THE INFLUENCE OF RELATIONAL NORMS AND TRUST ON CUSTOMER SATISFACTION IN INTERFIRM EXCHANGE RELATIONSHIPS

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ABSTRACT

A vital aspect of managing interfirm exchange relations is establishing and maintaining customer satisfaction. The objective of this study was to examine empirically the influence of relational norms (solidarity, role integrity, information exchange) and trust on customer satisfaction in interfirm exchange relationships. Responses describing 249 pharmacy-buying group dyads were analyzed in a path analysis to test the direct and indirect (via trust) effects of the relational norms on customer satisfaction. Information exchange had significant indirect and direct effects on customer satisfaction. Solidarity had only significant indirect effects on customer satisfaction. No significant effects were found for role integrity. Implications for future research are discussed.

INTRODUCTION

Preserving customer satisfaction with an exchange partner has been identified as an important aspect of maintaining interfirm exchange relationships (Anderson, Fornell, and Lehmann 1994; Anderson and Narus 1984, 1990; Frazier, Spekman, and O'Neal 1988; Ganesan 1994). The logic is that a satisfied customer will remain in the exchange relationship. Satisfaction with an exchange partner has been associated with positive relationship characteristics such as a long-term orientation, fewer terminations of relationships, and reduced litigation (Ganesan 1994; Hunt and Nevin 1974; Lusch 1976). Further support for the importance of satisfaction in exchange relationships is the finding of Anderson, et al. (1994) that customer satisfaction is associated positively with profitability.

Given the vital role of customer satisfaction in interfirm exchange relationships, identification of factors that affect it is important. Two potential influences are the relational norms of the exchange relationship and the level of trust present (Dwyer, Schurr, and Oh 1987; Frazier, et al 1988; Crosby,

Evans, and Cowles 1990). Though there is conceptual support for the associations between relational norms, trust and customer satisfaction, little empirical evidence exists. The objective of this study was to examine the influence of relational norms and trust on customer satisfaction in interfirm exchange relationships.

DEVELOPMENT OF HYPOTHESES

As shown in Figure 1, relational norms are hypothesized to have direct and indirect effects (through trust) on customer satisfaction. Three norms were studied: role integrity, solidarity, and information exchange. In the model, trust is presented as a partial mediator between the relational norms and customer satisfaction. In the next section we develop hypotheses for associations between relational norms and interfirm trust.

Relational Norms and Interfirm Trust

Relational norms have been used to characterize interfirm exchange relationships (Kaufmann and Dant 1992; Kaufmann and Stern 1988; Macneil 1978, 1980). The presence of relational norms has been associated with a long-term orientation, a reluctance for substitute exchange partners, and a tolerance for uncertainty (Dwyer, Schurr, and Oh 1987; Macneil 1981; Palay 1984). Exchange partners can develop relational norms that provide the basis for the partners to pursue both joint goals and their own goals. Since a long-term orientation exists, firms are willing to work together in the present, expecting future benefits.

Three relational norms that can influence exchange partners are role integrity, solidarity, and information exchange. Role integrity refers to the expectation that an exchange partner will accept and maintain a unique and complex role within the exchange relationship (Kaufmann and Dant 1992; Macneil 1980). The ability of an exchange partner to maintain a complex role creates an expectation

Figure 1
Hypothetical Model of the Influence of Relational Norms and Trust on Customer Satisfaction

Role Integrity

Trust

Customer Satisfaction

Solidarity

Information Exchange
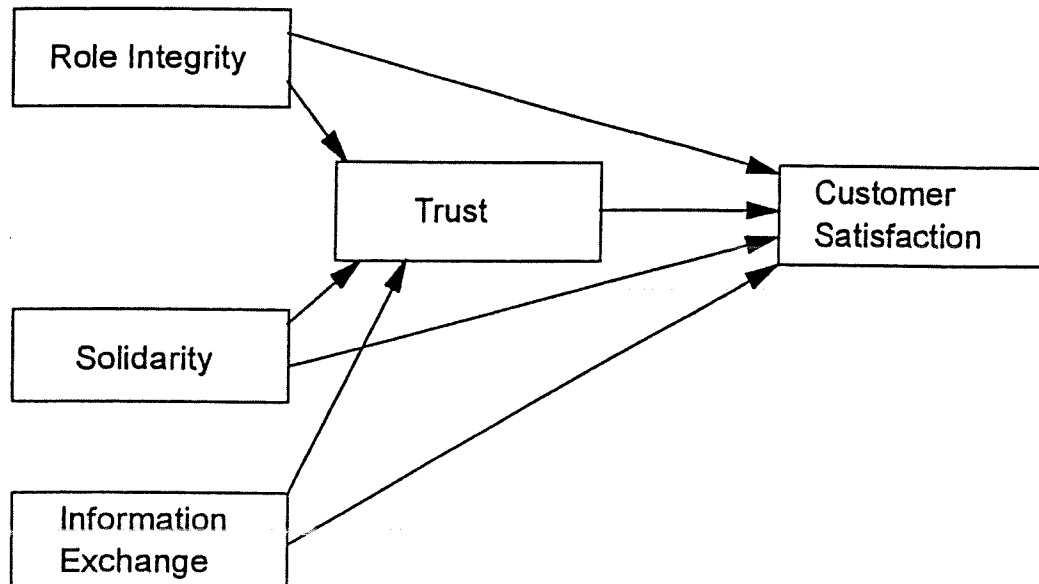
of future interactions. When a firm expects an exchange partner to be available for future exchange, they will allow "debts" to remain outstanding. A capability to tolerate being owed favors has been associated with the evolution of trust (Blau 1964). Based on this logic, we predict the following.

H1: The degree of role integrity in an exchange relationship is associated positively with the trust present in the relationship.

Solidarity refers to a bilateral expectation that both parties value the relationship and will work to preserve it (Heide and John 1992; Macneil 1980). The presence of solidarity establishes activities that will maintain the relationship. Such activities include a preference for joint problem solving, treating each other fairly, and meeting obligations (Dant and Schul 1992; Macneil 1980). Because solidarity fosters these activities, it will support the development of trust (Gundlach and Murphy 1993; Macneil 1981). Thus, we state the next hypothesis.

H2: The degree of solidarity in an exchange relationship is associated positively with the

trust present in the relationship.

Information exchange refers to a bilateral expectation that the exchange partners will proactively provide information useful to each other (Heide and John 1992). By sharing useful information, the exchange partners achieve coordination of their activities (Anderson and Weitz 1992). The coordination enhances expectations of competent role performance, one aspect of trust. Information exchange fosters confidence in the continuity of the relationship (Anderson and Weitz 1989). As suggested previously, expectations of future exchange can help build trust. Therefore, we state the next hypothesis.

H3: The extent of information exchange in an exchange relationship is associated positively with the trust present in the relationship.

Relational Norms and Customer Satisfaction

As stated earlier, relational norms develop over time, as firm engage in exchange. One development is accurate expectations of the other's

role within the relationship (Frazier, et al. 1988). That is, the activities of a firm to maintain its role in the exchange relationship clarify the expectations for that role. The presence of accurate expectations will increase the likelihood of positive disconfirmation and satisfaction (Olson and Dover 1979). Following this logic, we state the next hypothesis.

> **H4:** The degree of role integrity in an exchange relationship is associated positively with the customer satisfaction in the exchange relationship.

Solidarity in an exchange relationship derives primarily from internal mechanisms such as cooperation and development of friendship networks (Kaufmann and Dant 1992; Pfeffer and Salancik 1978). The use of internal, informal control mechanisms is preferred to more formal, external control mechanisms (Macaulay 1963). Such a preference implies a positive association between solidarity and satisfaction. Thus we predict the next association.

> **H5:** The degree of solidarity in an exchange relationship is associated positively with the customer satisfaction in the exchange relationship.

Information exchange has been predicted to associate positively with satisfaction with an exchange partner (Mohr and Nevin 1990). The sharing of information about production scheduling, design requirements, and volume needs supports the perception of equity in the exchange relationship (Frazier, et al 1988; Heide and John 1992). Perceived equity between the partners will increase their satisfaction with the exchange relationship (Frazier, et al. 1988; Oliver and Swan 1989). Following this logic, we state the next hypothesis.

> **H6:** The extent of information exchange in an exchange relationship is associated positively with the customer satisfaction in the exchange relationship.

Trust and Customer Satisfaction

Trust in an exchange partner means that a firm expects the other to provide competent role performance and meet fiduciary obligations (Barber 1983). Trust as expected competent performance, relates to the firm's reliability and expertise (Blau 1964; Ganesan 1994; Moorman, Zaltman, and Deshpande 1992; Swan and Trawick 1987). The expectation that another will meet its fiduciary obligations means that the trusted party occasionally will put the interests of another before its own. Further, it means that a firm can expect an exchange partner to avoid opportunistic behavior (Bradach and Eccles 1989; Lewis and Weigert 1985).

The relationship between trust and satisfaction has received some attention in the marketing literature. Anderson and Narus (1990) reported a significant positive path from trust to satisfaction in a study of distributor-manufacturer working partnerships. A positive association between trust and satisfaction also was reported in a study of relationship quality (Crosby, et al. 1990). Thus, we propose the following hypothesis.

> **H7:** The level of trust present in an exchange relationship is associated positively with the customer satisfaction in the exchange relationship.

METHODS

Sample and Dyad Under Study

To test the hypotheses, we examined pharmacy - buying group dyads. In 1994 there were 26,585 independently owned pharmacies in the U.S. (NPC 1994). Due to economic pressures, many independent pharmacies have joined buying groups in an effort to control costs. The Federation of Pharmacy Networks is an association of 25 independent pharmacy buying groups, totaling over 11,000 independent pharmacy members. We surveyed independent pharmacies that were members of buying groups belonging to the Federation.

A two-stage cluster sample of 500 pharmacies was used. The first stage was a random sample of five buying groups, selected from a roster of

Federation buying group members. Then, a systematic random sample of 100 pharmacies was drawn from the membership rosters of each of the five buying groups. Targeted key informants were the contact person shown on the membership rosters, usually the owner-manager of the pharmacy.

Data Collection and Analysis

Using a mail survey we asked independent pharmacy key informants about their relationship with a buying group. The pretested survey booklet was mailed with a personalized cover letter. Respondents were offered a summary of the results. A follow-up postcard was mailed as a reminder.

After the measures were purified, the items for each measure were summed and used in a path analysis to test the hypothesized pathways. The measures were purified, based on Cronbach's alpha, item-to-total correlation, and exploratory factor analysis (Churchill 1979). The path analysis tested the hypothesized pathways shown in the model in Figure 1. Thus, both direct and indirect paths from relational norms to customer satisfaction were tested for significance.

Measures

Role Integrity. To assess role integrity we developed a 4-item measure that was adapted from a measure reported by Kaufmann and Dant (1992). The items asked about the complexity and uniqueness of the roles in the exchange relationship. Respondents used a 5-point Likert scale (1-Strongly Disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly Agree).

Solidarity. Solidarity was measured with four items that asked about how the parties worked together to preserve the exchange relationship. The items were adapted from those used in a previous solidarity measure (Kaufmann and Dant 1992). The respondents used a 5-point Likert scale to assess the solidarity (1-Strongly Disagree/5-Strongly Agree).

Information Exchange. Information exchange, the third relational norm, was rated with

a 4-item measure. The items asked about the sharing of information by the parties. Respondents rated information exchange with the 5-point disagree/agree scale.

Trust. The trust measure had six items that evaluated both aspects of trust. Three items asked about competent role performance and three asked about meeting fiduciary obligations. Respondents used a 5-point Likert scale for the ratings (1-Strongly Disagree/5-Strongly Agree).

Customer Satisfaction. Customer satisfaction was assessed with six items that rated different attributes of the buying group's activities. Attributes assessed were: selecting dependable suppliers, membership fee structure, prices for contracted products, quality of contracted products, managing the buying group, and communicating with member pharmacies. Respondents used a 5-point scale (1-Very Dissatisfied 2-Dissatisfied 3-Neutral 4-Satisfied 5-Very Satisfied) to rate customer satisfaction.

Table 1
Mean, Standard Deviation, and Reliability of Purified Measures

Construct	Mean	Standard Deviation	Reliability[a]
Role Integrity (3/4)	9.52	1.93	0.59
Solidarity (4/4)	14.60	2.13	0.61
Information Exchange (4/4)	12.98	3.13	0.88
Trust (5/6)	17.15	3.22	0.84
Customer Satisfaction(6/6)	22.53	3.54	0.83

a   Cronbach alpha for items in purified measure.

Measure Purification

The mean, standard deviation, and reliability of the measures are shown in Table 1. Reliability was estimated by Cronbach alpha. The reliability for information exchange, trust, and customer satisfaction exceeded 0.80. However, both Cronbach alphas for the role integrity and solidarity measures were near 0.60. Given the

early stage of research with these measures, both role integrity and solidarity were included in the path analysis. All of the purified measures were unidimensional.

During the purification process, two items were dropped. One item was dropped from role integrity due to low item/total correlation. Similarly, one item was dropped from the trust measure because of low item/total correlation.

RESULTS

Of the 500 surveys mailed out, 249 were returned in analyzable form, for a 49.8 percent usable response rate. In the absence of actual nonrespondent data, late responders (n=70) were compared to the other respondents on selected variables (Armstrong and Overton 1977). The two groups were compared using t-tests on the five model constructs and the length of time of membership in the buying group. The two groups did not differ significantly on any of these variables (p<0.05).

Path Analysis

As shown in Figure 2, two of the three pathways from the relational norms to trust were significant at the 0.05 level. Solidarity and information exchange both had significant positive pathways to trust, as predicted. The pathway from role integrity to trust was not significant. Thus, H2

and H3 are supported, while H1 is not.

Two of the four pathways to customer satisfaction were significant (p<0.05). Both trust and information exchange had a significant positive pathway to customer satisfaction, providing support for H6 and H7. Thus, no support was found for H4 and H5.

Table 2 shows the direct, indirect (through trust), and total effects of the relational norms on customer satisfaction. For information exchange, the indirect effects on customer satisfaction that went through trust exceeded the direct effects. The direct effect of information exchange on customer satisfaction was the only significant direct effect of the relational norms on customer satisfaction. Solidarity had only significant indirect effects on customer satisfaction. No significant effects were found for role integrity on customer satisfaction.

DISCUSSION AND IMPLICATIONS

The results show relational norms and trust as significant influences on customer satisfaction in interfirm exchange relationships. The current use of relationship marketing makes these findings of interest to firms concerned with satisfying long-term customers and to researchers studying the marketing of exchange relationships.

Influences of Relational Norms on Trust

This study identified solidarity and information

Figure 2
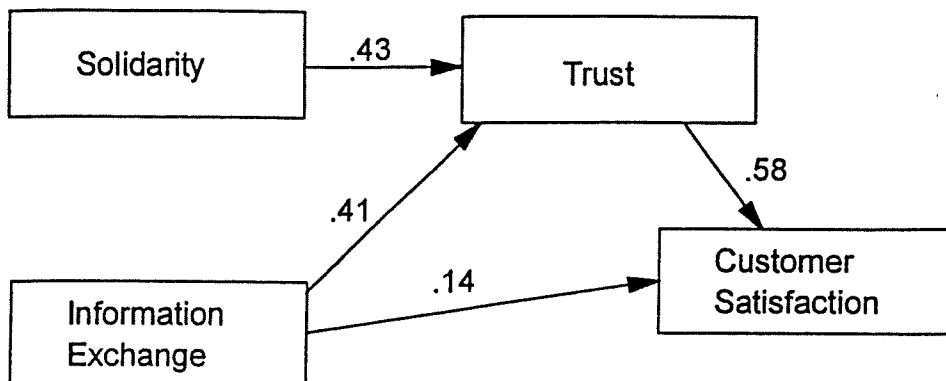### Empirical Model of the Influence of Relational Norms and Trust on Customer Satisfaction

Table 2
Direct, Indirect, and Total Effects of
Relational Norms on Customer Satisfaction

Independent Variable	Direct Effects	Indirect Effects	Total Effects
Role Integrity	.00	.00	.00
Solidarity	.00	.25	.25
Information Exchange	.14	.24	.38

exchange as positive influences on trust. The presence of relational norms supports the development of trust between the exchange partners. Solidarity supports trust-building activities such as setting of mutual objectives, joint problem solving, and meeting obligations. These activities increase the likelihood that the exchange partners will have accurate expectations of each others' competencies. Also, by meeting obligations, the exchange partners foster the expectation that each will meet their fiduciary obligations within the exchange relationship. Thus, solidarity supports the growth of both expectations that comprise trust: competent role performance and the meeting of fiduciary obligations.

By exchanging information about their needs and goals, the exchange partners enhance coordination of activities. The coordination improves the perceived competence of the firms, contributing to trust between the firms. Because information exchange often involves future material needs, a long-term orientation can arise. In the presence of such an orientation, the partners can tolerate temporary inequities, trusting that things will even out in the long run.

The association between role integrity and trust was low (beta = 0.04). One explanation is that the buying groups have not assumed unique and complex roles within the exchange relationship. Rather, the buying groups have been limited to a singular role, that of obtaining contracts with suppliers of generic prescription drugs. Other potential activities, such as marketing assistance and managerial support, have been provided by drug wholesalers, outside of pharmacy-buying group relationships. Thus, a pharmacy's trust in a buying group is related to the buying group's competency, the narrow generic broker role, rather than a complex,

multifaceted role. This would translate into the inconsequential association between role integrity and trust.

Influence of Trust on Satisfaction

Trust had a positive effect on the satisfaction of the pharmacies with their buying groups. A customer is satisfied when an exchange partner demonstrates its trustworthiness, by competently performing its role and meeting fiduciary obligations. By meeting obligations, an exchange partner can increase the equity perceived by the customer, which in turn contributes to customer satisfaction.

Direct Influences of Relational Norms on Satisfaction

Only information exchange had a significant (positive) association directly with customer satisfaction. The exchange of sensitive information contributes to the perception of equity in the exchange relationship (Heide and John 1992). The perceived equity between the partners supports customer satisfaction in the exchange relationship. The absence of direct effects of role integrity and solidarity on customer satisfaction shows that relational norms can have different effects with interfirm exchange relationships.

Limitations

One limitation of this study is that the relations were assessed from only the pharmacy perspective. It is likely that the buying groups view pharmacy-buying group relationships differently than do the pharmacies. For example, the buying groups may perceive information exchange much differently because they communicate with many members, while a given pharmacy uses one or two buying groups.

A second limitation is the somewhat low reliability of the measures for role integrity (alpha = 0.59) and solidarity (alpha = 0.61). Future work is needed to develop more reliable measures. Perhaps a role integrity measure could focus on specific roles within an exchange relationship. Similarly, the items for solidarity could be more focused.

In addition, the study was cross-sectional. We can improve our knowledge of relational influences on customer satisfaction by increasing the number of longitudinal studies of interfirm relationships. For example, a longitudinal study would allow the assessment of the covariance of trust and customer satisfaction over time. Also, the directionality shown in the model is supported by the literature. However, it is feasible that over time, satisfaction can impact on relational norms. A longitudinal study also would allow an assessment of causality not possible with a cross-sectional design.

Implications for Future Research

There are several issues that warrant future research. One issue is the need to better assess the mechanisms by which the norms and trust affect customer satisfaction. In this study, we described the results by referring to disconfirmation and equity, but did not actually measure these constructs. Future work could provide a more detailed examination by testing competing models of customer satisfaction in interfirm exchange relationships.

Our findings suggest that the development of trust and relational norms should contribute to customer satisfaction. However, little work has been done to identify activities that will foster the growth of trust and relational norms. One exception is a description of how industrial sales people gain customer trust (Swan, Trawick, and Silva 1985). Another approach would be to consider Zucker's (1986) three modes for trust production: 1) characteristic-based, 2) process-based, and 3) institutional-based. Characteristic-based trust derives from properties of the party being trusted. Process-based trust evolves through exchange experience. The third mode for developing trust, institution-based, develops trust from formal structures, such as an independent council that sets industry standards.

Another future research issue is to apply the model to other exchange dyads. Other seller-customer dyads may require more complex roles, which could make role integrity important. Also, the need for trust might vary with different levels of consumer expertise. For example, the purchase and use of a highly technical product (i.e. computer) that requires significant consumer

expertise likely involves more trust than the purchase of a less technical product (i.e. hammer). Such variations in trust requirements could affect the association between trust and customer satisfaction.

In conclusion, we showed that relational norms and trust have influence on a customer's satisfaction in an exchange relationship. However, future work is needed to determine if the associations identified in a channel relationship will be present in relations that involve the end-consumer.

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APPENDIX
Purified Measures

Role Integrity

Our pharmacy and this buying group expect a great deal from each other.

Our relationship with this buying group is much the same as any arrangement we make with other suppliers or purchasers.

There are expectations between us that go beyond the buying of pharmaceuticals.

Solidarity

Our relationship with this buying group could better be described as "arms length dealings" than "cooperative effort."

Both parties expect fairness in this relationship.

It is expected that, if this buying group has information that would help our operations, they should provide that information to us.

This relationship could better be described as a "long term joint venture" than a "series of single encounters."

Information Exchange

We provide feedback to this buying group about their

selection of suppliers.

Our relationship with this buying group is characterized by open communication by both parties.

We give and receive information from this buying group.

Our pharmacy and this buying group keep each other well informed.

Trust

This buying group really knows its business.

This buying group will put our interests ahead of its own in certain situations.

The personnel of this buying group are knowledgeable.

This buying group tries to help its members achieve their goals.

This buying group acts as a trustee for its members.

Customer Satisfaction

Selecting dependable suppliers

Membership fee structure

Prices for contracted products

Quality of contracted products

Managing the buying group

Communicating with member pharmacies

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