



**NORTHERN ARIZONA
UNIVERSITY**
The W.A. Franke College of Business

**The Impact of Social and Contractual Enforcement
on Reseller Performance:
Mediating Role of Coordination and Inequity of Sharing
E-business Benefits**

Working Paper Series— 11-04 | March 2011

Talai Osmonbekov, Ph.D.*
Brian Gregory, Ph.D.
The W.A. Franke College of Business
Northern Arizona University
Flagstaff, AZ 86011

* Corresponding author: Talaibek.Osmonbekov@nau.edu, Phone: 928-523-7365

The Impact of Social and Contractual Enforcement on Reseller Performance: Mediating Role of Coordination and Inequity of Sharing E-business Benefits

Introduction

When Renault wanted to share information with its network of more than 14000 dealers in Europe they turned to Oracle's Siebel brand of Partner Relationship Management (PRM) software. Using this web-based software Renault was able to streamline its communications with dealerships, improve dealer sales lead-conversion rates by 30 percent for new cars and by 25 percent for used cars, and become more responsive to customer requests via their website by following through with emails to dealers in the customer's area. In addition, Renault was able to provide the dealerships with automated self-service 24/7 technical support for dealers, and standardize business processes across its dealer network (Oracle 2006). As this example illustrates, manufacturer-reseller relationships are undergoing a dramatic transformation as manufacturers attempt to capitalize on the proliferation of web-based business software, commonly referred to as e-business tools, to achieve efficiencies (Wu et al. 2003; Lee et al. 2005; Bello et al. 2002; Mirani et al. 2001).

Previous marketing research found that resellers adopt e-business tools only when they see clear benefits of using them for themselves (Osmonbekov 2010) and the impact of the adoption of e-business tools on reseller performance is mediated by relationship states, such as coordination, conflict and reseller adaptation (Osmonbekov, Bello, Gilliland 2009). So, the relational context in which the firms make e-business adoption decisions is very important, as e-business tools are becoming a de-facto *interorganizational* information sharing, communication and payment system in the channels of distribution. For example, researchers found that social enforcement impacts the adoption of e-business tools by reseller (Osmonbekov 2010) and channel relationship states of coordination, conflict and adaptation (Lee et al., 2009). Outside of the e-business context, Gilliland, Bello and Gundlach (2009) found that the relationship governance processes, such as social and contractual enforcement, have a differential impact on channel relationship states of coordination and conflict. However, there are no previous marketing studies, that examine social and contractual governance processes' impact on performance and the mediating role of channel relationship states, although previous channels research suggests such pattern of relationships (Jap 1999).

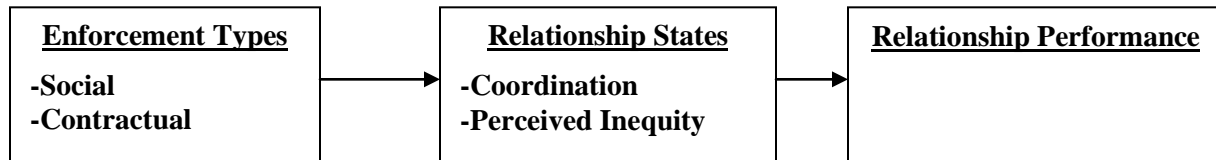
Extant channels research suggests the important role of equity perceptions on channel relationships (Frazier 1983; Kumar, Scheer and Steenkamp 1995; Scheer, Kumar and Steenkamp 2003). In our in-depth interviews we discovered that resellers are cautious about their e-business arrangements with manufacturers as they are concerned about inequity of the sharing benefits of the e-business efficiencies. Some managers directly announced that the e-business transformation of the channel benefits mainly the manufacturers and the resellers "just end up doing more work". These and similar comments motivated us to research the impact of perceived inequity, as channel relationship state, on the performance of the reseller.

This research expands the current understanding of channel management issues in motivating reseller performance by using governance (Heide 1994; Heide and John 1992; Gilliland, Bello and Gundlach 2009) and equity (Adams 1963) theories in the context of channel e-business technology (Osmonbekov, Bello, Gilliland 2009; Mirani et al. 2001; Osmonbekov 2010). Specifically, we contribute to the governance literature by examining the direct impact of social and contractual enforcement governance processes on reseller performance. Second, we examine the mediating role of the channel relationship states, namely coordination and perceived inequity, in the governance-performance linkage. To achieve these goals the study develops and tests a theoretical model by drawing from marketing literature as well as insights gained from in-depth interviews with managers at reseller firms.

Theoretical Model and Hypotheses

The model is developed (Figure 1) by combining insights from our in-depth interviews and examination of existing research. The model reflects our thesis that relationship performance is impacted by types of enforcements used in the relationship through channel relationship states of coordination and perceived inequity.

Figure 1. Enforcement Types, Channel Relationship States and Relationship Performance



Types of Enforcement

Social enforcement is defined as the extent to which parties' shared expectations and norms serve as an enforcement mechanism in a manufacturer-reseller relationship. According to Heide (1994), firms may establish and share common values that direct their behaviors in a certain way. These shared norms assist companies in deciding on behaviors that are appropriate for certain situations. If firms share a common set of norms any behavior that is consistent with those norms will be well-received by both sides of a relationship dyad (Schein 1985). Such common values are often referred to as 'relational norms' (Heide and John 1992) and may be indicative of bilateral governance in a relationship. Heide (1994) notes bilateral means of enforcement "are designed to achieve compliance by means of making certain behaviors desirable or undesirable..." (p. 78). Social enforcement, as a bilateral means of enforcement, also could be described as self-enforcement because parties in the relationship are relying on existing social norms to guide their behavior.

Social governance is founded in the common values that exist between channel partners, which is the basis for developing flexibility, tolerance, and other factors that guide the relationship. The social nature of the exchange is particularly important to the evolution of the relationship. Lusch and Brown (1996) find that the informal nature of contracts – sometimes referred to as "soft contracts" – allows the relationship to change in response to external challenges. These expectations eventually stabilize and represent the implicit understanding channel members adopt about one another's behavior. Social governance relies on established patterns in the relationship to administer and adhere to the agreements that guide the relationship (Gilliland and Manning, 2002). Social governance, therefore, allows for the relationship to be kept on track by increasing the likelihood of bilateral communication and information sharing to maintain alignment in the face of obstacles. Mutual solutions are available because intentions are transparent and firms tend to willingly adjust in order to maintain the shared values that have been established.

Using shared values to enforce a contract is thought to have a positive impact on the relationship between the two firms, and ultimately the performance of the reseller in selling the supplier's products. First, when values are shared by channel members, an anticipation of fairness in the long run is created (Ouchi, 1979; Black, 1998). That expectation of fairness is a motivating force for the reseller to focus on selling the supplier's products (Gilliland, Bello, & Gundlach, 2009) by creating a sense of confidence in the reseller that their efforts will not be wasted. Additionally, social enforcement allows for an interconnectedness of values that bonds firms such that they are more likely to behave in a manner that is conducive to the performance of the relationship (Seek & Kantola, 2009). Social enforcement is also thought to increase channel performance by way of making pro-social behavior more likely (Anderson & Weitz, 1992). Thus, the following hypothesis is proposed:

H1a. Social enforcement is positively related to relationship performance.

Contractual Enforcement

While social enforcement maintains the relationship between firms through a mutual understanding based on shared values and norms, contractual enforcement describes a task-focused process whereby one party supervises the other party's performance of specific behaviors that were dictated by a formal contract (Gilliland, Bello, & Gundlach, 2009). Contractual enforcement most often takes the form of unilateral enforcement, where the supplier exercises influence over the reseller by pointing to aspects of a formal contract (Antia & Frazier, 2001). While the use of formal contracts has been thought to be an effective means of communicating behavioral expectations to resellers (Gilliland, Bello, & Gundlach, 2009), others suggest that there may be unintended attitudinal consequences associated with managing a business partner in such a manner. For instance, contractual enforcement can be used to punish resellers by imposing contractually agreed upon fines to resellers who fail to comply with the terms of the agreement (Gundlach, 1994; Boyle, Dwyer, Robicheaux, & Simpson, 1992). The use of contractual enforcement, and the disciplinary form it often takes, is often met by resellers with hostility (Frazier & Rody, 1991). Overreliance on the formal contract may signify a transaction oriented and adversarial relationship (Gundlach and Achrol 1993; Ferguson, Paulin and Bergeron 2005), and misuse of contracts often creates tension and may harm channel performance (Lusch and Brown 1996). Therefore, the following hypothesis is proposed:

H1b. Contractual enforcement is negatively related to relationship performance.

Channel Relationship States

The type of enforcement that a manufacturer uses with its resellers is likely to affect the nature of the relationship. Here we examine two constructs that may represent the state of the relationship in the dyad: coordination and perceived inequity.

Coordination. A distribution channel creates a need for the manufacturer and reseller to engage in complementary tasks and activities to achieve mutually beneficial outcomes (Jap 1999). Within a channel, it is the shared nature of the tasks that give rise to the need for coordination among actors. In this context, *coordination* is the extent that channel tasks are performed in a consistent and coherent manner (Crowston, 1997). Social enforcement coordinates the relationship through bonds that implement prior agreements and keep the parties honest in dealing with one another (Fehr and Gächter, 2000). It encourages the free exchange of information to support the alignment of tasks and responsibilities. The information exchanged is typically rich in content because it tends to be face-to-face, allowing better clarification and fewer misunderstandings (Mohr, Fisher, and Nevin, 1996). Because social enforcement rests on the notion of shared norms of relevant information sharing, tasks are more readily aligned and implemented, coordinating the relationship between the two parties. Therefore, the following hypothesis is advanced:

H2a. Social enforcement is positively related to coordination.

Coordination of specific tasks and activities could also be achieved through a lengthy and detailed contractual agreement that outlines specific responsibilities of the parties and covers major areas of the relationship (Williamson 1996). In fact, elaborate contracts serve as a form of quasi-integration, intended to deal with problems of opportunism, performance and coordination (Ferguson, Paulin and Bergeron 2005).

Invoking contractual agreements signals expectations of behavior and may align reseller actions with the manufacturer expectations (Gilliland, Bello, and Gundlach 2009). As discussed earlier, contractual enforcement may arouse resentment and may hurt relationship performance in the long run,

however, the resellers may still comply with detailed assignment of responsibilities and tasks specified in the formal contract between manufacturer and reseller. So, we propose the following hypothesis:

H2b. Contractual enforcement is positively related to relationship coordination.

Equity Theory

Equity theory deals with the norm of distributive justice in dyadic relationships and reflects the desire of members of a dyad to have a fair distribution of benefits in a dyadic relationship (Adams 1963; Huppertz et al. 1978). In marketing, equity theory has been applied by Huppertz et al. (1978) in the context of a retail exchange situation to examine price inequity perceptions and consumers' intentions to resolve perceptions of inequity. Channels research suggests the impact of equity perceptions on satisfaction/dissatisfaction with a relationship (Frazier 1983), relationship quality (Kumar, Scheer and Steenkamp 1995), and relationship continuity (Scheer, Kumar and Steenkamp 2003). Following prior research, we distinguish between overall perceived inequity with a relationship and a specific perceived inequity about certain arrangements and programs in a relationship (Kumar, Scheer, and Steenkamp 1995). We are focused on the reseller perceptions of issue-specific inequity pertaining to e-business arrangements with a manufacturer.

In the context of e-business arrangements in the channel, perceptions of inequity play an important role as this modification in business processes usually forces channel members to reevaluate existing relationships. Both parties have inputs into this arrangement and both parties expect to reap certain benefits that would be equitably distributed. We therefore define *perceived inequity* as reseller perceptions that benefits from e-business arrangements between manufacturer and reseller are not shared fairly, i.e., benefiting the manufacturer. The measure of this construct was developed specifically for this research to fit the context of e-business arrangements. It is intended to capture the type of reseller judgments and reservations about the e-business arrangements that were revealed in in-depth interviews with reseller firms.

Sharing common norms means that each party in the dyad understands its responsibilities in the relationship and acts accordingly. Social enforcement emphasizes that channel members keep their promises, work together to solve problems and be sensitive to each other's needs (Gilliland, Bello, and Gundlach 2009). This will also apply to the specific e-business arrangements between manufacturer and the reseller, its design, implementation and usage. As e-business tools are deployed in a manner consistent with both reseller and manufacturer needs, any perceptions of inequity associated with the technology deployment will be reduced. Therefore, the following hypothesis is proposed:

H3a. Social enforcement is negatively related to perceived inequity.

Contractual enforcement is often perceived as a coercive method of influencing reseller behavior (Frazier and Rody 1991) and reseller compliance under such influence usually signals that the behavior could be in conflict with reseller's own goals (Gilliland, Bello, and Gundlach 2009). This will also apply to the specific e-business arrangements between the channel members, its design, implementation and usage. As e-business tools are deployed in a manner not consistent, and perhaps even in conflict, with reseller needs, the perceptions of inequity associated with the technology deployment will be increased. Therefore, the following hypothesis is proposed:

H3b. Contractual enforcement is positively related to perceived inequity.

Mediating Role of Channel Relationship States

A closer examination of channel relationship states in the manufacturer-reseller relationship may help lead to a clearer explanation of reseller performance. Prior channels research suggests that the channel

relationship states usually intervene between organizational governance variables and performance outcomes of a relationship (Jap 1999). For instance, Jap (1999) posits that the impact of such variables as goal congruence and trustworthiness on profit performance is mediated by coordination efforts in the context of an interfirm collaboration process. Empirical evidence that a similar pattern of mediation may hold true in the interorganizational e-business arrangements setting is scarce. In other contexts, the findings on the linkage between governance processes and reseller performance are conflicting. For example, Aulakh, Kotabe, Sahay (1996), studying export channels, found no direct effect between social governance and reseller performance, but Bello, Chelariu and Zhang (2003) found empirical support for the hypothesized link between relationalism and reseller's performance in export channels. An explanation of these conflicting findings concerns the mediated pattern of effects, i.e. channel relationship states intervene between governance variables and firm performance. Although resellers react differently to different types of relationships they have with manufacturers, ultimately the coordination of day-to-day tasks and perceived inequity about the usage of e-business tools will play a major role in their performance. Therefore, the following hypothesis is advanced:

H4. Channel relationship states (channel coordination and perceived inequity) mediate the link between enforcement types (social and contractual enforcement) and relationship performance.

Methodology

Data Collection

Pilot Study and Field Interviews. As noted earlier, the empirical test is focused on the perspective of a reseller at the e-business adoption process. First, the software companies and products that are focused on providing e-business tools to a channel were examined. Several software firms were visited, the functionality of their packages was studied, and demonstrations of their products were observed. This was an important step, as these companies (e.g. Siebel Systems) conduct research in manufacturer-reseller interactions in order to produce appropriate tools. Next, a pilot study was conducted with 25 purchasing and marketing managers of value added resellers (VAR) in the computer and network equipment industry. There was sufficient diffusion of e-business tools in manufacturer-reseller interactions as well as variance among the resellers in using them to warrant an extended study. A series of 28 field interviews was then conducted with VAR's marketing and purchasing managers responsible for direct dealings with the manufacturers. The interviewees provided insights and feedback on the questionnaire items in addition to reflecting on how e-business tools may be changing their interactions with manufacturers. Field work provided support for using key informants as persons interviewed had a working knowledge about using e-business tools in their interactions with the manufacturers.

Table 1. **Measurement Items** (7-point, anchored by “Strongly Disagree” and “Strongly Agree”)

Social Enforcement ($\rho=.94$, $VE=.72$)	Mean	SD	Loading
<i>For both parties in this relationship it is expected that...</i>			
We keep our promises to each other because we value our partnership	5.55	1.49	0.88
Our shared expectations serve to enforce our business agreements	5.29	1.49	0.89
The strength of our relationship will keep the parties honest in dealing with each other	5.26	1.59	0.90
Both sides are willing to make cooperative changes when differences arise	4.96	1.62	0.72
Each party fulfills its responsibilities because the other party expects it	5.03	1.53	0.77
Contractual Enforcement ($\rho=.92$ $VE=.75$)			
This manufacturer relies on our agreement, where it applies, to resolve disagreements with us	3.60	1.80	0.82
This manufacturer refers to our agreement when attempting to influence us	3.77	1.90	0.87
This manufacturer refers to portions of our agreement to gain our compliance on a particular request	3.70	1.87	0.94
This manufacturer makes it clear that we are to conform to our agreement, should differences arise between us	3.87	1.92	0.84
Inequity ($\rho=.84$, $VE=.63$)			
The manufacturer gains the most from the transition to online operations	3.36	1.47	0.80
The benefits of the online operations unfairly favor the manufacturer	3.69	1.64	0.80
The manufacturer does not share the benefits of online operations equitably	3.62	1.61	0.78
Coordination ($\rho=.94$, $VE=.72$)			
<i>Regarding day-to-day activities...</i>			
Our efforts are well coordinated with the manufacturer's efforts	4.23	1.55	0.87
Our efforts are consistent with manufacturer's efforts	4.67	1.34	0.83
Our efforts are organized effectively with the manufacturer's efforts	4.28	1.44	0.93
Our efforts are complementary to the manufacturer's efforts	4.99	1.37	0.76
Activities between our firms are well timed.	4.05	1.50	0.81
Reseller Performance ($\rho =.93$, $VE=.76$) (anchored by “Not at all” and “Very Well”)			
<i>How well do you accomplish your economic goals reselling this manufacturer's products?</i>			
Sales goals.	4.86	1.26	0.91
Profit goals	4.60	1.41	0.83
Growth goals	4.52	1.31	0.91
Market share goals	4.28	1.31	0.83

Measures. The scales (see Table 1) were adopted and adapted where appropriate from extant literature. For instance, measures for social and contractual enforcement were derived from Heide's (1994) conceptualization of mutuality of interest enforcement mechanism and adopted from previous empirical research in distribution channels (Gilliland, Bello and Gundlach 2009). Coordination is adapted from Cheng (1983), which describes the construct as an outcome of channel interactions (as opposed to a process). A four item scale to measure reseller performance was adapted from Kumar et al. (1992) to reflect reseller perspective. This measure is specific to the reseller-manufacturer relationship. A three item scale of inequity was adapted to an interorganizational setting from Oliver and Swan (1989). Pretest questionnaires were posted on a password-protected web-site. A pretest was then conducted using a fresh sample of reseller representatives (N=29). After collecting the results of the pretest, the researchers followed up with the respondents with clarification questions that were used to purify the scales and reduce the number of items to a manageable pool. The final questionnaire instrument was also posted on a password-protected web site.

Final Sample. The sampling frame was 2 lists purchased from publishers of trade journals and other business information. Computer and computer network components resellers were selected for this study because this industry is more likely to employ and understand e-business tools than other industries and it has a large impact on the economy. For the main study, a list of 4342 names of executives from computer integrator and VAR companies (SIC 7373) was used. After the removal of duplicates, firms that had gone out of business, merged companies, misclassified companies etc., the usable list was reduced to approximately 1700. Executives were contacted by phone and qualified to ensure that their company was in computer and network components resell business and were using e-business tools with the manufacturers of these products. The respondent's e-mail address was obtained and each was sent a link to the web survey with the appropriate instructions and a respondent password.

A total of 614 prospects qualified for the study and agreed to receive an email containing a link to the survey. 224 responses were received constituting a response rate of a little over 36%. Overall, the final sample of resellers had a fairly long relationship with the manufacturers (mean of 9.2 years). The share of the focal manufacturer in the reseller's business averaged 36% of sales. The share of the overall manufacturer-reseller interaction accounted for by the Web is almost 36% of all interactions, indicating the importance of Internet tools in manufacturer-reseller relationships.

Data Analysis and Results

The data analysis follows a standard procedure in structural equation modeling recommended by Anderson and Gerbing (1988). First, using Amos 5.1 software a confirmatory factor analysis with 21 items was conducted to assess statistically the discriminate and convergent validity of the 5 constructs in question. Means, standard deviations, and correlations among constructs are provided in Table 2.

The parameters are estimated using the maximum likelihood estimation technique. The results demonstrate that the measurement model provides a reasonable fit for the data. Positive diagnostics of the model include Chi-square of 301.8 with 179 df, comparative fit index (CFI) of .96, a parsimony normed fit index of (PNFI) of .71. The root mean square error of approximation (RMSEA) is .055. The measures demonstrate adequate reliability (Hair et al. 2006) since composite scale reliabilities (ρ) range from .84 to .94 and variance extracted (VE) ranged from .63 to .76 (See Table 1). Face validity was examined by 2 professors and 1 doctoral student who judged the consistency between theoretical definitions of constructs and their respective measurement items. In the pretest stage, 1 item for contractual enforcement, and 1 item for inequity were eliminated, as they demonstrated low test-retest reliability. Convergent validity is evidenced by the large significant loadings (t-values > 2) of all the 21 items on their latent constructs; discriminant validity was indicated since the confidence interval (+/- two standard errors) around the correlation estimate between any two latent constructs includes 1.0 (Anderson and Gerbing, 1988, p. 416).

Table 2. Means, Standard Deviations, and Correlations

	Mean	Standard Deviation	1	2	3	4	5	6
1. Social Enforcement	5.23	1.33						
2. Contractual Enforcement	3.72	1.70	.10					
3. Inequity	3.55	1.36	-.18*	.18*				
4. Coordination	4.38	1.29	.60**	.19**	-.14*			
5. Performance	4.66	1.22	.29**	-.06	-.27**	.24**		

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

N=224

After checking the appropriate metrics and performing additional analysis per Hair et al. (2006), it is concluded that multicollinearity is not a concern in the data. The standard errors are fairly small (not inflated), estimates did not change radically when some variables are excluded, and simple correlations are not greater than .7. Additionally, none of the eigenvalues approach zero and Variance Inflation Factors (VIFs) are within appropriate range.

After verifying that confirmatory factor analysis model diagnostics are acceptable, specification and testing of the structural models were undertaken. The results of the first test are described in Table 3 (direct model). This model is designed to test H1 positing that both social and contractual enforcement impact performance. The chi-square for this model is 12.24 with 3 degrees of freedom, CFI is .93, PNFI is .18, and RMSEA is .12. 4 out of 6 structural paths in the model are significant and in the expected direction. All three paths from social enforcement are significant. Social enforcement positively affects coordination (SE=.55), negatively impacts perceived inequity (SE=-.19) and improves performance (SE=.28). On the other hand, contractual enforcement's positive impact on perceived inequity is significant (SE=.16), but the impact on coordination and performance is not significant. These results provide support for H1a which posits positive association between social enforcement and relationship performance, but doesn't provide support for H1b which posits a negative relationship between contractual enforcement and relationship performance.

Table 3. Structural Models Statistics and Unstandardized Path Coefficients

Measure	Direct	Indirect	Saturated
χ^2	12.24	5.26	.28
Df	3	3	1
Social Enforcement → Coordination	.55***	.58***	.56***
Social Enforcement → Perceived Inequity	-.19**	-.22**	-.19**
Social Enforcement → Performance	.28***		.17*
Contractual Enforcement → Coordination	.07	.08	.07
Contractual Enforcement → Perceived Inequity	.16**	.16**	.16**
Contractual Enforcement → Performance	-.04		-.02
Perceived Inequity → Performance		-.22***	-.18**
Coordination → Performance		.20**	0.13

* p<.05. **p<.01. ***p<.001

The second test is of the theoretical (indirect) model with the channel relationship states mediating the impact of the enforcement types on relationship performance. Overall the theoretical model fits the data well. The chi-square is 5.26 with 3 degrees of freedom, GFI is .88, CFI is .98, PNFI is .82, NNFI is .98, and RMSEA is .065. All the structural paths except one are significant and in the direction expected. Social enforcement positively influences coordination, (SE=.58) providing support for H2a, as well as reducing perceived inequity (SE=-.22), providing support for H3a. Contractual enforcement significantly affects perceived inequity (SE=.16), providing support for H3b but doesn't have a significant impact on coordination, so H2b is not supported.

Testing for Mediation

Mediational analysis is conducted using Amos following the procedures described in prior research (Mayer and Davis, 1999; Sapienza and Korsgaard 1996) that are based on Baron and Kenny's (1986) general principles. The procedures compare alternative models in terms of their fit indices as well as path coefficients. The results of the procedures are illustrated in Table 3. A comparison is made of three different models: a direct model, an indirect model and saturated model. One can compare only nested models (Sapienza and Korsgaard 1996) so only 2 comparisons are made. The comparison of the direct model and the saturated model yields the chi-square difference of 11.96 with 2 degrees of freedom, which is significant ($p < .005$). The comparison between the indirect model and the saturated model provides a chi-square difference of 4.98 with 2 degrees of freedom (*ns*). This suggests that the more parsimonious indirect model has better fit and is therefore superior to the more complex saturated model.

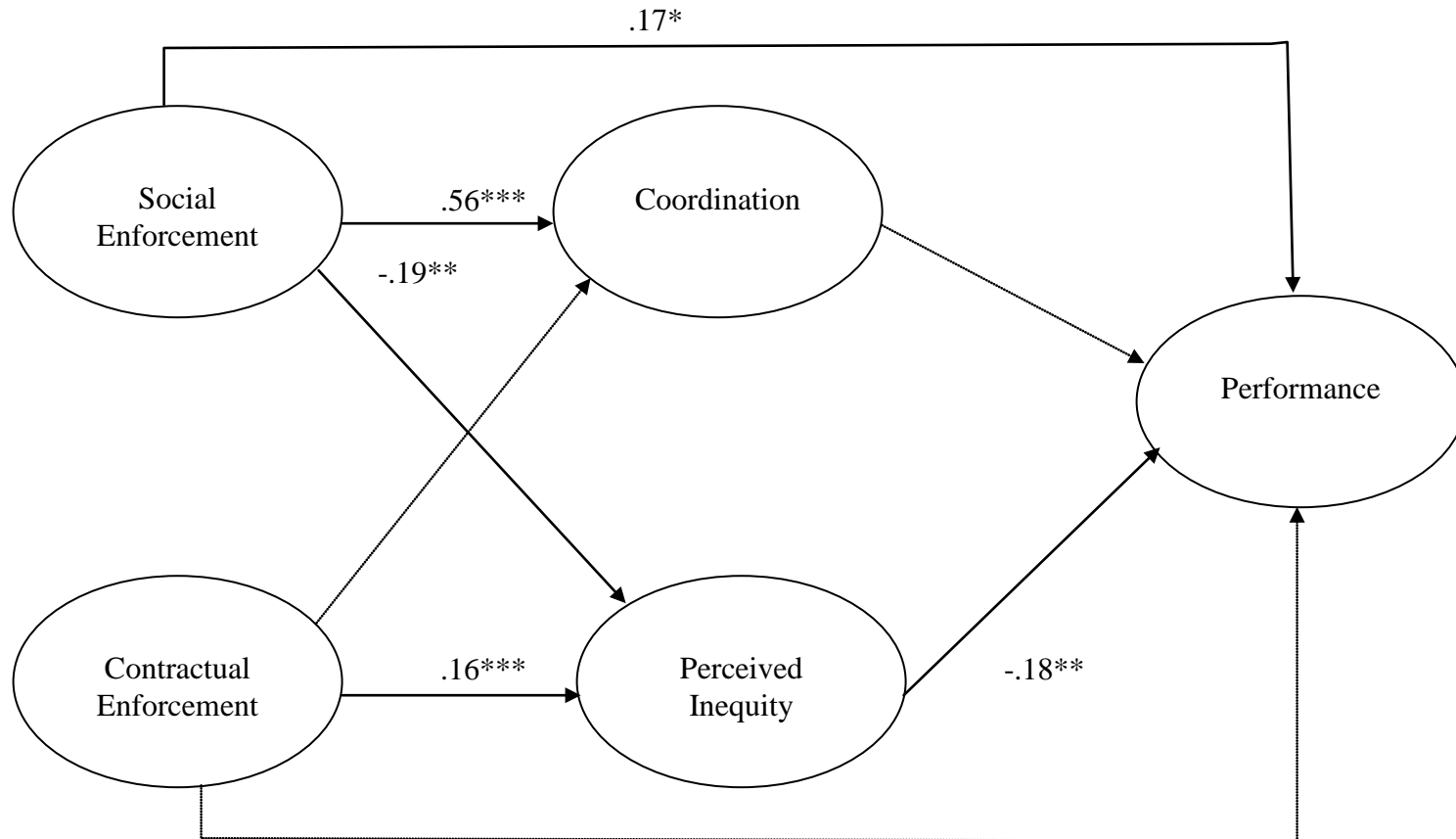
To complete the mediational analysis it is necessary to examine the individual structural path estimates in the saturated model. The direct path from contractual enforcement to performance is not significant, while its link with perceived equity remains significant ($p < .001$). The path from social enforcement to performance is significant ($p < .05$) but the paths to coordination ($p < .001$) and perceived inequity ($p < .01$) remain highly significant. However, the path from coordination to performance becomes insignificant.

The results of chi-square difference tests and examination of structural paths suggest the link between contractual enforcement and performance is fully mediated by perceived inequity. On the other hand, the relationship between social enforcement and performance is only partially mediated by channel relationship states. Social enforcement impacts performance both directly and indirectly (see Figure 2). Thus, the results of our mediational analysis provide partial support for H4 suggesting that the impact of enforcement types on relationship performance would be mediated by channel relationship states.

Discussion

The primary contribution of this research pertains to an examination of the differential impacts of contractual and social enforcement on relationship performance as well as the mediating factors of coordination and perceived inequity. In terms of direct relationships, results suggest that social enforcement has a positive relationship with performance while contractual enforcement's relationship with performance was insignificant. The significant relationship between social enforcement and performance lends empirical support to the theoretical proposition regarding the manner in which resellers are likely to experience this type of governance. Specifically, social enforcement is thought to positively influence relationship performance by creating the long-run sense of equity, open communication, transparency, and shared values that are likely to motivate resellers to sell a supplier's products. The relationship between contractual enforcement and performance is not quite as clear. Study results show an insignificant relationship between the two variables. This suggests that, at best, the potentially coercive tendencies of contractual enforcement don't benefit the supplier or the reseller. This result, coupled with the likelihood for negative attitudinal consequences that are so often associated with the use of coercion, call into question the appropriateness of this type of enforcement.

Figure 2. Saturated mediation model of enforcement types on performance.*



*Note: Dotted arrows represent insignificant paths and solid lines represent significant paths. $p < .05$. $**p < .01$. $***p < .001$

The benefits of using social enforcement as opposed to contractual enforcement to manage a business-to-business relationship come to light even further when channel relationship states are also considered. Results indicate that social enforcement is related to both increased levels of coordination and reduced levels of perceived inequity. Contractual enforcement, on the other hand, appears to contribute to feelings of inequity while not contributing to the ability of the two firms to coordinate their activities.

Mediation analyses demonstrate a complex pattern of influence through which enforcement type is related to performance. Perceived inequity mediated the relationships between both contractual and social enforcement and performance. It is important to note, however, that social enforcement appears to reduce the reseller's feelings of inequity while contractual enforcement leaves the reseller feeling less fairly treated. Perceptions of inequity, then, lead to reductions in the effectiveness of the business relationship. The partial nature of the mediating effect of perceived inequity on the social enforcement-performance relationship suggests that when suppliers manage their relationships with resellers by way of developing a shared set of values, that the reseller is more motivated to sell that supplier's products and comes to believe that the supplier treats them fairly which, in turn, manifests itself in even higher performance for the relationship.

Perhaps the most surprising results of this research have to do with coordination. One of the main benefits of contractual enforcement seems to be the ease with which specific requirements of a business arrangement may be articulated in a formal contract. Surely, an understanding of expectations is an important prerequisite to high levels of coordination in the relationship. It is interesting, then, that the results of this study show an insignificant relationship between contractual enforcement and coordination, while social enforcement was positively related to coordination. One possible interpretation of this surprising result is that coordination in a business relationship has more to do with the health of interpersonal dynamics than formal business agreements. The true nature of the markets in which the firms in this sample operate may be too dynamic for a formal contract to truly specify every action that will have to occur in order to maintain coordination in the relationship. Rather, it appears to be the interpersonal bonds that are created through social enforcement that enable the two firms to sustain high levels of coordination in the face of environmental shifts.

Managerial Implications

This research reaffirms the importance of developing strong business relationships with downstream channel partners and demonstrates that relationship norms affect both directly and indirectly the success of the downstream partner. This suggests that the cultivation of good relationships can help manufacturers to motivate resellers.

This study of the differential effects of contractual and social enforcement reveals that social enforcement has a direct relationship with performance that is partially mediated by perceived inequity. Contractual enforcement, on the other hand, seems to increase resellers' perceptions of inequity which, in turn, is negatively related to performance. Based on these results, it would seem wise for managers to train their salespeople to try to use social enforcement as opposed to contractual enforcement whenever possible. This shift might represent a substantial increase in effort on the part of the manufacturer, as the manufacturer would not be able to simply rely on a formal agreement to influence reseller behavior, but rather must attempt to develop a bond based on common values with those who work for the reseller, and use that bond to manage the relationship. Despite the fact that socially enforcing a contract is undoubtedly more time consuming for the manufacturer, manufacturers should resist the temptation to solve their issues with resellers in a unilateral fashion, as contractual enforcement is likely to result in increased feelings of perceived inequity by the reseller.

References

- Adams, J. Stacy (1963), "Toward an Understanding of Inequity," *Journal of Abnormal and Social Psychology*, 67, 422-436.
- Anderson, James C., and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103(3), 411-23.
- Antia, K. D., & Frazier, G. L. (2001). The severity of contract enforcement in interfirm channel relationships. *Journal of Marketing*, 65, 67-81.
- Armstrong, Scott J. and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14, 396-402.
- Atwater, L. E., Waldman, D. A., Carey, J. A., & Cartier, P. (2001). Recipient and observer reactions to discipline: are managers experiencing wishful thinking?. *Journal of Organizational Behavior*, 22, 249-270.
- Aulakh, Preet, Masaaki Kotabe and Arvind Sahay (1996), "Trust and performance in cross-border marketing partnerships: A behavioral approach," *Journal of International Business Studies*, Special Issue.
- Baron, Reuben M., & Kenny, David A. (1986), "The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bello, Daniel C., Cristian Chelariu and Li Zhang (2003), "The antecedents and performance consequences of relationalism in export distribution channels," *Journal of Business Research*, 56(1), 1-16.
- Bello, Daniel C., Talai Osmonbekov, "Frank" Tian Xie, and David I. Gilliland (2002), "e-Business Technological Innovations: Impact on Channel Processes and Structure," *Journal of Marketing Channels*, 9 (3): 3-25.
- Black, D. (1998). *The social structure of right and wrong*. San Diego: Academic.
- Boyd, Eric D. and Robert Spekman (2004), "Internet Usage within B2B Relationships and Its Impact on Value Creation: A Conceptual Model and Research Propositions," *Journal of Business-to-Business Marketing*, 11-1/2, 9-32.
- Boyle, B., Dwyer, F. R., Robicheaux, R. A., & Simpson, J. T. (1992). Influence strategies in marketing channels: measures and use in different relationship structures. *Journal of Marketing Research*, 29, 462-473.
- Crowston, Kevin (1997), "A Coordination Approach to Organizational Process Design," *Organization Science*, 8 (2), 157-175.
- Churchill, Gilbert A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16, 64-73.
- Cheng Joseph L. C. Interdependence and coordination in organizations: A role-system analysis. *Academy of Management Journal* 1983; 26 (1): 156-162.
- Ferguson, Ronald, Michele Paulin and Jasmin Bergeron (2005), "Contractual Governance, Relational Governance, and the Performance of Interfirm Service Exchanges: The Influence of Boundary-Spanner Closeness," *Journal of the Academy of Marketing Science*, 33(2), 217-234.

- Fehr E and Gächter, S (2000), "Fairness and retaliation: the economics of reciprocity," *Journal of Economic Perspectives*, 14, 159-181.
- Frazier, Gary L. (1983), "Interorganizational Exchange Behavior in Marketing Channels: A Broadened Perspective," *Journal of Marketing*, 47 (Fall), 68-78.
- Frazier, Gary L. and Rody R. C. (1991), "The use of influence strategies in interfirm relationships in industrial product channels," *Journal of Marketing*, 55, 52-69.
- Gilliland, D. I., Bello, D. C., & Gundlach, G. T. (2009). Control-based channel governance and relative dependence. *Journal of the Academy of Marketing Science*, 38, 441-455.
- Gilliland David I. and Bello Daniel C. Two sides to attitudinal commitment: The effect of calculative and loyalty commitment on enforcement mechanisms in distribution channels. *Journal of the Academy of Marketing Science* 2002; 30 (Winter): 24-43.
- Gilliland David, and Manning, K. C. (2002), "When do firms conform to regulatory control: the effect of control processes on compliance and opportunism," *Journal of Public Policy and Marketing*, 13, 236-248.
- Gundlach, G. T. (1994). Exchange governance: the role of legal and nonlegal processes across the exchange process. *Journal of Public Policy and Marketing*, 13, 236-248.
- Gundlach, G.T. and Ravi Achrol (1993), "Governance in Exchange: Contract Law and Its Alternatives," *Journal of Public Policy and Marketing*, 12(2), 141-155.
- Hair, Joseph F. Jr., Williams C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L. Tatham (2006), *Multivariate Data Analysis*, 6th Edition, Prentice-Hall: Upper Saddle River, NJ.
- Heide, Jan B. (1994), "Interorganizational Governance in Marketing Channels," *Journal of Marketing*, 58 (1), 71-85.
- _____, _____., and George John (1992), "Do Norms Matter in Marketing Relationships?" *Journal of Marketing*, 56 (2), 32-45.
- Huppertz, John, Sidney Arenson, and Richard Evans (1978), "An Application of Equity Theory to Buyer-Seller Exchange Situations," *Journal of Marketing Research*, 15 (May), 250-260.
- Jap, Sandy D. (1999) "Pie-Expansion Efforts: Collaboration Processes in Buyer-Supplier Relationships," *Journal of Marketing Research*, 36 (November), 461-475.
- Kumar, Nirmalya, Lisa K. Scheer, and Jan-Benedict E.M. Steenkamp (1995), "The Effects of Supplier Fairness on Vulnerable Resellers," *Journal of Marketing Research*, 32 (February), 54-65.
- Nirmalya Kumar, Louis W. Stern and Ravi S. Achrol (1992), "Assessing Reseller Performance from the Perspective of the Supplier," *Journal of Marketing Research*, 29 (2), 238-253.
- Lee, Nick, David Gilliland, Daniel Bello and Talai Osmonbekov (2009), "When electronic management tools work –and don't work – in social-based distribution channels: A study of IT manufacturers and resellers," *Journal of Business Research*, forthcoming.
- Lee, Hae Young, Yong-Ki Lee and Dowan Kwon (2005) "The intention to use computerized reservation systems: the moderating effects of organizational support and supplier incentive," *Journal of Business Research*, 58, 1552-1561.
- Lusch R. F and Brown J. R. (1996), "Interdependency, contracting, and relational behavior in marketing channels," *Journal of Marketing*, 60, 19-38.

- Mayer Roger C. Davis James H. The Effect of the Performance Appraisal System on Trust for Management : A Field Quasi-Experiment. *Journal of Applied Psychology* 1999; 84 (1): 123-136.
- Mirani, Robert, Deanne Moore and John A. Weber (2001), "Emerging Technologies for Enhancing Supplier-Reseller Partnerships," *Industrial Marketing Management*, 30, 101-14.
- Mohr, J. Fisher R. J. and Nevin J. R. (1990), "Collaborative communication in interfirm relationships: collaborative effects of communication and control," *Journal of Marketing*, 60, 103-115.
- Richard L. Oliver and John E. Swan (1989) "Equity and Disconfirmation Perceptions as Influences on Merchant and Product Satisfaction," *The Journal of Consumer Research*, 16 (3), 372-383.
- Osmonbekov, Talai (2009) "Reseller Adoption of Manufacturers' e-business tools: The impact of social enforcement, technology-relationship fit and the mediating role of reseller benefits," *Journal of Business Research*, forthcoming.
- Osmonbekov, Talai Daniel Bello and David Gilliland (2009) "The impact of e-business infusion on channel coordination, conflict and reseller performance," *Industrial Marketing Management*, 38 (7), 778-784.
- Oracle (2006), "Enabling Partner Value Networks Through Partner Relationship Management," White Paper, August (updated), accessed on www.oracle.com on March 11, 2007.
- Ouchi, W. G. (1979). A conceptual framework for the design of organizational control mechanisms. *Management Science*, 25, 833-848.
- Podsakoff, Philip M., Scott B. MacKenzie, Nathan P. Podsakoff and Jeong-Yeon Lee (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," *Journal of Applied Psychology*, 88(5), 879-903.
- Sapienza Harry J. Korsgaard Audrey M. Procedural Justice in Entrepreneur-Investor Relations. *Academy of Management Journal* 1996; 39 (3): 544-574.
- Scheer, Lisa K., Nirmalya Kumar and Jan-Benedict Steenkamp (2003), "Reactions to Perceived Inequity in U.S. and Dutch Interorganizational Relationships," *Academy of Management Journal*, 46-3, 303-316.
- Schein EH. *Organizational culture and leadership*. San Francisco: Josey-Bass; 1985.
- Seeck, H., & Kantola, A. (2009). Organizational control: restrictive or productive? *Journal of Management & Organization*, 15, 241-257.
- Srinivasan, Raji, Gary L. Lilien, and Arvind Rangaswamy (2002), "Technological Opportunism and Radical Technology Adoption: An Application to E-Business," *Journal of Marketing*, 66 (July), 47-66.
- Williamson, Oliver (1996), *The Mechanisms of Governance*, New York: Free Press.
- Wu, Fang, Vijay Mahajan and Sridhar Balasubramanian (2002), "An Analysis of E-Business Adoption and Its Impact on Business Performance," *Journal of the Academy of Marketing Science*, 31 (4), 425-47.