

Available online at www.sciencedirect.com



Industrial Marketing Management 32 (2003) 595-604



An investigation into commitment in non-Western industrial marketing relationships

Leonard V. Coote^{a,*}, Edward J. Forrest^{b,1}, Terence W. Tam^{c,2}

^aSchool of Business, University of Queensland, Brisbane, Qld 4072, Australia

^bCollege of Business and Public Policy, University of Alaska-Anchorage, Anchorage, AK 99508, USA

^cSchool of Marketing, Griffith University, Nathan, Qld 4111, Australia

Received 22 June 2002; received in revised form 20 November 2002; accepted 8 January 2003

Abstract

This paper reports an investigation into the antecedents of commitment in non-Western industrial marketing relationships. The authors draw the antecedents from extant literature and posit that commitment is related to trust (integrity and reliability), communication quality, conflict, and similarity (social, ethnic, and economic). It is further argued that trust mediates the effects of communication, conflict, and similarity on commitment. As an extension, the authors examine the moderating effects of normative contracts (an implicit understanding of roles and responsibilities) on the construct interrelationships. The hypotheses are tested using data collected from approximately 150 industrial marketing relationships sampled from overseas Chinese firms. The results generally support the authors' framework; however, the mediating hypotheses are not supported. There is evidence of systematic differences in the effects of the studied antecedents on commitment and trust. Furthermore, a multigroup analysis provides evidence of significant moderating effects due to contracting mode. The study provides new insights into the theory and practice of industrial marketing.

© 2003 Elsevier Science Inc. All rights reserved.

Keywords: Industrial marketing; Asian business relationships; Normative contract

1. Introduction

Relationship commitment is a fundamental prerequisite for successful industrial marketing relationships (Dwyer, Schurr, & Oh, 1987; Gundlach & Murphy, 1993). Commitment enhances the effectiveness, productivity, and efficiency of relational exchanges (Morgan & Hunt, 1994). Commitment impacts on channel partner satisfaction and the financial performance of channel relationships (Mohr & Spekman, 1994). Committed parties focus on long-term outcomes and attempt to maximize profits over a series of transactions (Ganesan, 1994). A long-term outlook and focus on future goals is central to the concept of commitment (Gundlach & Murphy, 1993; Moorman, Zaltman, & Deshpande, 1992). It

E-mail addresses: l.coote@business.uq.edu.au (L.V. Coote), edwardf@cbpp.uaa.alaska.edu (E.J. Forrest), ttam@mailbox.gu.edu.au (T.W. Tam). is this focus on longer-term outcomes that makes investments in specialized assets possible (Rindfleisch & Heide, 1997; Williamson, 1985). It is clear that commitment is an important construct. Several recent industrial marketing studies have examined its antecedents in North American and European settings (de Ruyter, Moorman, & Lemmink, 2001; Goodman & Dion, 2001). However, few systematic attempts to model the antecedents of commitment in non-Western industrial marketing contexts are reported in the literature.

To address this important gap, this paper presents a model of the potential antecedents of commitment using a sample of buyer–supplier relationships from a non-Western setting. Trust (integrity and reliability), communication quality, conflict, and similarity (social, ethnic, and economic) are posited as predictors of commitment. It is further argued that trust mediates the effects of trust, communication, and similarity on commitment. As an extension of the basic model, the moderating affects of normative contracts on the construct interrelationships are examined. Normative contracts exist when the parties to a relationship have an implicit understanding of their roles and responsibilities (Lusch & Brown, 1996). The model is tested using data sourced from 152

^{*} Corresponding author. Tel.: +61-7-3365-9721; fax: +61-7-3365-6788/6988.

¹ Tel.: +1-907-786-4161; fax: +1-907-786-4727.

² Tel.: +61-7-3875-7523; fax: +61-7-3875-7126.



Fig. 1. Hypothesized model.

buyer-supplier relationships sampled from overseas Chinese businesses. This is an appropriate context for study because a substantial proportion of economic activity occurs within the overseas Chinese business environment (Xin & Pearce, 1996). A rationale for the constructs and their hypothesized interrelationships are presented next (see Fig. 1). This is followed by a description of the research methodology and presentation of the results. The paper concludes with a discussion of the findings and their implications for the theory and practice of industrial marketing.

2. Conceptual framework

2.1. Commitment

Relationship commitment is defined as an exchange partner's enduring desire to maintain a valued relationship (de Ruyter et al., 2001; Moorman et al., 1992). Commitment exists when one party believes a relationship is important and warrants maximum efforts to maintain or enhance the relationship (Morgan & Hunt, 1994). Absent from this affective definition of commitment are instrumental and temporal dimensions (Goodman & Dion, 2001; Gundlach & Murphy, 1993). Instrumental commitment exists when an exchange partner lacks alternatives, has made investments in specialized assets, or both. Temporal commitment exists when the parties form expectations of relationship continuity. The affective definition of commitment adopted for this study is more closely related to the notion of long-term orientation (Ganesan, 1994). A longterm orientation exists when the parties focus on long-term goals and believe the relationship will be mutually profitable in the future. Essentially, the belief that a relationship

will achieve desired outcomes creates commitment among the parties.

Commitment is an important goal for channel and relationship managers (Dwyer et al., 1987). It is essential to developing and maintaining successful relational exchange (Gundlach, Achrol, & Mentzer, 1995). For example, manufacturers require commitment from distributors and retailers in order to carry out coordinated marketing programs (Goodman & Dion, 2001). More generally, commitment enhances the efficiency and effectiveness of marketing relationships (Morgan & Hunt, 1994). Commitment increases the efficiency of exchange relationships by establishing relational norms that include flexibility and solidarity (Gundlach & Murphy, 1993). Commitment enhances effectiveness because the parties can maximize their returns over a series of transactions (Mohr & Spekman, 1994). Empirical research indicates that commitment predicts willingness to cooperate, propensity to leave, and acquiescence and compliance (Morgan & Hunt, 1994). It is clear that commitment is an important construct both theoretically and for practicing managers.

2.2. Trust

Trust has become a focal point of explanation in the industrial marketing literature in recent years (de Ruyter et al., 2001; Doney & Cannon, 1997; Smith & Barclay, 1997). A rationale for the increasing focus on trust is the widespread acceptance of its importance to building relational exchanges (Goodman & Dion, 2001; Morgan & Hunt, 1994). Indeed, trust is the most fundamental of the relational social norms that have been described in the relational contracting literature (Macneil, 1978). Industrial marketing relationships can involve long time horizons, investments in specialized assets, and overlapping roles and responsibilities. Trust is crucial to

achieving relationship outcomes under these conditions (Mayer, David, & Schoorman, 1995). Trust exists when a party has faith or confidence in the integrity and reliability of their partner (Gundlach et al., 1995; Morgan & Hunt, 1994). Central to this definition of trust is the notion of credibility or the belief that another party can be relied on to fulfill written and spoken promises (Ganesan, 1994). It is important to differentiate trust from the notion of benevolence, which exists when an exchange partner is concerned about the welfare of their partner. To restate for emphasis, trust exists when one party has confidence in the honesty, reliability, and integrity of their partner.

There is support in the industrial marketing literature for the trust \rightarrow commitment path. According to Morgan and Hunt (1994), exchange participants will seek only trustworthy partners because commitment entails vulnerability. This line of argument is generally supported by empirical research. Morgan and Hunt report a positive relationship between trust and commitment in their study of manufacturer-retailer relationships. de Ruyter et al. (2001) find support for the positive effect of trust on affective commitment in their study of high-technology markets. Goodman and Dion (2001) report a correlation of .57 between trust and commitment in their study of distributor-manufacturer relationships. There is evidence supporting the positive effect of trust on commitment in commercial research relationships (Moorman et al., 1992). Finally, Ganesan (1994) reports a positive relationship between credibility (trust) and longterm orientation. Based on this literature the following relationship is expected:

H1: There is a positive relationship between trust and commitment.

2.3. Communication

The quality of communication and information exchange is one of the most important characteristics of business relationships (Mohr, Fisher, & Nevin, 1996). Communication is an important determinant of relationship effectiveness and has been described as the glue that holds industrial marketing relationships together (Mohr & Spekman, 1994). Relational contracting theory also stresses the importance of proactively sharing information to the success or failure of a relationship (Macneil, 1978). Communication is defined as the formal and informal sharing of credible and meaningful information between exchange partners (Anderson & Narus, 1990; Goodman & Dion, 2001). Central to this definition is the accuracy, relevance, and timeliness of the information that is exchanged, rather than its volume or frequency. Communication closely parallels the relational norm of information exchange (Lusch & Brown, 1996). Briefly stated, information exchange is the bilateral expectation that exchange participants will proactively exchange important and credible information with their partner (Heide & John, 1992).

Support for the communication \rightarrow trust path can be drawn from the industrial marketing literature. Anderson and Narus (1990) report evidence of the positive effect of communication on trust in their study of manufacturerdistributor partnerships. Morgan and Hunt (1994) report a correlation of .59 between communication and trust in their study of manufacturer-retailer relationships. de Ruyter et al. (2001) report a positive relationship between relationship characteristics (i.e., communication) and trust in their study of high-technology markets. Mohr et al. (1996) find support for the effect of communication on trust in their study of conventional channels. Finally, Smith and Barclay (1997) report a positive relationship between communication and trust in their study of partnership selling effectiveness. The following relationship is predicted based on past literature and research:

H2: There is a positive relationship between communication and trust.

2.4. Conflict

Conflict has been central to discussions of marketing channels for more than a decade (Stern, El-Ansary, & Coughlan, 1997). This interest is not surprising given that the potential for conflict exists wherever exchange participants are required to work together to achieve common goals (Brown & Day, 1981). This basic condition describes almost all industrial marketing relationships (Gaski, 1984). Scholars have long recognized that the consequences of conflict can be productive or destructive (Deutsch, 1969). Conflict is productive or functional when new solutions to problems are found and disputes are resolved amicably (Morgan & Hunt, 1994). Destructive conflict is a symptom of dysfunctional relationships and can result from the exercise of channel power (Lusch, 1976). Drawing on Anderson and Narus (1990), the definition of conflict adopted in this study is that conflict is the overall level of disagreement in the exchange relationship. This definition of conflict emphasizes the frequency, intensity, and duration of conflict between the parties (Kumar, Stern, & Achrol, 1992).

The conflict \rightarrow trust relationship has not been studied extensively in the industrial marketing literature. It is argued that trust is eroded when explicit and implicit agreements are violated (Dwyer et al., 1987; Gundlach et al., 1995). There is some empirical evidence to support this linkage. For instance, Anderson and Narus (1990) report a correlation of -.78 between conflict and trust in their study of manufacturer–distributor relationships. Recent research in hightechnology markets demonstrates that relationship characteristics (i.e., harmonization of conflict) is a determinant of trust (de Ruyter et al., 2001). However, there is some controversy regarding the causal ordering of the conflict \rightarrow trust relationship (Anderson & Narus, 1990; Young & Wilkinson, 1989). Conflict is posited as a predictor of trust in the model of Fig. 1. However, the position that trust can reduce conflict in subsequent periods is acknowledged. The following relationship is expected based on this discussion:

H3: There is a negative relationship between conflict and trust.

2.5. Similarity

Similarity captures the extent to which the exchange participants share a common background (Crosby, Evans, & Cowles, 1990). Assessments of perceived similarities could be based on physical, social, and economic characteristics. For example, representatives from buyer and supplier firms may socialize together and have similar economic status. More generally, similarity captures an exchange participant's belief that their partner shares common interests and values (Doney & Cannon, 1997). To this extent, similarity can be a close proxy for the notion of shared ethical values. Shared values exist when the parties have beliefs in common about what behaviors are important or unimportant, appropriate or inappropriate, and right or wrong (Morgan & Hunt, 1994). The initiation stage of interfirm relationships typically involves an assessment of the similarity of one's own goals with those of potential partners (Heide, 1994; Stump & Heide, 1996). Similarity can trigger the belief that a potential partner shares one's goals, motives, and intentions.

Research results on the effects of similarity have been mixed; however, there is evidence to support the hypothesized similarity \rightarrow trust relationship. It is argued that similarity fosters trust because an exchange participant will be more confident in their ability to predict their partner's intentions if they have a common background (Doney & Cannon, 1997). In goal interdependent situations, similarity among parties may be a cue for expecting the other party to honor formal and informal agreements (Crosby et al., 1990; Doney & Cannon, 1997). Doney and Cannon (1997) find support for the positive effect of salesperson similarity on trust in their study of 200 purchasing managers. Crosby et al. (1990) find partial support for the positive effect of similarity on relationship quality (i.e., trust). Finally, Morgan and Hunt (1994) report a correlation of .88 between shared ethical values and trust in their study of manufacturer-retailer relationships. This literature and research provides a basis for predicting a positive relationship between similarity and trust. The following relationship is expected:

H4: There is a positive relationship between similarity and trust.

3. Research methodology

3.1. Research setting

The research setting for the study was industrial marketing relationships between overseas Chinese businesses in a regional Asia-Pacific country. This was an appropriate context for examining the hypothesized relationships for several reasons. As already noted, a substantial and increasing proportion of marketing activity occurs within the overseas Chinese business environment (Xin & Pearce, 1996). It was also expected that there would be wide variation in the focal constructs within this context. At the same time, restricting the study to a single context minimizes extraneous sources of variation. A series of qualitative interviews revealed that owners/CEOs would be appropriate key informants for the study. The interviews revealed that owners/CEOs are responsible for approving key suppliers, negotiating and enforcing agreements, and renewing or terminating contracts. It is not surprising that owners/CEOs have such an important and active role in managing key supplier relationships. These firms tend to be smaller than the companies that dominate Western economies and the CEOs often have a significant ownership stake.

3.2. Sample characteristics

The sampling frame for the study was a list of approximately 1000 overseas Chinese-owned businesses. The list was obtained from a commercial source. A survey packet was personally addressed and sent to each firm's owner/CEO. The survey packet included (1) a cover letter from the researchers, (2) a self-administered questionnaire with instructions, and (3) a reply-paid envelope to encourage reply. Note that the survey was administered in English. The survey was closed out 2 months after the initial mailing. A total of 152 questionnaires were returned during this time for a response rate of approximately 15%. Respondents were instructed to selfselect and describe a business relationship with which they are familiar. As expected, the observations varied widely in terms of relationship characteristics and firm demographics. The average relationship was 8 years in length (S.D. = 6years). The average firm purchased \$2.3 million worth of goods and services from their supplier annually (S.D.=\$8.6 million). On average, the buyer firms had annual sales revenues of approximately \$8 million (S.D.=\$32 million). Finally, the firms in the sample employed 70 workers on average (S.D. = 431). These figures are characteristic of overseas Chinese firms.

3.3. Nonresponse bias

Nonresponse bias was assessed using the procedures described by Armstrong and Overton (1977). A series of tests was conducted that examined potential differences in waves of early and late respondents. The first 75% of respondents were classified as early. Then, early and late respondents were compared on several demographic characteristics including relationship length, annual purchase volume, annual sales revenue, and number of employees. This analysis failed to reveal any significant differences across the

early and late respondents and indicates that nonresponse bias may not be a problem.

3.4. Measures

To be consistent with previous research, the measures were based on past research in marketing. All of the measures used multi-item Likert scales anchored from 1 (*strongly disagree*) to 5 (*strongly agree*).

3.4.1. Commitment

The commitment items measure the extent to which an exchange participant values the relationship with their partner and believes it will generate desired outcomes. The items were based on past research in industrial marketing (Ganesan, 1994; Morgan & Hunt, 1994). The items include the following: "The relationship with my supplier will be profitable over the long run," "Maintaining a long-term orientation with my supplier is important to me," "My relationship with my supplier is something I intend to maintain," "I am very committed to the relationship with my supplier," and "I expect to continue working with my supplier for a long time." The scale was highly reliable (construct reliability=.91, variance extracted=.67).

3.4.2. Trust

The trust scale measures the confidence an exchange participant has in the honesty, integrity, and reliability of their partner. The items were based on the ones used by Morgan and Hunt (1994). Statements from the scale include the following: "Promises made by my supplier are reliable," "My supplier is honest and truthful," "My supplier has a high degree of integrity," "My supplier is open in dealing with me," and "I have great confidence in my supplier." The scale achieved high reliability (construct reliability=.88, variance extracted=.59).

3.4.3. Communication

The communication scale captures the credibility and relevance of information exchanged by the parties. The measures were based on the items developed by Anderson and Weitz (1992) and Smith and Barclay (1997). Statements from the scale were the following: "My supplier and I exchange information that may benefit one another," "My supplier and I keep each other informed about events and changes," "My supplier and I make it a point to keep each other informed," and "I keep my supplier informed about changes in my business." The scale was highly reliable (construct reliability=.85, variance extracted=.60).

3.4.4. Conflict

The conflict scale measures the level of disagreement in the exchange relationship. The items were based on previous research (Anderson & Narus, 1990; Kumar et al., 1992). Statements from the scale included the following: "I have significant disagreements with my supplier," "I am involved in conflict with my supplier," "I am rarely in agreement with my supplier," and "I have a tense relationship with my supplier." The scale was reliable (construct reliability=.80, variance extracted=.50).

3.4.5. Similarity

The similarity items capture the extent to which the parties share social and economic characteristics. The actual items used were based on past research (Crosby et al., 1990; Doney & Cannon, 1997). Statements from the scale were the following: "My supplier has a similar social background to me," "My supplier has a similar economic background to me," "My supplier is very similar to me," and "My supplier has a similar ethnic background to me." The scale achieved high reliability (construct reliability=.88, variance extracted=.64).

4. Analysis and results

Following the two-step approach described by Anderson and Gerbing (1988), a measurement model was estimated before examining structural model relationships. The constructs were represented as correlated first-order factors and the indicators were related only to their posited constructs. Sample covariances were used as input into the LISREL program to estimate the model (Joreskog & Sorbom, 1996). The chi-square statistic for the measurement model was significant, $\chi^2(199) = 306.09$, P < .05, which is to be expected given this statistic's sensitivity to sample size. The other fit measures indicate good fit to the sample data (goodness-of-fit index [GFI]=.84, adjusted goodness-of-fit index [AGFI]=.80, comparative fit index [CFI]=.94, root mean square residual [RMR]=.05). All of the standardized estimates are significant (P < .05) and equal to or greater than .65 (see Appendix A). These results provide evidence of convergent validity, and item and scale reliability. The construct intercorrelations are reported in Table 1. Discriminant validity was assessed for each pair of constructs by constraining the estimated correlation between them to 1.0 and then performing a chi-square difference test on the values obtained from the constrained and unconstrained models (Anderson & Gerbing, 1988). This test provided evidence of discriminant validity across all pairs of constructs.

Following the assessment of the measurement model, the hypothesized model of Fig. 1 was estimated for a test of the

Table 1 Construct intercorrelations

	1	2	3	4	5
1. Commitment	1.00				
2. Trust	.79	1.00			
3. Communication	.83	.86	1.00		
4. Conflict	57	57	41	1.00	
5. Similarity	.12	.29	.23	01	1.00

Correlations >.16 are significant (P < .05).

Table 2 Structural model results

	Initial model		Full model	
	Standard estimate	t Value	Standard estimate	t Value
Trust \rightarrow commitment (β_{12})	.84	9.97	.14	0.78
$Communication \rightarrow$	_	_	.62	3.93
commitment (γ_{11})				
Conflict \rightarrow commitment (γ_{12})	-	_	24	-2.71
Similarity \rightarrow commitment (γ_{13})	-	_	07	- 1.06
Communication \rightarrow trust (γ_{21})	.75	8.95	.71	8.24
Conflict \rightarrow trust (γ_{22})	30	-4.57	29	-4.05
Similarity \rightarrow trust (γ_{23})	.09	1.63	.13	2.19
R^2 -commitment	.70	_	.75	_
R^2 -trust	.87	_	.81	_

research hypotheses. Estimating this model produced a significant chi-square statistic, $\chi^2(202)=320.51$, P < .05. The other fit measures were indicative of adequate fit to the sample data (GFI=.84, AGFI=.80, CFI=.94, RMR=.06). The standardized parameter estimates and t values are reported in Table 2. As predicted in H1, the effect of trust on commitment is strongly positive and significant (β_{12} =.84, t=9.97). Communication has the positive and significant effect on trust predicted in H2 (γ_{21} =.75, t=8.95). The effect of conflict on trust is negative and significant (γ_{22} =-.30, t=-4.57), as predicted in H3. Contrary to H4, the effect of similarity on trust is not significant (γ_{23} =.09, t=1.63). Finally, the model explains 70% and 87%, respectively, of the variation in the endogenous constructs: commitment and trust.

Next, a model with direct effects was estimated for an overall test of the mediating hypothesis. This model produced a significant chi-square statistic, $\chi^2(199) = 306.09$, P < .05; however, the other fit measures indicate good fit to the data (GFI=.84, AGFI=.80, CFI=.94, RMR=.05). A chisquare difference test revealed that the full model represents a significant improvement in fit over the mediating model, $\chi^2 \Delta(3) = 14.42$, P<.05. Therefore, the mediating hypothesis is generally not supported. The standardized estimates for the direct effects model are reported in Table 2. The effect of trust on commitment is attenuated to the point of nonsignificance (β_{12} =.14, t=0.78). The effects of communication and conflict on trust are slightly attenuated (γ_{21} =.71, $t = 8.24; \gamma_{22} = -.29, t = -4.05$). The effect of similarity on trust is positive and significant (γ_{23} =.13, t = 2.19). There is evidence of direct effects from communication and conflict to commitment (γ_{11} =.62, t=3.93; γ_{12} = -.24, t=-2.71). The direct effect of similarity on commitment is nonsignificant ($\gamma_{13} = -.07$, t = -1.06). The model explains 75% and 81%, respectively, of the variation in trust and commitment.

4.1. An extension: moderating effects of normative contracts

Past research suggested that normative contracting would moderate the relationships in the structural model

(Lusch & Brown, 1996). Therefore, the possible moderating effects of normative contracting are examined as an extension of the basic model. An assessment of the measures for the normative contracts construct is shown in Appendix B. The items were summed to create a composite scale and the sample was split into two groups representing low and high levels of normative contracting. To test the moderating effects of normative contracting, a constrained model was estimated in which all the parameters were held as invariant across the subsamples. Then, the fit of the constrained model was compared to an unconstrained model in which the structural paths were allowed to vary across the groups. These constraints were designed for the purpose of the moderator analysis and not to improve the fit of the model to the data. Also, note that the direct-effects model was used as the basis for these tests. A chi-square difference test revealed that the unconstrained model represented a significant improvement in fit over the constrained model, $\chi^2 \Delta(7) = 61.21$, P < .05. This result provided initial evidence to support the moderating effects of normative contracting on the structural model relationships.

A further series of tests identified the specific paths that are moderated by normative contracting. The standardized estimates for these tests are shown in Table 3. The effect of conflict on commitment is strongly negative and significant in the low normative contract group; however, the effect is nonsignificant in the high normative contract subsample $(\gamma_{11(\text{Low})} = -.60, t = -4.01; \gamma_{11(\text{High})} = -.02, t = -0.11).$ The negative effect of conflict on trust is significant in the low normative contract group, but it is not significant in the high normative contract group $(\gamma_{12(Low)} = -.60,$ t = -4.66; $\gamma_{12(\text{High})} = -.01$, t = -0.09). Next, the effect of similarity on commitment is negative and significant in the low normative contract group ($\gamma_{13(\text{Low})} = -.18, t = -2.16$). However, the effect of similarity on commitment is not significant the high normative contract subsample $(\gamma_{13(\text{High})}=.02, t=0.23)$. Finally, similarity has a positive and significant effect on trust in the low normative contract

Table 3	
Multigroup	analysis

	Low normative		High normative	
	Standard estimate	t Value	Standard estimate	t Value
Trust \rightarrow commitment (β_{12})	.41	1.78	.12	0.54
Communication \rightarrow commitment (γ_{11})	.70	4.01	.42	2.22
Conflict \rightarrow commitment (γ_{12})	60*	-4.23	02 *	-0.11
Similarity \rightarrow Commitment (γ_{13})	18*	-2.16	.02 *	0.23
Communication \rightarrow Trust (γ_{21})	.68	5.05	.59	4.01
Conflict \rightarrow Trust (γ_{22})	60 *	-4.66	01 *	- 0.09
Similarity \rightarrow Trust (γ_{23})	.32 *	3.83	.07 *	0.72
R^2 -Commitment	.89	_	.52	_
R^2 – Trust	.92	_	.57	_

* Significant differences (P < .05).

group, but the effect of similarity on trust is not significant in the high normative contract group ($\gamma_{13(\text{Low})}$ =.32, *t*=3.83; $\gamma_{13(\text{High})}$ =.07, *t*=0.72). The implications of these findings and the more general pattern of results are discussed subsequently.

5. Discussion and conclusion

This study modeled some possible antecedents of commitment in a non-Western industrial marketing setting. Trust (integrity and reliability), communication quality, conflict, and similarity (social, ethnic, and economic) were modeled as predictors of relationship commitment. It was further argued that trust would mediate the effects of communication, conflict, and similarity on commitment. The empirical results are generally supportive of the conceptual framework; however, the mediating hypothesis is not supported. There is evidence of significant direct effects from communication and conflict to commitment. Furthermore, there is evidence of systematic differences in the effects of communication, conflict, and similarity on commitment and trust. Communication and conflict appear to be more important predictors of commitment than trust and similarity. Finally, the multigroup analysis indicates significant differences in the structural model estimates across high and low levels of normative contracting.

The estimates from the initial model supported the positive trust \rightarrow commitment path. However, the relationship was attenuated to the point of nonsignificance in the full model. This result is inconsistent with a premise of relationship marketing theory and past research. It was argued that trust is a crucial prerequisite for commitment (Morgan & Hunt, 1994). Essentially, commitment entails vulnerability and exchange participants will seek only trustworthy partners. Past research supports the positive effect of trust on relationship commitment (de Ruyter et al., 2001; Goodman & Dion, 2001; Morgan & Hunt, 1994). Perhaps, the moderating effects of normative contracts provide a potential explanation for lack of consistent support for this relationship. The trust \rightarrow commitment relationship tended towards significance in the low normative contracts subsample (P < .10), although the path was not significant in the high normative contracts group. It is possible to speculate that normative contracts act as a substitute for trust (cf. Lusch & Brown, 1996). That is, a mutual understanding of each other's roles can lessen the importance of making trust-based judgments about one's partner.

An unexpected result was the direct communication \rightarrow commitment relationship. The effect of communication on commitment was strongly positive in the total sample and both subsamples. This finding indicates that communication is a direct corridor to commitment. There is some evidence of direct effects in past research. de Ruyter et al. (2001) and Morgan and Hunt (1994) posit communication \rightarrow trust \rightarrow commitment relationships. Morgan and Hunt's results are indicative of mediation. However, de Ruyter et al. find a direct effect from relationship characteristics (i.e., communication quality) to affective commitment. Next, there was consistent support for the communication \rightarrow trust relationship. The effect of communication on trust was strongly positive and significant in the total sample and both subsamples. This finding reinforces the position that communication is key to building successful relational exchange (Mohr et al., 1996). It also extends past research by establishing the robustness of the communication \rightarrow trust path in a non-Western setting.

Another unexpected result was the direct conflict \rightarrow commitment path. It was argued that the negative effect of conflict on commitment would be mediated by trust. The direct effect of conflict was negative in the total sample and strongly negative in the low normative contracting subsample. However, the direct effect of conflict on commitment was nonsignificant in the high normative contracting group. This result is indicative of the moderating effect of normative contracting on the conflict \rightarrow commitment relationship. The potential for conflict is present in many marketing relationships (Dwyer et al., 1987; Gaski, 1984). However, normative contracting appears to be an effective mechanism for lessening the destructive consequences of conflict. As predicted, the negative effect of conflict on trust was supported in the total sample and the low normative contacting subsample, although the negative conflict \rightarrow trust path was attenuated to the point of nonsignificance in the high normative contracting group. This finding extends past research by isolating the conditions under which conflict erodes trust (cf. Anderson & Narus, 1990; Morgan & Hunt, 1994). Conflict undermines trust in relationships where the parties lack a mutual understanding of their respective roles. Stated differently, the results indicate that normative contracts are a useful mechanism for lessening the destructive effects of conflict in exchange relationships.

As expected, the direct effect of similarity on commitment was nonsignificant in the total sample and the high normative contract group. However, the similari $ty \rightarrow commitment$ relationship was negative and significant in the low normative contract subsample. The negative sign is unexpected and somewhat difficult to explain. It can be argued that dissimilarity would reduce an exchange partner's willingness to commitment to a relationship. The empirical results suggest that a different mechanism is at work. Normative contracts are a powerful tool for overcoming the apparent reluctance of parties with similar characteristics to form relationships. Finally, support for the similarity \rightarrow trust relationship was mixed. The path was nonsignificant in the initial model but it was positive and significant in the full model. Normative contracting also moderated the effect of similarity on trust. The similarity \rightarrow trust relationship was positive in the low normative contract group, but it was nonsignificant in the high normative contract subsample. Thus, it appears that normative contracting can act as substitutes

for the positive effects of shared social, ethnic, and economic characteristics. Past research on similarity has produced mixed results (Crosby et al., 1990; Doney & Cannon, 1997). Again, it may be that the moderating influence of normative contracting provides a potential explanation for these inconsistencies.

5.1. Implications for theory and practice

Some of the key implications for theory relate to the two major respecifications of interest, that is, the direct communication \rightarrow commitment and conflict \rightarrow commitcommitment paths. A central premise of the relationship marketing literature is that trust is a mediating variable (Morgan & Hunt, 1994). This premise is intuitively appealing because of the centrality of trust to successful relational exchange. It is well recognized that trust can establish productivity by encouraging investments in specialized assets, enhancing interfirm coordination and cooperation, and reducing monitoring costs (Doney & Cannon, 1997; Morgan & Hunt, 1994; Smith & Barclay, 1997). However, the mediating variable hypothesis is a separate argument and one that is not always supported by the empirical data (de Ruyter et al., 2001). Furthermore, the results reported here suggest that the quality of two-way communication and the level of conflict are more important to establishing commitment than trust. That trust is a cornerstone of successful relational exchange is not being questioned (Dwyer et al., 1987; Gundlach et al., 1995). However, the findings suggest that other variables could be considered to be as important as trust. A rival explanation is that because trust and communication are highly correlated, it is difficult to estimate their separate effects, though the discriminant validity tests demonstrated that these constructs are empirically distinct.

Managers seeking to build commitment and trust should (1) encourage the two-way exchange of meaningful and accurate information and (2) seek to avoid conflict and minimize the exchange of harsh words. However, the pattern of relationships is more complex than indicated by these general prescriptions. The presence or absence of normative contracting can significantly alter the corridors to commitment and trust. A normative contract moderates the destructive effects of conflict on commitment and trust. Industrial marketing managers should consider how normative contracts can be developed (cf. Lusch & Brown, 1996). Normative contracts also appear to act as substitutes for trust. The transaction cost literature suggests that explicit contracts make trust redundant (Rindfleisch & Heide, 1997; Williamson, 1985). It may be that normative contracting has the same effect and is something that managers and researchers should carefully consider. The implications regarding the consequences of similarity are more difficult to define. Ethnic similarity was the least important of the similarity indicators. Most

important were social similarity and overall similarity, then economic similarity. These findings gauge the importance of various dimensions of similarity and may be instructive to practitioners.

5.2. Limitations and research directions

This research was successful in modeling the determinants of commitment in a non-Western business setting; however, it is important to acknowledge some possible limitations. In particular, future research might adopt the use of alternative sampling strategies than the one used here. Respondents from participating firms were asked to self-select a relationship from the network of business relationships in the firm they operated. This sampling approach may have constrained the variation in the theoretical constructs. For example, relationships to which the buyer firms were committed may have been oversampled and relationships to which firms are less committed may have been undersampled. This would make it less likely that the parameter estimates would be significant if they were different from zero in the population. However, the sampling strategy was successful in capturing relationships that vary widely. The firms and relationships studied vary in terms of their demographic characteristics and the descriptive statistics for the measured variables are also indicative of wide variation. In the future, researchers might use a random procedure to identify the focal relationships rather than asking participants to self-select the focal relationship. An alternative approach is to ask each respondent to report on one positive and one negative relationship.

There are several obvious topics for further research arising from this initial study. Further research is required on the moderating effects of normative contracting. Though the research is successful in isolating some moderating effects, further conceptual development is required to more thoroughly explain these differences. It is also important that future research explore the relative importance of explicit versus normative contracts in relational exchange (cf. Lusch & Brown, 1996). The findings are limited to an examination of the effects of normative contracting. Another direction for future research is to directly compare Western and non-Western business relationships. A multigroup approach would provide a useful framework for examining potential differences across contexts. A related research topic would be to explore relationships that involve partnering between firms from different national backgrounds. It may be that similarity has a greater impact when perceived differences are exaggerated. In summary, the main contribution of the study is the extension of Western concepts of industrial marketing relationships to a non-Western setting. The initial findings reported here suggest that industrial relationships in the East may not be so different from those encountered in Western economies.

Appendix A. Measurement model results

	Standard estimate	t value
Commitment (construct reliability=.91; variance ex	tracted=.67)	
1. Maintaining a long-term orientation with my supplier is important to me.	.88	13.46
2. My relationship with my supplier is something I intend to maintain.	.82	12.04
3. I expect to continue working with my supplier for a long time.	.69	9.46
4. I am very committed to the relationship with my supplier.	.82	12.03
5. The relationship with my supplier will be profitable over the long run.	.89	13.66
Trust (construct reliability=.88; variance extracted=	=.59)	
1. My supplier is honest and truthful.	.79	11.37
2. Promises made by my supplier are reliable.	.80	11.59
3. My supplier is open in dealing with me.	.76	10.62
4. I have great confidence in my supplier.	.72	9.87
5. My supplier has a high degree of integrity.	.77	10.91
Communication (construct reliability=.85; variance	extracted=.60)
1. I keep my supplier informed about changes in my business.	.68	9.21
2. My supplier and I make it a point to keep each other informed.	.77	10.82
3. My supplier and I exchange information that may benefit one another.	.85	12.53
4. My supplier and I keep each other informed about events and changes.	.78	10.97
Conflict (construct reliability=.80; variance extract	ed=.50)	
1. I am involved in conflict with my supplier.	.73	9.45
2. I have significant disagreements with my supplier.	.75	9.78
3. I have a tense relationship with my supplier.	.65	8.25
4. I am rarely in agreement with my supplier.	.70	8.90
Similarity (construct reliability=.88; variance extra	cted=.64)	
1. My supplier is very similar to me.	.79	11.19
2. My supplier has a similar ethnic background to me.	.70	9.37
3. My supplier has a similar economic background to me.	.82	11.66
4. My supplier has a similar social background to me.	.88	12.96

Appendix B. Normative contracting measures

	Standard estimate	t value
Normative contract (construct reliability=.87; variance	e extracted=	=.56)
1. We have a mutual understanding of each other's role.	.73	9.79
2. We have a mutual understanding of remedies for failure to perform.	.77	10.67
3. We have a mutual understanding of how disagreements will be resolved.	.67	8.83

Appendix B (continued)

Normative contract (construct reliability=.87; varianc	e extrac	cted=.56)
4. We have a mutual understanding of how	.80	11.11
contingencies will be handled.		
5. We have a mutual understanding of how benefits	.78	10.80
and burdens will be divided.		

Model fit: $\chi^2(5) = 6.81$, *P*=.24; GFI=.98; AGFI=.95; CFI=1.0; RMR=.03. The items are based on the ones originally used by Lusch and Brown (1996).

References

- Anderson, E., & Weitz, B. (1992). The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research*, 29, 18–34.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54, 42–58.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14, 396–402.
- Brown, J. R., & Day, R. L. (1981). Measures of manifest conflict in distribution channels. *Journal of Marketing Research*, 18, 263–274.
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in services selling: an interpersonal influence perspective. *Journal of Marketing*, 54, 68–81.
- de Ruyter, K., Moorman, L., & Lemmink, J. (2001). Antecedents of commitment and trust in customer-supplier relationships in high technology markets. *Industrial Marketing Management*, 30, 271–286.
- Deutsch, M. (1969). Conflict: productive and destructive. Journal of Social Issues, 25, 7–41.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer–seller relationships. *Journal of Marketing*, 61, 35–51.
- Dwyer, R. F., Schurr, P. H., & Oh, S. (1987). Developing buyer-seller relationships. *Journal of Marketing*, 51, 11–27.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, 58, 1–19.
- Gaski, J. F. (1984). The theory of power and conflict in channels of distribution. *Journal of Marketing*, 48, 9–29.
- Goodman, L. E., & Dion, P. A. (2001). The determinants of commitment in the distributor-manufacturer relationship. *Industrial Marketing Man*agement, 30, 287–300.
- Gundlach, G. T., Achrol, R. S., & Mentzer, J. T. (1995). The structure of commitment in exchange. *Journal of Marketing*, 59, 78–92.
- Gundlach, G. T., & Murphy, P. E. (1993). Ethical and legal foundations of relational marketing exchanges. *Journal of Marketing*, 57, 35–46.
- Heide, J. B. (1994). Interorganizational governance in marketing channels. *Journal of Marketing*, 58, 71–85.
- Heide, J. B., & John, G. (1992). Do norms matter in marketing relationships? *Journal of Marketing*, 56, 32–44.
- Joreskog, K. G., & Sorbom, D. (1996). LISREL 8: user's reference guide. Chicago: Scientific Software International.
- Kumar, N., Stern, L. W., & Achrol, R. S. (1992). Assessing reseller performance from the perspective of the supplier. *Journal of Marketing Research*, 29, 238–253.
- Lusch, R. F. (1976). Sources of power: their impact on interchannel conflict. *Journal of Marketing Research*, 13, 382–390.
- Lusch, R. F., & Brown, J. R. (1996). Interdependency, contracting, and relational behavior in marketing channels. *Journal of Marketing*, 60, 19–38.
- Macneil, I. R. (1978). Contracts: adjustment of long-term economic relations under classical, neoclassical, and relational contract law. Northwestern University Law Review, 72, 854–909.

- Mayer, R. C., Davis, J. H., & Schoorman, D. F. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.
- Mohr, J., Fisher, R. J., & Nevin, J. R. (1996). Collaborative communication in interfirm relationships: moderating effects of integration and control. *Journal of Marketing*, 60, 103–115.
- Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal*, *15*, 135–152.
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: the dynamics of trust within and between organizations. *Journal of Marketing Research*, 29, 314–328.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58, 20–38.
- Rindfleisch, A., & Heide, J. B. (1997). Transaction cost analysis: past, present, and future applications. *Journal of Marketing*, 61, 30–54.

- Smith, J. B., & Barclay, D. W. (1997). The effects of organizational differences and trust on the effectiveness of selling partner relationships. *Journal of Marketing*, 61, 3–21.
- Stern, L. W., El-Ansary, A. I., & Coughlan, A. (1997). Marketing channels (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Stump, R. L., & Heide, J. B. (1996). Controlling supplier opportunism in industrial relationships. *Journal of Marketing Research*, 33, 431–441.
- Williamson, O. E. (1985). The economic institutions of capitalism: firms, markets, and relational contracting. New York: Free Press.
- Xin, K. R., & Pearce, J. L. (1996). Guanxi: connections as substitutes for formal institutional support. Academy of Management Journal, 39, 1641–1658.
- Young, L. C., & Wilkinson, I. F. (1989). The role of trust and cooperation in marketing channels: a preliminary study. *European Journal of Marketing*, 23, 109–122.