have bypassed or abbreviated the maturity stage, thereby winding down the relationship in a relatively hasty and more positive manner than those who had continued on their prior course to full-blown maturity. Perhaps a change in goals or priorities of one party or the other clarified that it could be less conflicting to change course with the partner before more history and investments are created. In this sense, reconfiguring the relationship earlier in the life cycle to avoid a negative history rather than later, could be positively associated with performance evaluations.

Another key finding of our investigation indicates that declining relationships can linger for surprisingly long periods, with neither side terminating. Ping (1993) offers insight into how this phenomenon occurs. Perpetually-in-decline channel relationships are not hostile. Instead, at least one side passively "neglects" the other (Hirschman 1970) or remains loyal, even in the face of a destructive act by the supplier (Hibbard et al. 2001). Ping (1993) also shows that idiosyncratic investments dissuade the firms from terminating their arrangement, an argument advanced

by RV. This result is consistent with our finding that idiosyncratic assets are long lasting and that they remain at high levels during the decline phase. A reseller often tolerates a disappointing relationship if the supplier has substantial brand equity, which is the case in our setting. It might also be that firms believe that it is easier to revive and utilize an existing relationship than to start a whole new one. Our results suggest this belief is in error.

This research also informs our understanding of the role of interpersonal relations in the development of successful interorganizational relationships. In the management literature, awareness grows of the need to consider both individual and organizational level factors of interorganizational relationships (House et al. 1995). Some scholars contend that the interpersonal relationships formed between organizational boundary spanners play a critical role in the development of interorganizational exchange and relationship development (Larson 1992, Doz 1996). Others maintain that organizational relationships and strategies develop independently of the individuals in these positions (Ogilvy 1995, Williamson 1996). This research, in accord with RV, shows that even stable, well-developed customer relationships perform substantially better when a trusted individual represents the seller, regardless of the relationship's state.

Limitations
The research has limitations. One limitation might arise from the lag in the movement analysis—five years as opposed to a shorter time frame. Moreover, we were not able to capture potential intermediate movement between phases within the time frame. However, we made an informed selection of this lag period based on pretest efforts, industry stability, and the infrequency of movement over shorter time periods. However, the results may not generalize to more dynamic environments.

Another limitation might be the in the phases measure itself. The description of the maturity phase omitted other potential outcomes, such as efficiencies from routines and history, that might have made this phase appear more attractive relative to the build-up phase. Here, the challenge is to balance the need to provide sufficient information for respondents to classify their relationships appropriately, without providing the full theory of how the relationship properties should vary across the phases. Although we did not provide any indication of how the set of properties should vary across phases, we observed groups of relationship properties displaying systematic patterns. Additionally, the classification measure was put near the conclusion of the survey, well after the respondents had completed the measures on the various relationship properties. Collectively, it is hard to imagine how

respondents might have introduced their own biases into the observed results.

A final limitation of this research may be common method bias. While cross-sectional research is a dominant approach for the study of organization science, it does not have to be a fatal flaw, nor does the reliance on a single method, a survey, in this case. Great care was taken to minimize demand effects. The survey asks respondents to report on observable aspects of their relationship, hence, the link between perception and reality is probably strong. Additionally, a host of perceptual measures are used and the individual items for these measures were separated throughout the survey, and some were reverse coded. Despite this, all of the measures move together in similar directions. Many surveys examine far fewer variables than are measured here. More generally, research has shown that common method bias may not be as prevalent or as threatening as one might think in organizational research (Doty and Glick 1998).

Managerial Implications
By recognizing and understanding the dynamic manner in which relationships change, managers can develop suitable relationship strategies. Additionally, *how* the relationship develops over time is critically important to performance. Relationships that appear to develop along a typical life cycle are associated with greater performance outcomes than those in decline and reconfigured to upgrade to a build-up or maturity phase. In other words, it is best to prevent decline because the scars incurred in this phase heal slowly and affect subsequent overall performance evaluation in the relationship. On the other hand, it may be better to dissolve a relationship than to allow participants to "marinate" in a decline phase for an extended period of time. By recognizing quickly that the relationship is incompatible or inoperable, firms should cut their ties and move on to new relationships.

Directions for Future Research
Much about relationship dynamics remains to be explored and understood. For example, one underresearched area involves the drivers that move the relationship from one phase to the next. What factors prod the relationship from an exploratory phase into build-up? From awareness to exploration? Are the circumstances that drive these changes a function of the internal needs of the firm or the competitive landscape, or are they dually created between the organizational participants? How do firms manage to put aside a disappointing history to renew their relationship? McEvily et al. (2003) note that little is known about rebuilding trust. An obvious solution is to rotate the personnel, although Doz (1996) notes that in general an alliance evolves from its initial conditions more readily if key personnel remain in place.

Another important research direction is to understand more clearly how firms can manage the dark side of long-term relationships and decline. Perhaps firms can minimize the psychological scars and acrimonious interactions that typify this stage by building appropriate safeguards and better managing expectations in earlier phases. We need better understanding of the dissolution process. What motivates one organization to begin dissolution activities? At what point do these activities become obvious? How does the counterpart respond to such actions?

We conclude that the relationship life cycle is a useful theory for better understanding how relationships begin, evolve, and dissolve over time. On the whole, the DSO theory of relationship development holds: One or two sentences allow the observer to predict relative levels of many states of the channel. However, results also indicate that relationships do not inexorably progress to a state of peak functioning and performance, and many do not appear to realize anticipations of continuing performance improvement and extremely close relationships. The build-up and mature stages are largely indistinguishable, even though the parties in build-up anticipate further improvement and closer commitment. Finally, partners cannot disregard history. Allowing a relationship to enter decline imposes costs that are realized when the relationship is "restarted:" A negative history exacts its price.

Electronic Companion

An electronic companion to this paper is available as part of the online version that can be found at http://mansci.journal.informs.org/.

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