COMPETITIVE ANALYSIS OF THE P/M INDUSTRY

Report No. PR-05-#1

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PMPA/PMRC Benchmarking and Statistics Project

Objectives:
The development of a statistical data base for the P/M parts industry to enable firms to:

- Benchmark key performance data vis-à-vis other part producers
- Develop relationships between success measures and independent variables

Strategies:
- Collect annual data from PMPA membership using three reports.

Objectives for the Spring 2005 meeting

- Complete and disseminate Report C (Wage and Hourly Survey)
- Continue to investigate avenues for dissemination
- Follow-up with MIMA to expand data collection

Accomplishments since the Fall 2004 meeting:

- Completion and dissemination of Report C
- Streamlining of data analysis and dissemination procedures

Related accomplishments (see attached documents):

- Funding for a workshop on the challenges of dealing with China from the Alfred P. Sloan Foundation. The workshop will be held on the WPI campus June 16-17, 2005.
- Two papers currently under journal review from previous projects.
APPENDIX A:

Workshop proposal to the Alfred P. Sloan Foundation
Funded, March 2005
Overview: There is little doubt that China is emerging as a critical issue for many, if not most of the industries within the Sloan Industry Studies Program. The sheer size of the potential market, availability of a workforce that is increasingly sophisticated, and supply chain issues associated with OEM development within China have affected many of our industries. In September 2004 Automotive News forecast 140 million vehicles on the road in China by 2020. An article in the Wall Street Journal on January 25, 2005 outlined scenarios in which the Chinese economy overtakes the U.S. economy by the middle of the century.

Chinese consumption will have significant effects on the worldwide economy, in terms of the challenges associated with serving a large and growing market, integrating a global organization into a rapidly developing economy, dealing domestically with competition from China, and the expectation of global OEMs that their domestic supply base will follow them into China. The last issue can be especially difficult for small suppliers who must develop global capabilities after years of viewing their markets in terms of North America or regions within the United States. Many of these firms are suddenly faced with decisions about market entry and the degree to which they may share intellectual property.

Within the Industry Studies Community, the challenges represented by China and the research opportunities considered are diverse yet there is still ample grounds for collaboration and communication among research teams to leverage the varied expertise among the Centers. These interests are summarized in Table 1. A core area of interest shared by Susan Sanderson, Ken Kraemer, Jason Dedrick, Patrick McCarthy, Haizan Li, Diran Apelian, and Chick Kasouf centers on manufacturing and product development. These four research teams are examining different industry sectors (lighting, personal computers, pulp and paper, and metal processing) that are significantly affected by developments in China. Two of these industries are more traditional manufacturing industries (pulp and paper and metals processing). The PC industry, while still technology intensive is also significantly affected by supply chain (especially electronic linkages) and automation.

These industries share supply chain, product development, pricing, distribution, and human resource issues. Potential participants noted that they would be interested in learning more about logistics. Chip White, representing the Trucking Industry Center is in the process of establishing a Sino-US Logistics Center in Shanghai. He is currently working with several multi-national companies, including General Motors, WalMart and Dell. His experience with these companies,
at the cutting edge of efficient and effective supply chain management will be valuable for the Centers seeking supply chain insights.

Michael Belzer (who may come with a Chinese colleague) has interest and substantial expertise in Chinese labor relations. For US companies that are establishing Chinese operations, understanding industrial relations is critical for effective management.

To complement the other participants, Thomas Rawski is an economist with over thirty years of research experience in China in several industries (including machine tools, appliances, motor vehicles, and garments). While he is an expert in industrial development, he would like to establish more close working relationships with engineers and researchers with more deep experience in industries to develop the implications of his data more completely. His economic perspective will be a productive complement to the work of specific centers.

Thus, while the participants will be a group with varied interests with their research in different stages of development, there is the opportunity for tremendous value as people from different centers exchange their insights into China. By discussing the challenges of the Chinese economy and competition on different industries, each participant will develop a broader view of Chinese industry and economic development. Several potential participants indicated that their motivation for attending would be to develop a broader overview of China and to establish opportunities for communication and collaboration with other scholars.

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Interest</th>
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<tbody>
<tr>
<td>Susan Sanderson</td>
<td>RPI</td>
<td>use of Chinese manufacturing and engineering in new technologies</td>
</tr>
<tr>
<td>Kevin Dowling</td>
<td>RPI</td>
<td>use of Chinese manufacturing and engineering in new technologies</td>
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<tr>
<td>(Color Kinetics)</td>
<td></td>
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<tr>
<td>Ken Kraemer</td>
<td>UCI</td>
<td>Computer industry, business automation, IT</td>
</tr>
<tr>
<td>Jason Dedrick</td>
<td>UCI</td>
<td>Computer industry, business automation, IT</td>
</tr>
<tr>
<td>Melissa Appleyard</td>
<td>Portland State</td>
<td>Industry structure</td>
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<tr>
<td>Mike Belzer</td>
<td>Trucking</td>
<td>Industrial relations systems; safety benchmarking</td>
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<tr>
<td>Possible collaborator</td>
<td>Trucking</td>
<td>Industrial relations systems; safety benchmarking</td>
</tr>
<tr>
<td>Chip White</td>
<td>GTech/Trucking</td>
<td>Logistics, integrated trucking</td>
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<td>Patrick McCarthy</td>
<td>GTech/Paper</td>
<td>Chinese paper and pulp capacity, pricing, and recycling</td>
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<td>Haizing Li</td>
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<td>John Hansman</td>
<td>MIT/Airlines</td>
<td>Air Transportation</td>
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<td>Chick Kasouf</td>
<td>MPI/WPI</td>
<td>Automotive supply chain</td>
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<tr>
<td>Diran Apelian</td>
<td>MPI/WPI</td>
<td>Automotive supply chain</td>
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Table 1. Summary of Research Interests among Industry Center Participants
These broad but complementary interests suggest that the most effective workshop strategy would be to begin exchanging ideas, papers, and news items before the meeting so that participants can develop an appreciation for the impact of other research streams on their work and to identify potential synergies between research projects.

**Objectives:** The objectives of this workshop are:

1. That each participant develops a better understanding of the Chinese infrastructure and its potential impact on his/her research center. Through the guest speakers and the exchange of ideas by participants, researchers can see the multiple issues affecting their interest in China differently when exposed to the research results of others.
2. To develop potential cross-center synergies that can result in inter-center communication, panel sessions, or research projects. By discussing research interests in this venue, new opportunities for collaboration may occur.
3. To develop a preliminary set of policy implications that the Sloan Industry Centers can address for dissemination to industry, academic, and government audiences.

**Deliverables:** The key deliverables will be:

1. A set of non-copyrighted proceedings that summarizes current research activity and research needs identified by workshop participants. This will be distributed to all participants and made available electronically at or before the 2005 Industry Centers Meeting (expected in the late fall of 2005). These proceedings will include a summary paper that will identify key policy implications generated by the workshop. This will be available for downloading on the Metals Processing Institute’s website at WPI for participants non-participants.
2. The development of a listserv dedicated to issues associated with China. This will allow a continuing dialog among participants and the Industry Studies community. This will include announcements of key events, upcoming papers and conferences, and other news about China relevant to the research of the Centers. We will open this listserv to non-participants from the Industry Centers community.

Also, while it would have to be approved by the Industry Studies Program’s planning committee, it may be possible to develop a panel session presented by 4 participants and a moderator to present the critical research results/activities/priorities in China at the 2005 meeting.

**Benefits:** The benefits of the workshop will be:

1. Each participant will have the opportunity to develop contacts with other researchers in the Industry Studies community. These contacts may provide access to data or critical contacts within China.
2. The workshop can provide the identification of possible research collaborators – either between/among participants or by identifying potential research partners through the contacts of participants.
3. The continuing communication within the Industry Centers community can allow the dissemination of results and funding opportunities in the future.

**Strategy:** We are proposing a workshop in Worcester June 16-17, 2005 on the campus of WPI. Worcester is about an hour away from two major airports (Boston and Providence) with easy access, and nearly as close to several others (e.g., Hartford, Manchester, and Hanscom). We anticipate no problem in access. For people who wish to extend their visit, we are very close to beaches, the Berkshires with Tanglewood, Boston, and several other universities if parents wish to begin their college tours. Moreover, the campus facilities will reduce costs and there are hotels nearby.

*Day 1:* We anticipate a short welcome followed by a panel of academic speakers from outside the Industry Studies community that will discuss: current economic conditions in China, critical infrastructure issues (transportation and IT), and Chinese culture. This would be followed by an industry panel that would include three executives whose business has been affected by China.

*Day 2:* This would be a full day session that would involve roundtable discussion sessions led by participants. The topics here would be determined by pre-workshop participation in a listserv to flesh out priorities and identify discussion leaders. I expect the timeline from the beginning of the year to the workshop to be as follows:

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<thead>
<tr>
<th>3/15/05-4/15/05</th>
<th>4/15/05 – 5/1/05</th>
<th>June 2005</th>
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<tr>
<td>Email communication among participants to clarify key research interests and emerging issues in their centers</td>
<td>Finalize topics day 2 and workshop schedule</td>
<td>Workshop</td>
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Most sessions would involve the Sloan Center participants, but we are also considering the inclusion of outsiders with experts in Chinese culture and infrastructure to run a session that complements the interest and expertise of the group. This might include someone from industry with significant experience or a faculty member from a humanities area. If funded, we will work toward establishing a combined slate of Center participants and external experts.

We currently have 9 participants who have indicated a commitment to attend and four who are working out scheduling conflicts. Opening this up to the broader Industry Centers community will probably add a few participants. I will open it to a wider audience if we have the funding.

**Dissemination:** In addition to the traditional venues of academic research and the Sloan Working paper series, we expect to make results available to the Industry Studies community through announcements on the Sloan listserv and the post conference listserv that we will develop.
APPENDIX B:

Papers currently under review
An Examination of Communication Behaviors as Mediators in Individual-Level Interorganizational Exchanges

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The research was funded by the Alfred P. Sloan Foundation and the Metal Processing Institute at WPI.
An Examination of Communication Behaviors as Mediators in Individual-Level Interorganizational Exchanges

Abstract

This research attempts to address some of the gaps in our understanding of individual-level interorganizational exchanges. To this end, a conceptual framework which integrates cooperative norms, communication behaviors, and perceived problem solving efficacy is developed. We employ qualitative and quantitative methodologies to explore relevance and significance of proposed constructs and relationships. Findings support the viability of constructs and proposed relationships. Specifically, communication behaviors were found to mediate the relationship between cooperative norms and problem solving confidence to resolve conflict. These results hold implications for future research and management practice.
Many business-to-business transactions are part of a continuing relationship between buyer and supplier (Webster, 1992). Indeed, the ability to establish collaborative relationships across organizational boundaries can be a source of competitive advantage (Liedtka, 1996; Sheth & Sharma, 1997; Jap, 1999; Christopher & Juttner, 2000). This point is underscored by Morgan and Hunt (1994) who note, “...to be an effective competitor in today’s global marketplace requires one to be an effective cooperator in some network of organizations” (p. 34).

According to Hutt and Speh (2004) collaborative relationships involve close informational, social, and operational linkages. Yet, in the end, the ability of two organizations to coordinate activities and develop an effective relationship is driven by the many discrete but interrelated interactions among individuals. As Jap (1999) observed, interpersonal relationships between boundary spanning personnel are the “microconditions that affect the dyad’s decision to exploit relationship distinctiveness and make specific investments” (p.465). Similarly, Narayandas and Rangan (2004) and Tellefsen and Thomas (2005) concluded that interpersonal dynamics affect interorganizational commitment.

Integrating the objectives of individuals across diverse organizations whose interests can easily conflict makes relationship management a difficult task. The quality of an interorganizational relationship depends on the many dyads and interactions among groups of employees who interact, negotiate, and deliver value to the partner organization. This is a process in which parties sometimes have conflicting priorities as companies focus on objectives that may be difficult to reconcile (e.g., customers pressuring for price concessions as increases in supplier R&D are expected). However, as Tellefsen and Thomas (2005) concluded, the bonds between individuals are critical for the development of relational exchanges between organizations.

The purpose of this paper is to explain individual-level communication factors that affect relationship quality and, consequently, relationship success or failure. Using constructs from the buyer-seller relationship literature that have their origins in psychology, we develop a framework which integrates normative and communication factors to explain their effects on perceived problem solving efficacy. We then explore the relationships through qualitative and quantitative research. Finally our findings and the implications for future research and managerial practice are discussed.

**Communication in Interorganizational Relationships**

Communication is central to effective relationship management. Assael (1969) found that frequent communications were associated with constructive conflict management. Dwyer, Schurr, and Oh (1987) highlight the significance of relationship expectations and bilateral communication processes particularly in the relationship exploration phase. Ohmae (1989) emphasized the importance of mutual expectations in collaborative relationships. Anderson and Narus (1990), in noting the interdependent nature of working partnerships, found communication to be a critical factor in cooperative relationships. Helper (1991; 1994) found strong relationships between interorganizational information flow and the effective use of engineering-related problem solving. Similarly, Ellram (1991) reported that poor communication was the most important barrier to success in international purchasing relationships and that early communication of specification changes was positively related to successful partnerships.
In later work, Ellram and Hendrick (1995) found that buyers and suppliers both desired improvements in face-to-face and electronic communication.

In a study of network dyads in entrepreneurial organizations, Larson (1992) found that individual interactions were critical in building effective interorganizational linkages. As she noted, communication is critical throughout alliance development, from preliminary assessment, to the trial period (where interpersonal interactions develop routines), to the establishment of operational structures and controls. Operational integration between partners depended on dense communication linkages, including many linkages between the organizations.

Mohr and Spekman (1994) reported that higher levels of communication quality and information sharing were associated with more successful partnering, and Paun (1997) found that communications frequency was one of the factors that differentiated best supplier relationships from average relationships.

In a study of purchasing managers, Leuthesser (1997) found that relational behaviors, including initiating behavior (the extent to which the supplier proactively initiates efforts to better understand the customer), signaling behavior (providing advance information), and disclosing (the willingness of the supplier to provide information about itself) were related to perceived relationship quality.

Christopher and Juttner (2000) noted that supply chain integration is typically achieved through a greater transparency of customer requirements through the sharing of information. They concluded that coordinating interpersonal relationships was one of the critical elements of effective interorganizational relationships. Indeed, Haytko (2004) most recently observed that it is difficult for relationship participants to think in terms of interfirm relationships without thinking of interpersonal relationships as their day-to-day experience involves working closely with individuals. This is consistent with Tellefsen (2002) who found that satisfaction with individual interactions increased purchasing manager satisfaction with the relationship and commitment to the relationship.

Bantham, Celuch, and Kasouf (2003), extend work in the area by using dialectical and interdependence theory as orienting frameworks and further develop ideas implied in extant business perspectives. Their framework posits problem solving as the key “driver” of business relationships. More specifically, problem solving is conceived as mediating the influence of two significant “enablers” on relationship satisfaction and investments. In this framework, a mindset enabler is characterized as the awareness of and willingness to address the tensions inherent in business relationships. A skillset enabler is conceived as consisting of communication behaviors that facilitate managing these tensions (i.e., nondefensive and active listening, self-disclosure, and editing).

Most recently, Claycomb and Frankwick (2004) identified a range of conflict resolution mechanisms that firms may employ in their supply chain relationships. These include joint problem solving (which enhances partnership success) smoothing over issues (which does not solve basic problems and may ultimately escalate the conflict), and coercion (which can destroy the relationship). They argue that effective communication is important in resolving conflict between partners.

Clearly, communication is a significant facilitator of relationship development and effectiveness. However, note that a review of the extant literature suggests other salient constructs that are implicated in buyer-seller communication processes. The conceptual challenge is developing a framework to explain interorganizational linkages.
that are managed by individuals and that endure change and conflict. Significant research representing both the operations management and marketing streams of literature has added to our understanding of these cooperative relationships. However, critical gaps in our understanding of individual-level interorganizational exchanges are evident.

First, the extant literature has not always provided the theoretical integration that would aid the development of more coherent bodies of research aimed at understanding how individuals in organizations become and continue to be effective cooperators. Specifically, questions relate to the dynamics of how expectations and communication behaviors are translated into effective problem solving.

Second, relatively few studies have looked at partnerships from the perspective of the matched buyer-supplier dyads (Ellram, 1991; Ellram & Hendrick, 1995). This is an important issue because within each organization, individuals within multiple business functions interact to solve problems. Those studies that have explored both sides of the partnership have typically done so from the single perspective of purchasing (representing the buyer) and sales/marketing (representing the supplier). Few studies have looked at partnerships from the perspective of functions (other than purchasing and sales/marketing) that interact in the typical course of exchanges between buyers and suppliers—for example, engineering, quality control, and customer service. This study addresses the gap in the current literature by using a multi-case study design to explore buyer-supplier interactions from cross-functional perspectives within both partnering organizations which, in turn, provides dyadic “grounding” for the conceptual integration.

In reviewing the preceding literature, three prominent construct domains emerged. The first relates to relationship expectations (also conceptualized as relationship mindset, understanding, or requirements). The second relates to aspects of communication (conceptualized as frequency, information flow, quality, skillset-specific behaviors). The third relates to problem solving (also viewed as coordination of activities, conflict management/resolution, operational integration).

Based on the identified significance of relationship expectations, communication, and problem solving in the business relationship literature we developed the following framework. In the large view, the framework extends prior work in the area by explicitly proposing relationships among constructs that, to our knowledge, have not been previously explored in the business literature.

Figure 1 presents a conceptual framework which integrates three significant conceptual domains that help explain buyer-seller relationships. The perspective depicts the influence of cooperative norms working through specific communication behaviors to influence problem solving efficacy.

![Cooperative Norms - Communication Behaviors - Problem Solving Efficacy](image)

**Figure 1.** Communication Behaviors as Mediators of Cooperative Norms and Problem Solving Efficacy
We use **cooperative norms** as a construct to capture the first theme identified in the literature which represents an awareness of and willingness to address important relationship issues. As such, cooperative norms provide the motivation and ability to engage in subsequent positive relationship exchanges that are required to effectively deal with the inevitable tensions and conflict that all relationships encounter in order to move the relationship forward. This theme was characterized by concepts such as relationship expectations, mindset, understanding, and requirements (Ohmae, 1989; Bantham et al., 2003; Leuthesser, 1997; Christopher & Juttner, 2000). The use of cooperative norms is also consistent with the view of Axelrod (1986) who argued that norms are a powerful mechanism to regulate conflict. Further, Cannon, Achrol, and Gundlach (2000) found that cooperative norms affect adaptations to dynamic market conditions.

As noted above, there is a considerable literature stream that identifies communication as important for buyer-seller relationship management. However, several aspects of communication have been identified (i.e., frequency, information flow, quality, specific behaviors) (Assael, 1969; Helper, 1991, 1994; Mohr & Spekman, 1994; Bantham et al., 2003). We adopt the conceptual work of Bantham et al. (2003) as we believe this conceptualization extends work in the area by focusing on specific behaviors that help to operationalize communication quality/efficacy beyond frequency and information exchange dimensions. Note that while explorations of frequency and information flow aspects of communication have contributed insights to understanding individual-level relationships, it is clear that these are weaker proxy constructs for communication quality. Thus we propose that the influence of cooperative norms works through four **communication behaviors** proposed in previous interpersonal relationship literature (Bussod and Jacobson 1983, Fowers 1998) including:

- **Nondefensive listening**: This is a critical relationship skill in that it involves focusing attention on what the other person is saying and attempting to really understand their view. It requires significant self-restraint in that one must suppress the tendency to interrupt or dispute the other’s perceptions. Without this communication behavior, mutual understanding is severely limited.

- **Active listening**: This form of listening is more active in contrast to nondefensive listening in that attention and interest are explicitly conveyed to the partner. With this skill, “encouragers” such as eye contact, nodding, and verbal prompts are used to demonstrate listening and facilitate further communication. Further, with active listening, the listener accurately summarizes what the partner has said, and, in this way validates a partner’s viewpoint.

- **Self-disclosure**: An open, honest sharing of information is a foundation of deeper relationships. It is through disclosure that significant relationship needs and expectations can be surfaced. Unilateral disclosure requires elements of courage and trust in that revealing important aspects of oneself leaves one vulnerable to opportunistic behavior by the partner.

- **Editing**: Like nondefensive listening, this skill requires self-restraint. However, self-restraint is now oriented to what is communicated and how it is communicated as opposed to listening behavior. With this communication skill, an emphasis is placed on courtesy and politeness. In this way, communication is actively managed to selectively minimize negative
exchanges (e.g., expressing negative emotions and blaming) as these interactions tend to adversely affect the relationship.

Lastly, we use problem solving efficacy as a construct to capture the third theme identified in the literature which represents perceived confidence in the ability to coordinate activities in addressing problems. The social cognition literature as long noted the importance of efficacy perceptions across a range of performance domains (Bandura 1997). Efficacy perceptions are distinct from norms in that norms are related to the awareness and willingness to address important relationship issues. Efficacy perceptions, in the context of the present framework, relate to confidence in problem solving skills and abilities that are needed to address important relationship objectives. Thus, a relationship partner might possess awareness of and a willingness to address some key relationship issues yet may not be confident in their own or the partner’s abilities to effectively problem solve in areas related to the issues. The problem solving efficacy construct is an important outcome variable that is affected by cooperative norms expressed through communication behaviors. Recall that this issue has been conceived in the literature as the coordination of activities, conflict management/resolution, operational integration and problem solving (Assael, 1969; Claycomb & Frankwick, 2004; Helper, 1991; 1994; Bantham et al., 2003). In addition, Bantham, et al. (2003) conceive of problem solving as central to effective relationships.

Of interest from the perspective of the present research is that the Bantham, et al. (2003) framework offers potential relationships among the identified constructs. They suggest that a relational mindset (i.e., willingness to cooperate) will, at least partially, work through the expression of a skillset enabler (i.e., specific communication behaviors) to influence problem solving. By extension we propose that the influence of cooperative norms works through specific communication behaviors to influence problem solving efficacy.

This research used a two phase methodology to explore proposed constructs and relationships. Study one employed a qualitative methodology to explore the viability of the identified constructs and relationships. Study two used a quantitative methodology to more formally test identified relationships.

**Study One**

**Method**

Study one employs a qualitative research methodology as described by Eisenhardt (1989), Miles and Huberman (1994), and Yin (1994). This methodology focuses on developing a deep understanding of the dynamics present within settings. The primary unit of analysis is the partnership, focusing on the individual participants’ perceptions of the relationship.
Subjects and Procedure

We investigated five partnerships in the manufacturing sector. Specifically, we studied the relationship between metal processing firms and their customers. Companies ranged in size from approximately 50 employees to several thousand employees.

Personal interviews were conducted with multiple individuals within each firm of the partnering dyad, including marketing, sales, purchasing, engineering, manufacturing, and quality control. Thus, responses from both sides of the relationship dyad are represented in study one. The participants were selected after a member of the research team and a primary contact at supplier firms discussed the project and decided on the appropriate interview participants based on their involvement in the relationship. Participants were not explicitly cued in terms of the framework under investigation. The interview typically began with the researcher asking the participant to describe the relationship. Further questioning related to the genesis of relationship problems, their resolution, resources that each firm contributes to the partnership, positives and negatives of the relationship, and comparisons of the partnership with less successful relationships. In total, 26 informants were interviewed for study one.

Interviews were conducted on site and by telephone and typically lasted 30 minutes. Interviews were audio taped and later transcribed; notes were also taken. The data gathered from the transcriptions of the interviews were used to create a case study database which was reviewed in light of the framework proposed above. Researchers independently reviewed and coded passages of text as to their representativeness of framework constructs. Researchers then compared coded passages for agreement. Instances of disagreement were resolved through subsequent review and discussion.

Results

Cooperative Norms

Our interview data suggests that the cooperative norm construct, defined as a willingness to make cooperative changes and balance benefits and burdens in a relationship, is prominently represented in working relationships between individuals from various functional areas across organizations. The following quotes are meant to serve as exemplars of the different ways that cooperative norms manifested themselves in the interview data. The participant’s job title and organizational affiliation precede each quotation. Both the first and second quotes provide positive examples of cooperative norms. They refer to a demonstrated concern and willingness to work with the partnering firm. The third quote provides a negative example of cooperative norms. This quote further suggests that the “heavy handed” action by the customer firm negatively affected subsequent communication behaviors.

Commodity Manager, Customer Firm #3:
I can sum up in saying that they have been very cooperative with us in some tough business times. They understand our side as we have tried to understand their side. They have worked with us very well.

Quality Engineer, Supplier Firm #1:
It is just no question that they are going to work with us, whether it is a problem, or getting something qualified, or anything they need form us, or we need from
them. They are, like it has always been, quite a partner, much more so than other companies. It seems to be a real focal point with them.

Operations Manager, Supplier Firm #2:
My view is they went out to everybody and basically put a gun to their head, put the bullet in the chamber, and pulled the hammer back. That was so out of character of how they had operated in the past, and they didn’t do a very good job explaining what they were trying to do and how the program would work. So those pathetic explanations didn’t end up coming until everybody was extremely upset and all sorts of communications going back and forth between the two companies, none of which were all that positive. They just literally went in and changed our prices. They just arbitrarily changed them.

Communication Behaviors
Our interview data provided numerous examples of communication behaviors that were represented in responses from individuals across functions and organizations which are consistent with those in the proposed framework. Below are a few examples, in the words of our informants, which illustrate these concepts. Again, the participant’s job title and organizational affiliation precede each quotation.

Nondefensive listening
Nondefensive listening involves focusing attention on what the other person is saying and attempting to really understand their view, even if their view is appreciably different. The following quotes provide positive examples of nondefensive listening. The first quote additionally suggests the relationship between this communication behavior and subsequent problem solving.

Quality Manager, Supplier Firm #3:
I think we need to listen; we need to have good listeners. Once we truly understand what’s going on, then we need to go in that direction and deal with what we are hearing. We need to be very open to self-criticism. Say we have a problem; this is our problem and not theirs. We have to deal with our problems in a mature way. Whatever our problem is, we have to deal with it. And then we can go and work with them and build relationships.

Quality Manager, Supplier Firm #3:
I have to be more flexible. I have to try to refocus my sights, take a different approach knowing that there’s going to be some threats, some positions that have been thrown out hard and fast. I have to make sure that if I am going to negotiate with them that I am coming back with a focus on the issue and a realistic approach and sell it in an appropriate way, not drawing another line in the sand of take it or else.
Active listening

Our interview data did not provide specific references to active listening “encouragers” such as eye contact, nodding, or verbal prompts used to demonstrate listening. It did, however, provide evidence of where attention and interest had been explicitly conveyed to the partner. The following quotes provide positive examples of where a partnering firm’s behavior indicates that they were attentive and interested in their partner’s communication. The second quote further suggests the relationship between active listening and problem solving efficacy.

Project Manager, Supplier Firm #3:
Their engineers have been very cooperative. They are willing to listen to our concerns and issues and take them back to their group and discuss those issues. Whereas with other customers, it is kind of like hardball, you make the part so you do everything. At (Company Name), they listen. I have worked with their engineers and they listen to what you can or cannot do. They understand your problems.

Quality Engineer, Supplier Firm #1:
Probably (Company Name) is a little bit more reasonable. They will listen to you, especially if we have a problem with a specific dimension or something like that. They will change things a little bit to make it easier for us to make. They will work with you. We have one particular customer that will not work with us, and it causes a lot of problems because it is very frustrating.

Self-disclosure

Self-disclosure is the open, honest sharing of information relevant to the relationship. The first quote refers to the open sharing of cost information that could leave the supplier vulnerable to opportunistic behavior by the customer. The second quote refers to the clarity of expectations that self-disclosure can facilitate.

Commodity Manager, Customer Firm #3:
I think (Company Name) has brought a spirit of partnership, which is a much overused word in today’s world, but they have been very open with us relative to sharing their costs we that we can arrive at a mutually acceptable price on the parts they are selling to us.

Quality Engineer, Supplier Firm #1:
One thing that is easy about working with them is that they let you know right up front, exactly what they expect and what they need. You don’t have any problems calling them if we think something is not right or if we have any questions. There is not much left open for interpretation. They get right down to the black and white, and let us know what is expected of us.

The following negative example of self-disclosure suggests that the lack of self-disclosure can have a negative influence on problem solving.

Supplier Manager, Customer Firm #1:
We send them purchase orders with weekly requirements and there are times when we don’t hear from them and then the week that they are due it’s, “Oh, we
had issues. Oh, we had this or that.” Let us know up front that you have the
issues and we can work with you; but don’t wait until after your delivery due date
and say, “Oh, by the way, we’ve had this problem, we’ve had that problem.”

**Editing**

This communication behavior requires an emphasis on courtesy and politeness.
Its use can minimize the escalation of negative exchanges. Our interview data provided
negative examples of editing, or more precisely, examples of when editing was absent
from an exchange. The first quote is self-reflective in nature while the second references
a customer’s lack of editing.

Quality Manager, Supplier Firm #3:
We are not perfect. From where I sit, I see us behaving sometimes in similar
kind. I think we as a company generally try to bargain in good faith, trying to
establish a win-win situation, which is good for everybody. Sometimes we get a
little negative emotion in there that escalates into an inappropriate position, but
we generally do a very good job.

Quality Manager, Supplier Firm #3:
Particularly at (Company Name), you know that somebody is going to be
threatening right away. If there is a problem the threats start first thing.
Problem Solving Efficacy

The review of our interview data identified multiple examples of problem solving efficacy, that is, the perceived confidence in the ability to coordinate activities in addressing problems. The following quotes provide examples. The first quote is a positive exemplar of the construct. The second and third quotes contrast both positive and negative examples of problem solving efficacy. All three quotes further suggest the relationship between communication behavior and problem solving efficacy.

Director of Purchasing, Customer Firm #3:
They jumped through hoops to get our product done and approved and continue to supply from that product on. They have tried to understand our needs and we have tried to understand theirs. They have worked with us for a long time and they have been very responsive and worked through their issues with us. They have given us the criteria that we are looking for—the cost, quality, technology, delivery, administration, and attitude to move forward with more business.

Customer Service Specialist, Supplier Firm #3:
I have a particular problem customer that is just, I mean, we know his tolerances for his parts are so tight that it is almost impossible for us. I don’t think we will ever please him. In fact, I was on the phone with him last night and again this morning. But with (Company Name), we have never had those issues. I mean they would always say, “Tell us what you can do.” They will work with you. But this particular gentleman will not work with anyone. This particular gentleman has blinders on; black is black and white is white; there is no gray area in between.

Quality Engineer, Supplier Firm #3:
We have trouble correlating different measurements with one of our customers. Usually it is just one measurement and their paperwork always comes with a form that implies we are wrong—fix it. This has been going on for months and months. It is just a correlation thing. One of us is doing something different, but they don’t seem to want to get to the bottom of it and figure out what is different. Where as with (Company Name), when we were having a similar problem, they spent hours on the phone with me, e-mailing back and forth, trying to figure out what we were doing differently and how we could get so we were doing it the same. It was never, “You are wrong and we are right.” It was, “What are we doing differently from each other.”

In sum, informant responses representing dyadic exchanges across functions and organizations provide qualitative support for the viability of the identified constructs as well as, to a limited degree, relationships that were identified in the literature. Findings of study one suggest the appropriateness of further empirical exploration of the proposed relationships. Study two formally tests these proposed relationships.
Study Two

We formally propose the following hypotheses based on Figure 1 which suggests that the influence of cooperative norms on problem solving efficacy will be mediated by specific communication behaviors. It is posited that:

H$_1$: Nondefensive listening will mediate the relationship between cooperative norms and perceived problem solving efficacy.

H$_2$: Active listening will mediate the relationship between cooperative norms and perceived problem solving efficacy.

H$_3$: Disclosure will mediate the relationship between cooperative norms and perceived problem solving efficacy.

H$_4$: Editing will mediate the relationship between cooperative norms and perceived problem solving efficacy.

We expect that cooperative norms will be positively related to the use of specific communication behaviors, which, in turn, will be positively related to perceived problem solving efficacy.
Method

Sample

Study two consisted of a sample of metal part producers from three separate metal forming technologies: powder metallurgy, casting, and heat treating. Although distinct, these technologies are metal forming industries that are in the mid-point of the supply chain and deal with a common set of competitive problems and customer management. Thus, responses from the supplier or seller side of the relationship dyad are represented in study two. Three different industry lists comprised the sampling frame. Using these lists, suppliers or firms that engage in specialized markets were eliminated. A total of 247 firms remained. At each firm, an individual was identified who was centrally engaged in an ongoing customer relationship.

Procedure

Following the Dillman Total Design Method (1978), a preliminary letter was sent to each potential respondent outlining the project, explaining its importance to them, and the importance of their participation. One week later, each individual received a cover letter, survey, and a postage paid return envelope. Individuals were promised a summary of results if they participated in the study. One week later a reminder post card was sent, and a follow-up survey package was sent to each non-respondent three weeks later. Data collection was terminated after another four weeks. The overall response rate was 36.4%.

Questionnaire

Measures were based on literature reviews and knowledge of metal part producer industries. Industry representatives not included in the study reviewed an initial draft of the questionnaire. The final questionnaire included measures of managerial perceptions of cooperative norms, use of communication behaviors, problem solving efficacy, and demographic descriptors.

Measures

The context for questionnaire administration was a significant customer relationship that had been ongoing for at least the past year in which the respondent had recently experienced conflict. Given the dyadic nature of relationships, respondent perceptions for all measures included: 1) views of their own (the supplier’s side) personnel; and 2) views of their customer’s (the buyer’s side) personnel. Measures were then summed and averaged representing combined company and customer perceptions. The Cooperative norms construct was assessed via a total of ten, seven-point items (strongly disagree/strongly agree) relating to the respondent's view of their company’s as well as their customer’s personnel with respect to concern for partner profitability, willingness to make cooperative changes, view of problems as joint responsibility, view of the need to work together with the partner, and not minding owing the partner favors (adapted from Cannon, Achrol, & Gundlach, 2000).
Communication behaviors were measured with seven-point items (rarely/frequently) relating to the respondent’s perception of their company’s as well as their customer’s personnel. These included:

- **Nondefensive listening (6 items):** paying attention to what the partner is saying, appearing to understand the partner, not interrupting the partner.
- **Active listening (6 items):** using eye contact when listening, accurately summarizing partner viewpoint, actively acknowledging understanding of the other perspective.
- **Disclosure (10 items):** sharing honest thoughts and feelings, open sharing of ideas and information, direct communication of point of view, specifies requirements and needs, and identifies specific ways the other side can change to improve relationship.
- **Lack of editing (8 items):** interacting politely (reverse coded), engaging in fewer positive than negative exchanges, focusing on more negative than positive behaviors, and overreacting to negative events.

The measure of **problem solving efficacy** consisted of four, seven-point items (not at all confident/extremely confident) assessing a respondent’s confidence in their company’s as well as their customer’s ability: to engage in joint problem solving in productively resolving conflict and to effectively resolve conflict through cooperative problem solving.

**Results**

Cronbach's coefficient alpha was used to assess the internal consistency of multiple item measures used in the study. Alpha measures ranged from .74 to .92 and compare favorably with reliabilities reported in related research. Table 1 reports descriptive statistics and correlations for the constructs used in this study.

**Regression Analyses**

In order to test whether communication behaviors mediate the effect of cooperative norms on problem solving efficacy three conditions must be met. 1. Norms should have a significant effect on the communication behaviors. 2. Norms should also have a significant effect on problem solving efficacy. 3. As compared to condition #2, the impact of norms on problem solving efficacy should significantly diminish when a communication behavior is included in a regression model with norms predicting problem solving efficacy (Baron & Kenny, 1986).

The above conditions were examined separately for the four communication behaviors with ordinary least squares regression using the Baron and Kenny criteria, and are reported in Table 2. Thus, a communication behavior is regressed against cooperative norms (condition #1). Next, problem solving efficacy is regressed against cooperative norms.

1 In measurement development pretesting, a series of pair-wise confirmatory factor analyses was conducted to assess discriminant validity of the measures using chi-square difference tests. For each pair of measures, the chi-square difference tests produced a significant result. Therefore, trying to force measures of different constructs into a single underlying factor led to a significant deterioration of model fit in comparison to the two-factor model. These results provide support for the discriminant validity of the measures (Anderson and Gerbing 1988).
norms (condition #2). Lastly, problem solving efficacy is regressed against cooperative norms and a communication behavior (condition #3). Note that Table 2 includes the standardized coefficients, model $R^2$ and F value for each tested relationship.

With respect to H1, cooperative norms had a significant effect on nondefensive listening, thus, condition #1 is met. As anticipated, norms had a significant effect on problem solving efficacy, thus, condition #2 is met. Further, the influence of norms was diminished when nondefensive listening was included in the regression model predicting problem solving efficacy, meeting condition #3 (with the standardized coefficient for cooperative norms dropping from .22 to .12).

Regarding H2, cooperative norms had a significant effect on adaptive listening, thus, condition #1 is met. As noted before, norms had a significant effect on self-efficacy, thus, condition #2 is met. Further, the influence of norms was diminished when active listening was included in the regression model predicting problem solving efficacy, meeting condition #3 (with the standardized coefficient for cooperative norms dropping from .22 to .14).

Findings with respect to H3 and H4 followed similar patterns with cooperative norms having significant effects on disclosure and editing, respectively, and problem solving efficacy (conditions #1 and #2). However, for condition #3, the influence of norms was diminished for disclosure (with the standardized coefficient for cooperative norms dropping from .22 to .00) and not for editing (i.e., a lack of). Note that directional relationships between variables were as expected with cooperative norms positively related to nondefensive and adaptive listening, disclosure, and problem solving efficacy and negatively related to a lack of editing. As anticipated all of the communication behaviors except a lack of editing were positively related to problem solving efficacy.

In summary, consistent with three of four predictions, communication behaviors were found to mediate relationships between cooperative norms and problem solving efficacy. Contrary to expectations the editing behavior was not found to mediate the relationship between norms and problem solving efficacy.

**Discussion and Implications**

The purpose of this project was to develop and test a model relating individual cooperative norms and communication behavior to relationship quality measured by problem solving efficacy. This work has both conceptual and practical implications. As Narayandas and Rangan (2004) noted, much of the previous literature did not distinguish between interpersonal and interorganizational effects. From a theoretical perspective, understanding the link between individual behavior and interfirm cooperation fills a significant gap in the literature. Larson (1992) suggested that social control factors will give a more complete account of the development of organizational networks than economic analyses alone. Ellram and Hendrick (1995) found that both buyers and sellers desired improved communication. Our research was designed to add to the emerging body of knowledge about “softer” issues in the development of effective interorganizational relationships.

In terms of practical applications, this study identified potential antecedents to effective cooperation that are tractable and can be developed within organizations that regard cooperation as essential to their strategy. Given the current competitive
environment, with pressures for the development of global capabilities and product development processes that often require the convergence of different capabilities from many firms, understanding “softer” issues will be a growing necessity among many firms.

**Theoretical implications.** Mohr and Spekman (1994) demonstrated that communication quality is associated with the degree of partnership success. That result is important because it links individual behavior (communication) with organizational outcomes. Certainly, their research was a significant contribution in identifying relationships among individual behaviors and organizational outcomes. However, their measures of communication quality focused more on the characteristics of the information (e.g., completeness, timeliness) than on the nature of individual interactions. Similar to Leuthesser (1997), we found a significant relationship between disclosure and relationship quality (measured by problem solving efficacy). However, we extended his work by identifying two more communication behaviors related to relationship quality—nondefensive and active listening.

The impact of individual interactions is underscored by Narayandas and Rangan (2004) who found that trust between individuals in buyer-seller relationships yields commitment between the firms. Our research dealt with firms similar to Narayandas and Rangan (buyer-seller relationships among commodity suppliers). While our final dependent measure (problem solving efficacy) is not a precise surrogate for trust, confidence in developing joint solutions is very likely to correlate with the Moorman, Zaltman, and Deshpande (1992) definition of trust—“a willingness to rely on an exchange partner in whom one has confidence” (p. 315). This connection has significant implications as trust is implicated in the links between cooperative norms, communication, and relationship quality. Connecting these results with downstream outcomes such as interorganizational commitment and investments may add new insights regarding relationships among these variables.

These results are also consistent with Anderson and Narus (1990) who found that communication was positively related to cooperation from the perception of both the manufacturer and distributors. While the dyads in the Anderson and Narus study differ from our sample, channel problems are certainly similar to commodity relations in the supply chain. Moreover, like Mohr and Spekman (1994), the measures of communication center on issues of communication sufficiency and timeliness. While these are certainly valuable, our research provides measures of interpersonal behavior that extend the breadth of the communication construct.

To aid construct integration, we have employed field interviews as a check on the relevance and significance of constructs identified in the literature. To this end we have utilized qualitative research methodology incorporating matched buyer-supplier dyads as a means of exploring both sides of the partnership and have done so from multiple functions including top management, sales, purchasing, engineering, quality control, and customer service.

These findings imply that to understand how conflict resolution gets translated into subsequent relationship satisfaction, investments and commitment, one must understand the antecedent process of how cooperative norms work through specific communication behaviors. Without communication behaviors facilitating efficacious
problem solving, the likelihood of satisfaction, future investments and longer-term commitment in the buyer-seller relationship are reduced.

Recall that while editing, more specifically a lack of editing, was found to be represented in the qualitative exemplars, it was the one communication behavior that was not found to at least partially mediate the effect of cooperative norms on problem solving efficacy. Of the communication behaviors, editing involves emotion - trying to limit the potentially adverse effects of negative emotion. Although appearing to possess face validity, perhaps the items used to capture this aspect of communication in study two do not adequately account for its influence. Or, alternatively, perhaps the emotional content associated with this aspect of communication causes editing to work differently or affect different variables in the relational process.

**Future research implications.** The present study contributes to research in the area in multiple ways. For example, exploration of the role of other communication behaviors could prove fruitful. Further, how might attributional processes related to prior problem solving episodes and associated outcomes affect cooperative norms and communication behaviors?

Future quantitative research might also explore proposed relationships for both sides of the relationship dyad. Study two of this research explored perceptions from the supplier/seller side of the dyad only. However, informant responses from study one representing both buyer and seller dyadic exchanges provide qualitative support for the significance and relevance of constructs as well as, to a limited degree, proposed relationships.

Given that the present research explored mediation for cross sectional data, longitudinal quantitative explorations appear particularly warranted. Specifically, examining the process whereby outcomes associated with one problem solving and conflict resolution episode effect subsequent communication and problem solving exchanges would be a valuable contribution to the literature. In addition, the role of cooperative norms, communication behaviors and problem solving efficacy in relationship satisfaction and investments begs exploration.

Future research in this area may also develop a contingency model comparing the generalizability of the present findings depending on the level of customer and seller power. Our research focused on selling firms in which the sales team dealt with a powerful customer. Might relationships among norms, communication behaviors and problem solving efficacy differ in settings in which the seller is more powerful?

**Managerial implications.** From a practitioner standpoint, the present research has important implications. First, the significance of perspective taking cannot be overemphasized as a means of addressing relational conflict. This observation was highlighted over and over by multiple informants in our field interviews and is further reinforced by the significant influence of cooperative norms in the regression equations.

Of significance is the finding that cooperative norms work through communication behaviors to influence perceived problem solving efficacy. Thus, even with the adoption of a partnering mindset, the achievement of truly efficacious problem solving will prove elusive without the complementing skillset – communication behaviors. Thus, training that reinforces skills relating to active and nondefensive listening, and disclosure provide specific tools that are critical for dealing with the continuous conflict encountered in various stages of interorganizational relationships.
Informant responses unequivocally indicated than even when partners were willing to cooperate to address a problem, it is the way they communicate about the problem, more so than the amount of communication, that can either facilitate or denigrate problem solving efficacy.

In conclusion, understanding buyer-seller relationships will continue to be a significant topic within the marketing literature. It is our hope that this examination of relationships among cooperative norms, communication behaviors, and problem solving efficacy will contribute to further efforts aimed at increasing understanding of the dynamics of individual-level working relationships between organizations.
Table 1
Descriptive Statistics and Correlations for Cooperative Norms, Communication Behaviors, and Problem Solving Efficacy

<table>
<thead>
<tr>
<th></th>
<th>Standard Deviation</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 Cooperative Norms</td>
<td>4.65</td>
<td>.89</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2 Nondefensive Listening</td>
<td>4.87</td>
<td>1.01</td>
<td>.34**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3 Active Listening</td>
<td>4.86</td>
<td>.95</td>
<td>.40**</td>
<td>.57**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4 Disclosure</td>
<td>5.07</td>
<td>.78</td>
<td>.57**</td>
<td>.58**</td>
<td>.63**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>X5 Editing</td>
<td>4.59</td>
<td>1.02</td>
<td>.49**</td>
<td>.44**</td>
<td>.53**</td>
<td>.50**</td>
<td>-</td>
</tr>
<tr>
<td>X6 Problem Solving Efficacy</td>
<td>4.66</td>
<td>1.19</td>
<td>.22*</td>
<td>.32**</td>
<td>.26*</td>
<td>.36**</td>
<td>.17</td>
</tr>
</tbody>
</table>

*Correlation is significant at the .05 level.
** Correlation is significant at the .01 level.
N = 92
## Table 2
Regression Analyses Testing Mediating Effect of Communication Behaviors on Cooperative Norms and Problem Solving Efficacy

<table>
<thead>
<tr>
<th>Communication Behaviors</th>
<th>Model Results</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$R^2$</td>
</tr>
<tr>
<td><strong>Nondefensive listening</strong></td>
<td></td>
</tr>
<tr>
<td>Nondefensive listening = (.34*) Coop. norms</td>
<td>.12</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.22*) Coop. norms</td>
<td>.05</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.12) Coop. norms + (.28*) Nondefensive listening</td>
<td>.12</td>
</tr>
<tr>
<td><strong>Active listening</strong></td>
<td></td>
</tr>
<tr>
<td>Adaptive listening = (.40*) Coop. norms</td>
<td>.16</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.22*) Coop. norms</td>
<td>.05</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.14) Coop. norms + (.22*) Adaptive listening</td>
<td>.09</td>
</tr>
<tr>
<td><strong>Disclosure</strong></td>
<td></td>
</tr>
<tr>
<td>Disclosure = (.57*) Coop. norms</td>
<td>.32</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.22*) Coop. norms</td>
<td>.05</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.00) Coop. norms + (.37*) Disclosure</td>
<td>.14</td>
</tr>
<tr>
<td><strong>Editing</strong></td>
<td></td>
</tr>
<tr>
<td>Editing = (-.54*) Coop. norms</td>
<td>.29</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.22*) Coop. norms</td>
<td>.05</td>
</tr>
<tr>
<td>Prob. solving efficacy = (.27) Coop. norms + (-.03) Editing</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note: Standardized coefficients appear in parentheses.
* $p < .05$ in all instances except adaptive listening coefficient where $p < .054$. 

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REFERENCES


An extension of the marriage metaphor in buyer–seller relationships:

An exploration of individual level process dynamics

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An extension of the marriage metaphor in buyer–seller relationships: An
exploration of individual level process dynamics

Abstract

The marriage metaphor has been used to make substantial contributions to our understanding of buyer-seller relationships. However, there has been increasing recognition that transfer from the marriage metaphor to buyer-seller relationships has not been fully explored. There is a need to explore buyer-seller relationships at a more micro, individual level that allows for greater consideration of relational/communication elements. This paper extends existing perspectives by integrating conceptual and empirical work from the interpersonal relationship literature. Specifically, the role of individual partner expectations, communication behavior, and appraisal processes in problem solving are delineated. Qualitative field interviews from participants representing multiple functional areas across both sides of business dyads are utilized as a means of examining the viability of the conceptual transfer from interpersonal to buyer-seller relationships. The work holds implications for future research and management of relational problem solving in buyer-seller partnerships.

Keywords: Buyer-seller relationships; Buyer-seller problem solving; Buyer-seller appraisal processes; Dyadic Communication
An extension of the marriage metaphor in buyer–seller relationships:  

An exploration of individual level process dynamics

Introduction

Throughout the past two decades, the marriage metaphor has been increasingly accepted within the marketing domain as representing an important platform from which to explore business relationships (c.f., Dwyer, Schurr, and Oh, 1987). Indeed, the resultant relationship marketing orientation has been recognized as a genuine paradigm shift for the discipline (c.f., Morgan and Hunt, 1994; Sheth and Paratiyar, 1995).

Examples of how relationship marketing has contributed to the evolution of marketing theory and research include: the recognition of distinctive phases through which relationships develop and change; the importance of mutuality, trust, information sharing, and commitment in relationships; and that through cooperative relationships, uncertainty can be reduced, resources can be pooled and costs divided, and problem solving can be more efficacious in the creation of value (c.f, Dwyer et al., 1987; Morgan and Hunt, 1994; Wilson, 1995).

While the marriage metaphor has been used to make substantial contributions to our understanding of buyer-seller relationships (c.f., Dwyer et al., 1987; Morgan and Hunt, 1994), there has been increasing recognition that transfer from the marriage metaphor to buyer-seller relationships has not been fully explored (Hunt and Menon, 1995; Tynan, 1997; O’Malley and Tynan, 1999). To this point, notable weaknesses in the buyer-seller relationship literature appear to be related to the need to examine buyer-seller relationships at a more micro, individual level that allows for greater consideration of social/relational elements.

While there has long been recognition that business relationships ultimately progress through individuals interacting over time (c.f., Hakansson, 1982), buyer-seller models have tended to focus on more macro, firm level factors and processes that by implication could be extended to interacting individuals but have not been explicitly linked to individual dyadic interaction.

As an example of this macro focus, Anderson and Narus (1990) state that “In our experience, firms typically have only a coarse understanding of how the outcomes they are providing to partner firms compare with these two standards. (i.e., outcomes compared to expectations and alternatives) Hence each firm needs to gain and periodically update its understanding of its partner firm’s requirements or expectations and the alternative outcomes competitors are offering.” (p. 56) In fact, Dwyer et al., (1987) recognize that their process model of relationship phases is broad in orientation and subject to more fine grained (i.e., individual level) conceptual refinement.

Wilson (1995) recognizes the need for work examining relationships that is sensitive to the experience of partners as relationships move through interacting people. Alajoutsijarvi, Eriksson, and Tikkanen (2001) also note the scarcity of work tied to essential aspects of individual level interaction. Indeed, Haytko (2004) most recently observed that it is difficult for relationship participants to think in terms of interfirm
relationships without thinking of interpersonal relationships as their day-to-day experience involves working closely with individuals.

In addition to the need to examine buyer-seller relationships at a more micro, individual level, there also exists a need to address social/emotional elements in buyer-seller relationships.

Value creation in buyer-seller relationships is dependent upon both economic/technical and social/relational elements (c.f., Wilson, 1995). The economic/technical elements are related to costs, volume, and technical know-how. The relational elements are related to communication processes, emotions, and trust. Despite some recognition that important relationship outcomes (i.e., satisfaction, commitment, and value creation processes) are tied to both economic/technical and social/relational elements, recent literature has noted the limited attention social/relational elements have actually received in research and practice.

For example, Walter, Ritter, Gemunden (2001) note that the inclusion of non-economic or “soft functions” would offer a richer understanding of value creation in buyer-seller relationships. Hutt, Stafford, Walker, and Reingen (2000) observe that a failure to nurture interpersonal connections often has negative consequences for alliances. Alajoutsijarvi, et al., (2001) specifically highlight the need for detailed examinations of patterns of interpersonal communication. Further, Bromberger and Hoover (2003) posit that the management of interpersonal relationships is the most tenuous aspect of supply chain management and the one that is least understood: “Despite years of process breakthroughs and elegant technology solutions, an agile, adaptive supply chain remains an elusive goal. Maybe it’s the people who are getting in the way.” (p. 64)

Clearly, there is a need to explore buyer-seller relationships at a more micro, individual level that allows for a closer consideration of social/relational elements. Addressing these areas is important in order to develop a more complete understanding of the role of individual level dyadic interaction in buyer-seller relationship success or failure. As is becoming increasingly clear, it is interpersonal connections that serve as the “glue” that binds firms in relationships (Hutt and Stafford, 2000; Haytko, 2004). The purpose of this paper is to present a perspective that adds depth to current thinking about buyer-seller relationships by exploring a “theoretical trail” we believe to be particularly relevant – the marriage metaphor.

We address these underdeveloped areas through an integration of theoretical and empirical work in the interpersonal relationship and business literature. Specifically, we propose a framework that further develops and clarifies dyadic interaction between individuals in buyer-seller relationships by focusing on expectations, communication behavior and appraisal processes. The proposed framework is then examined through a qualitative lens by employing field interviews with informants representing different functional areas across both sides of the relationship dyad. Finally, implications of the proposed framework for theory development, future research, and managerial practice are discussed. Extending the marriage-business literature metaphoric transfer, we now review relevant interpersonal relationship literature and its implications for understanding buyer-seller relational processes.

**Relevant interpersonal relationship literature**
In the marital relationship literature, problem solving behaviors have long been a target of interventions aimed at addressing marital conflict (Weiss, 1984). Further, Bradbury and Karney (1993) found that the quality of partner problem solving accounts for significant variability in their relationship satisfaction. Beyond behaviors, cognitive processes have also been found to play important roles in marital relations. For instance, Jacobson (1984) describes how cognitive processes can contribute to continued marital distress even following successful behavior change.

Bennun (1986) delineates two classes of expectations that have implications for understanding outcomes associated with dyadic interpersonal interactions. One set of expectations relate to behaviors that contribute to the achievement of outcomes (i.e., the expectation that a partner will behave in a cooperative, collaborative manner). The second set of expectancies relates more to the outcomes themselves. As Bennun notes, these classes of expectations hold implications for interventions aimed at improving relationships. Partners may enhance interaction by not only altering expectations related to desired outcomes but also by altering expectations relating to how they interact.

In a related area, Ben-Yoav and Pruitt (1984) found that negotiation efficacy was dependent on both expectations related to cooperative future interaction (ECFI) and accountability concerns. Conditions of high accountability (i.e., related to tangible outcomes) and low ECFI (i.e., expectations tied to cooperative behavior in the future) tended to produce contentious behavior which reduced joint benefit in partner negotiation. In contrast, conditions of high accountability and high ECFI contributed to increased joint negotiation benefit. Implications of these findings parallel those of Bennun in highlighting the importance of how expectations related to partners’ interactions impact problem solving effectiveness.

In addition to expectations, partners’ evaluations of their interactions have also been found to affect the development of their interpersonal relationship (Bradbury and Fincham, 1991; Johnson and Bradbury, 2000). McNulty and Karney (2002) examined relationships among specific expectations, appraisals of discreet interactions, and global satisfaction with the marital relationship. Specifically, of relevance to the present paper, they delineate how longer and shorter-term expectancies directly influence relational appraisal and how a partner’s own behavior is mediated by the other partner’s behavior in affecting appraisal processes. These findings imply that in order to develop a more complete understanding of partner relationship success or failure requires an understanding of how partner expectations and behaviors interact to influence evaluation of specific interactions.

Expectations–communication behavior–appraisal model of buyer–seller problem solving

Integrating extant business relationship frameworks with relevant interpersonal relationship literature, Figure 1 posits concepts and relationships relevant to the explication of individual level dynamics for buyer-seller problem solving episodes. Bantham, Celuch, and Kasouf (2003), extend work in the buyer-seller relationship area
by positing interdependent problem solving as the key “driver” of satisfaction, investments, and subsequent relationship commitment. Bantham et al., (2003) conceive of episodic problem solving as requisite through all phases of partnerships, from initial goal development, to coordinating engineering activities for the development of a part, to reworking delivery scheduling due to unforeseen quality problems.

Based on the work of Bennun (1986) and Ben-Yoav and Pruitt (1984), which highlighted the significance of both outcomes-related and interaction process-related expectations in partner interactions, we suggest that critical cognitive domains in interdependent problem solving are represented as two types of expectations (developed in real-time or derived from past experience). These expectations consist of (1) those related to business outcomes and (2) those related to communications. Thus, in our view, these expectations serve as the cognitive foundation for interdependent problem solving processes and manifest themselves as short-term communication-related expectations (e.g., what I expect this upcoming meeting to be like; how I expect to be treated; how I expect to treat the other side) as well as long-term expectations relating to tangible business outcomes (e.g., sales volume and cost issues) in a given problem solving interaction.

This view is consistent with prior work in the marketing relationship literature that suggests that tangible/economic/marketing-related and intangible/emotional/relationship-related elements are implicated in assessments made by relational partners (c.f., Dwyer, Schurr and Oh 1987; Wilson 1995; Wathne, Biong, and Hiede 2001). As portrayed in Figure 1, these expectations loom large in not only how partners behave but how they evaluate outcomes of a problem solving episode.

As suggested by Bantham et al. (2003) and supported by Kasouf, Celuch, and Bantham (2003) the cognitive domain (e.g., expectations) will affect communication behaviors, which, in turn, influence problem solving efficacy. Therefore, by extension, we conceive of an individual’s communication expectations as influencing their own communication behavior.
Communication behaviors typically examined for their ability to enhance interpersonal interaction include: nondefensive listening, paying attention to what a partner is saying, not interrupting the partner; active listening, using eye contact when listening, accurately summarizing partner viewpoint; disclosure, open sharing of requirements, needs, ideas and information, direct communication of point of view; and editing, interacting politely, engaging in fewer negative than positive exchanges, and not overreacting to negative events (Fowers, 1998; Bussod and Jacobson, 1983).

Owing to the current work related to appraising interpersonal relationships (McNulty and Karney, 2002), one partner’s communication behavior will influence the other partner’s communication behavior. For example, the failure of one partner to edit negative emotions from their communication will often result in the expression of reciprocal negativity from the other partner. In another instance, the unilateral use of information disclosure can spur reciprocal disclosure from one’s partner. The dyadic communication process, which we conceive as the core of problem solving, results in both relational process (i.e., communication-related) and business outcomes. Consistent with this view of outcomes, we propose that the appraisal of any problem solving episode is composed of an evaluation of relational process as well as business outcomes.

Based on the work of McNulty and Karney (2002) which supports the greater saliency of the partner’s as opposed to one’s own behavior in appraising interactions, we propose that an individual’s evaluation of relational process outcomes is predominantly influenced by the other partner’s communication behavior during problem solving.
Alternatively, we conceive of the evaluation of business outcomes to be determined by an individual’s own prior business expectations as compared to actual business outcomes. Ultimately, both process and outcome appraisals associated with a given problem solving episode are conceived as enhancing or degrading subsequent longer-term outcomes such as satisfaction, investments, and commitment. This further clarifies the conceptual connection between problem solving episodes and factors implicated in relationship commitment. For example, satisfaction will be tied to appraisals of both business outcomes and communication processes. Further, positive process appraisals are likely to result in the enhancement of intangible investments such as trust and social bonding between partners. Positive appraisals related to business outcomes (i.e., successfully resolving a quality problem) may result in greater financial investment between partners in the future. Finally, the comparison level of alternatives also stands to be influenced by episodic appraisal processes. Comparison level of alternatives is tied to the quality of outcomes from the best available relationship partner (Anderson and Narus 1990; Wilson 1995). Given the perception of roughly equivalent business outcomes among available partners, an evaluation of the quality of relational (communication) processes among potential partners may increase the commitment to one partner because alternative partners are particularly difficult to work with in order to achieve business objectives.

In summary, the model portrayed in Figure 1 elaborates the episodic problem solving process by showing how expectations and communication behaviors interact to affect appraisals for a given problem solving episode. Further, the perspective highlights the importance of specific appraisal processes associated with problem solving and their potential significance for longer term relational outcomes (i.e., satisfaction and investments).

Field interviews

Qualitative field interviews were used to examine the viability of the conceptual framework depicted in Figure 1. Data collection and analysis employed a qualitative research methodology as described by Eisenhardt (1989), Miles and Huberman (1994), and Yin (1994). This methodology focuses on developing a deep, rich understanding of the dynamics present within settings.

Twenty-six participants, representing four industrial buyer-seller relationships were interviewed. The firms involved in these relationships ranged in size from 50 employees to several thousand employees. The participants were significantly involved with the management and operation of the buyer-seller relationship. They represented both sides of the relational dyad and multiple organizational functions (e.g., buyers, commodity managers, supplier managers, design engineers, quality engineers, marketing managers, and customer service specialists). Many of the participants were interviewed on several occasions over an eighteen-month time span. In total, 62 interviews were conducted for the study.

Interviews typically lasted about 45 minutes. They were audio taped and later transcribed. The interviewing approach was open-ended. Participants were asked to describe positive and negative factors related to working with the partner, the nature of information use, satisfaction with the partnership, and likelihood of continuing with the
relationship. This form of interviewing provided the perspectives of the participants; in the participants’ own words. The data gathered from the transcriptions of the interviews were used to create a case study database that was reviewed in light of the conceptual framework displayed in Figure 1. Researchers independently reviewed and coded passages of text as to their representativeness of framework constructs. Researchers then compared coded passages for agreement. Instances of disagreement were resolved through subsequent review and discussion.

The starting point for this research was the identification of the need to examine buyer-seller relationships at a more micro, individual level that allows for greater consideration of social/relational elements. The following quotes, taken from key participants in manufacturer-supplier relationships, one for each side of the buyer-seller dyad, are representative of global sentiments expressed by multiple participants that highlight the potential significance of interpersonal dynamics in buyer-seller relationships.

Too often it happens part of the problem is that people don’t understand relationships …they’re driving strictly for results and don’t understand what the rest of it is.

People do team training and things like that but how many are really effective…Do they really understand how efficiently and effectively we are moving through the process.

Recall from our earlier explanation of the conceptual framework depicted in Figure 1 that we conceive of problem solving as requisite through all phases of partnerships and that expectations related to both communications and business outcomes influence how partners behave and how they evaluate outcomes of a problem solving episode. Our field data suggest the significance of these expectations.

**Expectations: Business outcomes**

It is not surprising that business expectations related to cost, quality, and delivery are often cited by our interview participants. Consider the following quotation from a marketing manager describing his understanding of his customer’s business expectations.

They had requested pricing to be as competitive as possible and we did offer a slight price concession. They then were emphatic about quality, of course, and so there are some strategic things we have to do to preserve the relationship and the partnership. They are basically asking everything we can do to maintain costs so that they can maintain their costs and retain their market share.

Similar thoughts are expressed by a supplier manager as he describes the business expectations that he has of his suppliers.

One thing that every supplier needs to keep in mind is that industry is moving toward three, or at least two, different directions. One is reduction in lead time. They need to be very fast and flexible and be able to address variations in demand. The other one, of course, is continuous cost efficiency.
The following quotes, the first from a commodity manager and the second from a Director of Purchasing, go beyond the typical business expectations of cost, quality, and delivery in describing the expectation that their suppliers be multinational. I think that they have to face the fact that they have to manufacture somewhere outside the United States, not only for cost purposes, but to support (customer) globally.

We have been very clear with our suppliers, (supplier) included. When we started our joint ventures with India, Thailand, China, and all those places we have been working with. If you are not there, then we have to work with other suppliers.

It is interesting to note that our participants’ descriptions of business expectations focus on the buyers’ expectations. Very rarely did the suppliers’ business expectations come up in the field interviews. This is not surprising. Current research has suggested that buyers are more concerned about the tangible business outcomes and pay significantly less attention to the interpersonal/interorganizational relationships with suppliers (Yu, 2001).

*Expectations: Communications*

Based on the work of Bennun (1986) and Ben-Yoav and Pruitt (1984) we posit that expectations related to communication processes also influence behavior and appraisal of outcomes. The following quotations from a marketing manager provide examples of this type of expectation.

Three months from now I want it to be a proactive relationship where we are actually out at (customer) doing a design seminar; teaching them what we do and getting in on new stuff. I think there is a lot of ability to grow this customer; a lot of potential. I think that they are a good company. That is one of the reasons why I think we need to work very hard on managing this relationship.

A preferred customer partners with you more, works the issues with you, together. A less preferred customer just wants rock bottom price and doesn’t really care about your problems. They don’t want to really take the time or the understanding to work things out. You know, I think those customers tend to beat you up on price as much as possible and, once they are finished with that, they are not afraid to switch.

The following quotes from a supplier’s quality manager provide further examples of communication-process expectations. The first two quotes reflect expectations of the current relationship with a customer. The third and fourth quotes describe expectations of an improved relationship.

If (customer) finds a quality problem, you know that somebody is going to be threatening you right away. If there is a problem, the threats start first thing.

This relationship requires more from us. It requires more face time, more people in our organization knowing more people from their organization.
So building good relationships, going through the war with them, they are going to be more willing to negotiate in good faith; they are going to be less inclined to take a hard and fast company line; this is what the standards are; black and white. They’ll get into those grey areas and we’ll work through them together.

We have got to understand them, and they have got to understand us. If we communicate and work together, we can get there; as opposed to ‘my way or the highway’ kind of approach.

It should be noted that expectations related to communication processes were most typically evidenced in interviews with representatives from the supplier firms. As expected, our field data suggests that buyers place more weight on business expectations relative to communication expectations and that suppliers place more weight on communication expectations relative to business expectations.

Communication behavior

Previous research has highlighted the significance of communication in establishing and maintaining interorganizational relationships (e.g. Dwyer, Schurr, and Oh, 1987; Anderson and Narus, 1990; Mohr and Spekman, 1994). These earlier perspectives related to communication have been extended through the specification of behaviors (e.g. nondefensive and active listening, self-disclosure, and editing) that influence the efficacy of relational communication in business settings (Bantham et al., 2003). More specifically, these communication behaviors have been found to mediate the relationship between expectations and confidence in problem solving (Kasouf, Celuch and Bantham, 2003). This current study does not focus on the specific communication behaviors employed by the participants in their dyadic communication processes. Rather, it focuses on the appraisal of these communication processes. Recall that we propose an individual’s evaluation of process (i.e., communication) outcomes is predominately influenced by the other partner’s communication behavior during problem solving. The following quotations provide insight into the participants’ evaluation of these communication behaviors during problem solving episodes.

Appraisal: Communication processes

Consistent with our expectations, participants from the supplier firms had the most to say about their appraisal of their partner’s communication behavior. Take for example, the following quote from an engineer for a supplier firm commenting on buyers’ lack of self-disclosure.

Where we don’t have good partnerships, they are companies that don’t do well in defining exactly what it is they want; companies that are not willing to share their applications with us so that we can help them design parts.

Supplier participants provided both positive and negative appraisals of their partners’ active/nondefensive listening and editing behavior. However, the negative
examples significantly outnumbered the positive. The following quotations, with corresponding parenthetical information regarding the informant and context, provide examples.

I think the relationship is good now because we have a good dialogue back and forth and we are able to react to the shortcomings (supplier engineer’s appraisal of communication with a specific customer).

I think we have been fortunate to have been working with (customer supplier manager); he has taken a much more objective look, saying ‘Hey, it may not be your fault—let us look at ourselves too.’ That took a lot of guts and leadership when it is easy to blame the vendor (supplier engineer’s appraisal of communication with a specific customer’s supplier manager).

We have customers where it doesn’t seem like it is much of a partnership—it’s just ‘This is what we want. You work for us!’ (supplier quality manager’s appraisal of communication with certain customers).

I think they could have handled it a little better. My view is they went out to everybody and basically put a gun to their head, put the bullet in the chamber, and pulled the hammer back. That was so out of character compared to how they had operated in the past. And they didn’t do a very good job of explaining what they were trying to do and how the program would work. So those pathetic explanations didn’t end up coming until everybody was extremely upset and all sorts of communications were going back and forth between the two companies, none of which were all that positive (supplier operations manager’s appraisal of communication with a specific customer).

Other customers are asking for give-backs; so it is not an unheard of request. It is just the approach they took. If they had come to us and said, ‘We need it desperately.’ But that is not what they did. They came to us and said, ‘We’re taking the money.’ (supplier marketing manager’s appraisal of communication with a specific customer).

As noted previously, buyers may pay more attention to business outcomes than communication outcomes. However, that does not imply that they place no value on communication outcomes. The following quotations, from a customer’s commodity manager and director of purchasing provide examples of their appraisal of a specific supplier’s communication.

I think (supplier firm) has brought a spirit of partnership, which is a much overused word in today’s world. But they have been very open with us relative to sharing their cost data so we can arrive at a mutually acceptable price on the parts they are selling to us.
They have been very cooperative with us in some tough business times. They understand our side as we have tried to understand their side and worked with us very well.

They jumped through hoops to get our product done and approved. They have tried to understand our needs and we have tried to understand theirs.

Appraisal: Business outcomes

Our informants provide a strong sense of the importance of their evaluation of their partner’s communication behavior. However, the proposed framework also suggests that the appraisal of business outcomes is of significant importance. The following quotations provide examples of both buyers’ and sellers’ appraisal of business outcomes. The first three quotes represent suppliers’ appraisals of the business outcomes in dealing with specific customers, while that last three represent buyers’ appraisals of business outcomes with specific suppliers. Again we provide quotations with corresponding parenthetical information regarding the informant context.

I love their contribution to sales and profit. So that’s a great relationship (supplier quality manager).

They are a good customer. And nowadays, a paying customer is a good customer (supplier marketing manager).

They are showing a lack of concern for their suppliers. Their volumes are not up to expectations. There were some long-term agreements that were based on volume. Although they never said that they guaranteed volumes, the agreements were based on where they felt their volumes were going, and they are not living up to those (supplier sales manager).

Customer service is pretty good. They respond pretty fast. Let’s say I don’t have a lot of quality problems. Again, my measurement criteria are cost, quality, and delivery. Their pricing is fairly reasonable. Again, no quality problems, and they deliver pretty much on time (buyer supplier manager).

They have given us the criteria that we were looking for—the cost, quality, technology, and delivery (buyer director of purchasing).

The positive points are their ability to react to schedule changes and their ability to deal with quality issues that come up (buyer commodity manager).

Overall, field interview data which includes responses from multiple informants, representing various functions, from both sides of the dyad over time appears to offer initial support for concepts in the proposed framework. The interviews serve as empirical grounding for the viability of applying concepts studied in the interpersonal relationship
literature to the business relationship domain. The following section will discuss the contributions of this work, its limitations, and its potential in facilitating future research.

Discussion

The present work contributes to the business relationship literature in several ways. While the marriage metaphor has made substantial contributions to our understanding of buyer-seller relationships, there has been increasing recognition that transfer from the marriage metaphor to buyer-seller relationships has not been fully explored. To this point, extant frameworks have not, at a more micro-level, clearly delineated how relational/communication elements impact the functioning of relationships. We have elaborated the role of expectations, communication behavior, and appraisal processes in problem solving thereby extending existing perspectives relating to the process dynamics of buyer-seller problem solving through an integration of theoretical and empirical work from the interpersonal relationship literature.

The proposed model conceives of problem solving as requisite through all phases of successful partnerships, from initial goal development, to coordinating engineering activities for the development of a part, to reworking delivery scheduling due to unforeseen quality problems. It is posited that critical cognitive domains in interdependent problem solving manifest themselves as shorter-term communication-related expectations as well as longer-term expectations relating to tangible business outcomes in a given problem solving interaction. We further propose that an individual’s communication expectations influence their own communication behavior which, in turn, influences their partner’s communication behavior. Finally, it is proposed that an individual’s evaluation of communication process outcomes is predominantly influenced by their partner’s communication behavior during problem solving. Alternatively, we conceive of the evaluation of business outcomes to be determined by an individual’s own prior business expectations as compared to actual business outcomes. Ultimately, both communication process and business outcome appraisals associated with a given problem solving episode are conceived as enhancing or degrading subsequent long-term outcomes such as satisfaction and investments.

The present framework contributes to a more thorough explication of relationship process dynamics in several ways. First, expectations are seen as relating not only to outcomes, but also to the behaviors that contribute to the achievement of those outcomes. Secondly, communication behavior is explicitly recognized as a core component of problem solving and partner communication behavior is seen as a salient influence in the relationship appraisal process. Lastly, a further clarification of the connection between the appraisal of problem solving episodes and critical longer-term satisfaction and investment in the relationship is proposed. Ultimately, such appraisals serve to stabilize or destabilize a relationship.

We recognize that the present paper is primarily conceptual in nature and clearly requires empirical examination. As a first step, we have utilized field interviews as an initial check on the viability of the proposed framework. As such we have employed a qualitative research methodology incorporating matched buyer-supplier dyads as a means of exploring problem solving process dynamics from the perspective of multiple functions over time.
The present conceptual extension contributes to research in the area in multiple ways. Given that the framework conceives of interdependent problem solving as involving an iterative process, longitudinal explorations appear particularly warranted. A more specific examination of the process whereby the appraisals of intermediate problem solving episodes affect longer-term relationship satisfaction, investment, and commitment would be a valuable contribution to the buyer-seller literature.

The proposed framework also offers specific, testable propositions for quantitative investigation. It is clear that buyers and suppliers hold different expectations—an examination of the importance and interactions of classes of expectations (business outcome and communication-related) for buyers and suppliers in different contexts would make for an interesting study. Are there conditions under which communication expectations are more or less salient? And, given the presence of certain business outcomes, are certain communication outcomes more or less likely? In terms of specific relationships among concepts, the model proposes several direct as well as mediated relationships that beg exploration. Lastly, the inclusion of other relevant variables for examination, where appropriate, could serve to add depth to the present framework. For example, how might attributional processes affect appraisal processes associated with communication and business outcomes?

Future research could also explore additional extensions of the marital metaphor. For example, rather than starting from an orientation based on a husband/wife dyadic relationship, future research might address research questions from the perspective of alternative dyadic relationships – parent/children or siblings (O’Malley and Tynan, 1999). This approach might be particularly relevant given the power asymmetry in some buyer-seller relationships. In addition, the “dark side” of the marriage metaphor could also be extended. For instance, aspects associated with distrust, betrayal, and dissolution tied to buyer-seller interaction would prove interesting and offer new insights in comparison to the alternative focus on loyalty and commitment (c.f., Hakansson and Snehota 1998).

From a practitioner standpoint, the framework has important implications. First, the significance of business outcome and communication process expectations cannot be overemphasized as a means of addressing problem solving efficacy. As noted in the interpersonal relationship literature (Bennun, 1986), an examination of the source and feasibility of expectations related to both communication and business outcomes provide relationship participants with the origins of potential areas of conflict. With awareness of these potential “hot spots,” partners can begin to address issues before they become full blown, ongoing conflicts that tend to take on a life of their own.

Clearly, based on informant interview data, buyers place more weight on business expectations relative to communication expectations than do suppliers. When this occurs, the stage is set for more contentious interaction and less joint problem solving benefit (at least from the supplier’s perspective). This observation is consistent with the experimental work related to negotiation of Ben-Yoav and Pruitt (1984). More balance in concern for communication expectations can contribute to more positive relational interaction which might produce more joint benefit in the long run. Indeed, Ben-Yoav and Pruitt explain this effect as a positive outcome of role conflict in that shifting attention to expectations and rebalancing expectations (business and relationship) could serve to help parties creatively cope to reconcile differences.
However, as our model makes explicit, awareness of expectations is not enough to insure truly interdependent problem solving without concomitant ability to manage communication behavior. In fact, while expectations may change due to updated information or experience the possibility of behavior change may take more effort given extant ability and habit. This may in part account for the observation that even when partners address conflict at the level of business expectations, their subsequent interactions may still consist of negative behaviors (i.e., threats, blaming, etc.) as habitual ways of behaving take time to change.

Owing to the significance of communication behavior in the problem solving and appraisal processes, the ability to employ active and nondefensive listening, editing, and where appropriate, disclosure, in place of more impulsive, automatic, negative exchanges that are likely to occur even in “good” relationships during times of stressful problem solving episodes would be paramount. Partner awareness of “trigger cues” not only tied to the other partner and/or context, but also residing within a partner can help increase the ability to interrupt dysfunctional dyadic cognitions and behavior (Bennun 1986). We echo the Bantham et al., observation that the way partners communicate in addition to the content of the communication, can either facilitate or denigrate interdependent problem solving outcomes.

In conclusion, understanding buyer-seller relationships will continue to be a significant topic within the business literature. It is our hope that this systematic examination of the way business partners evaluate their problem solving efforts will contribute to future theoretical and empirical efforts aimed at increasing understanding of working relationships among individuals in organizations.

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