



# An analysis of international business-to-business relationships based on the Commitment–Trust theory<sup>☆</sup>

Margareta Friman<sup>a,\*</sup>, Tommy Gärling<sup>b</sup>, Bruce Millett<sup>c</sup>, Jan Mattsson<sup>d</sup>, Robert Johnston<sup>e</sup>

<sup>a</sup>Service Research Center, Division for Business and Economics, Karlstad University, SE-651 88 Karlstad, Sweden

<sup>b</sup>Department of Psychology, Göteborg University, Box 500, SE-405 30 Göteborg, Sweden

<sup>c</sup>Faculty of Business, University of Southern Queensland, Toowoomba 4350, Australia

<sup>d</sup>Roskilde University, P.O. Box 260, DK-4000 Roskilde, Denmark

<sup>e</sup>Warwick Business School, University of Warwick, Coventry CV4 7AL, UK

Received 2 March 2000; received in revised form 22 August 2000; accepted 3 December 2000

## Abstract

Business-to-business relationships are characterized by an exchange between two or more parties. Research has identified several factors that enhance marketing and management in business relationships, mainly with a focus on large manufacturing firms. However, less is known about how service firms develop and maintain international relations during the establishment of a business. To analyze the relevance of the key mediating variable (KMV) model [J. Mark. 58 (1994) 20–38.], which maintains that business-to-business relationship requires commitment and trust, interviews were conducted with five different service entrepreneurs in Sweden, Australia and the UK. The findings demonstrate the importance of commitment, trust, relation termination costs and benefits, shared values and communication between the exchange partners. © 2002 Elsevier Science Inc. All rights reserved.

**Keywords:** Relationship business; Service; Internationalization

## 1. Introduction

Many entrepreneurs establish their own firms when they recognize a specific market demand. However, some of these entrepreneurs are unable to fulfil the market demand with their own resources and means. In order to succeed, they therefore attempt to overcome their insufficiency by establishing relationships with a partner. Such business-to-business relationships are referred to as relational marketing (e.g., Ref. [1]) and described as a network paradigm [2,3].

Morgan and Hunt [4] assert that relationship marketing refers to activities directed toward establishing, developing and maintaining successful relations. More recently, there has been a growing interest in what factors contribute to such long-term prosperous exchanges between business associates. In social exchange theory (e.g., Refs. [5,6]), which has successfully been applied to studies of marital

satisfaction and family life quality, it is proposed that relationships providing more rewards than costs will yield enduring mutual trust and attraction. The theory further asserts that the actions of individuals are motivated by the reward (not necessarily monetary) that these actions are expected to bring from others [7]. For example, in a business-to-business relation, one part provides another with resources and support, while, in exchange, the other part contributes monetary rewards. Thus, whether or not commitment and trust emerge between the exchanging partners is a function of the perceived costs or the rewards one expects at a later date from the relationship exchange. Studies of happily married couples and other successful intimate relationships (e.g., Refs. [7,8]) show that interpersonal factors entailing psychological rewards, such as respect and trust, dominates over exchanges of money and goods. It therefore seems important to investigate whether the psychological factors suggested in social exchange theory has any impact on business-to-business relations relative to exchanges of money and other tangible things. Furthermore, it is important to specify which these psychological factors are.

<sup>☆</sup> The key mediating variable model in an international context.

\* Corresponding author. Tel.: +46-54-700-1168; fax: +46-54-83-6552.

E-mail address: margareta.friman@kau.se (M. Friman).

The issue is more complicated in international business relationships. Language barriers and cultural differences may, for instance, prevent or complicate long-term relationships. During the past years, several internationally oriented service firms in finance, utilities, legal and consulting have grown rapidly by acquisitions, mergers and franchising. Yet, little is known about how service firms develop international relations during the establishment of a business. Previous research of the internationalization process has tended to focus on how manufacturing firms expand internationally (e.g., Ref. [9]). An important aim of the present study is to attempt to extend previous findings from manufacturing industry to service enterprises.

In this study, the Commitment–Trust theory [4] will be used to analyze the development of international business-to-business relations in the service sector. In essence, the theory postulates a number of psychological factors which are important. In this paper, the theory will be operationalized as the Key Mediating Variable (KMV) model. This model is relevant since it is founded on empirical findings from many different areas including social-exchange theory (e.g., Ref. [6]), organizational theory (e.g., Ref. [10]) and transaction theory (e.g., Ref. [11]). Although the KMV model has been successfully applied on a national sample of automobile tire retailers [4], it needs to be tested further. Another aim therefore was to examine whether the KMV model can be used to analyze international business-to-business relationships.

The KMV model appears to fail to emphasize or ignore some factors that may be important. One is fairness in exchanges [12]. If business-to-business partners share benefits and burdens proportional to their investments, trust should increase. Another factor is perceptions of relationship

effectiveness, which refer to whether the exchanging parts perceive the relationship as productive, worthwhile and satisfying (i.e., Refs. [13,14]). The relationship may not be perceived as effective if benefits are not gained, thus, decrease trust and/or commitment. Still another factor that is assumed but made explicit in the KMV model is prior beliefs about the likelihood that the exchanging partner will reciprocate acts of trust and commitment (e.g., Ref. [15]). For instance, interactions reinforcing individuals’ expectations about others’ trustworthiness may increase trust, whereas interactions disconfirming those expectations may undermine trust. Thus, the KMV model may not be entirely suitable to account for the performance when service firms establish international business-to-business relationships. A third aim of the present study is, consequently, to see if fairness, perceptions of relationship effectiveness and/or prior beliefs about trust and commitment play any role when establishing international business-to-business relationships.

1.1. The KMV model of relationship marketing

Morgan and Hunt [4] and several others (e.g., Refs. [1,2,16–18]) have found that business-to-business relationships require commitment, as well as trust. These psychological factors are, in turn, assumed to be affected by termination costs and benefits, shared values, communication and opportunistic behavior. The seven factors have been brought together in the KMV model to form an account of what is necessary for the development of long-term collaboration (see Fig. 1).

Cooperative relationships are built on a foundation of mutual commitment. Commitment is defined as the *per-*

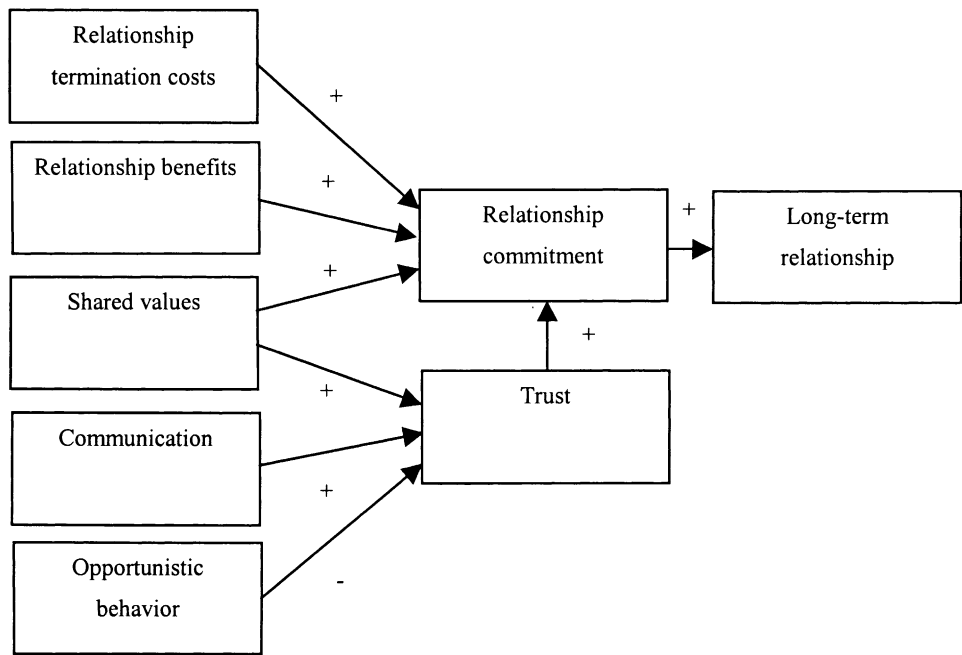


Fig. 1. The KMV model of relationship marketing [4].

*ceived importance* of a relationship [1]. Commitment also includes the desire to continue the relationship and to work to ensure its continuance [4,16]. If a business relationship is perceived as less important, commitment is assumed to decrease. An important relationship is conversely assumed to increase commitment. Hence, commitment implies importance and a desire to continue a relationship assuming that it will bring future value or benefits.

As business partners repeatedly interact with each other, trust may develop. Trust is defined as the willingness to rely on an exchange partner in whom one has confidence [4]. Trust has also been described as an expectation about the other part's honesty and benevolence [2,17,18]. Consequently, trust is the belief that one's partner is reliable, stands by its words, fulfils promised obligations and is honest. Empirical research has found trust to be an antecedent of commitment [4,19].

According to the KMV model, there are five precursors of commitment and trust. The more losses that are expected of a relationship termination, the more committed the different parties will be to each other. When exchange partners share the same values, commitment to the relationship will increase. Trust is, in turn, affected by the communication between the exchanging parts. Communication of high quality (i.e., relevant, timely, and reliable) will result in greater trust. When individuals try to maximize their own outcome (i.e., opportunistic behavior) at the expense of others, trust will decrease.

### 1.2. Objective

The objective of the present study is to gain a better understanding of factors affecting the development of international business-to-business relationships in the service sector. A point of departure is the seven factors identified by the KMV model. However, other factors are also focused on. Five authentic cases are analyzed with the aim of revealing critical incidents [20,21] in the development of the relationships. By integrating data on the critical incidents with accounts of events, the method is a hybrid of traditional case descriptions [22] and the critical incident technique [23].

## 2. Method

### 2.1. Case selection

The cases to be analyzed were selected according to three criteria. One was that English was mastered by all respondents. Second, it was important that the ventures were of significant size. A third criterion was that the ventures represented modern technology and service development in an international context. In the present study, five recent services internationalization were studied in Sweden (2), Australia (2) and the UK (1). Each of the

five cases had developed their business within 3 years before the interview. Three of the founder works with telecommunication (referred to as CALLMARK, NORTHTEL and TELESERV, respectively), one with education (COMPUTE) and one with temporary services (TEMPSEARCH). The present analysis further included interviews with coworkers and exchanging business-to-business partners in order to gain a better understanding of the development of the relationship. One of the respondents (TEMPSEARCH) started the firm together with a coworker. He was also interviewed and is referred to as TEMPSEARCH's coworker.

### 2.2. Procedure

The research instrument was a semistructured questionnaire administrated in a personal interview. In an introductory part of the interview, the interviewee was told the aim of the study. He or she was then asked to recall critical incidents in establishing the relations with the exchanging part. To jog memory, a checklist with key episodes of an event was handed out (i.e., background, how it originated, persons involved, sequence of events and outcomes). Respondents were asked to describe the incident in as much detail as possible. Confidential handling of the transcriptions was guaranteed. The interviews were tape-recorded and later transcribed into a verbatim text that served as the data for the analysis. Selected transcriptions were read and validated by the respondents as part of the analysis. Changes suggested by respondents were of marginal importance and primarily concerned additions of certain facts that they remembered when reading the transcripts.

In the data analysis, all transcriptions were first divided into events by two of the researchers and later reviewed by a third researcher. A second step was to select events that were judged to be related to the development of the relationships. The data thus consist of selected statements made as the interviewees were described experiences during establishing and developing of the relationship. No formal method of content analysis was used to extract categories from data.

## 3. Results

Data will be presented that have bearings on the importance of the hypothesized elements of the KMV model. In particular, the prerequisites for the establishment of the business-to-business relationships and their further development are identified.

### 3.1. Opportunistic behavior

Few admitted that they were driven by opportunism. However, some of them recalled acting initially with a high degree of self-interest. TEMPSEARCH described how the

first meeting with the exchanging partner took place: "... brutally speaking ... really to steal ideas ...". Similarly, TELESERVE attested that: "We were selling major software systems into Europe and around the world ... and we were doing it first of all to make money, but secondly to start developing relationships with the European carriers ...".

None of the entrepreneurs felt that the businesses associate was too greedy in trying to maximize their own profit. Instead, the entrepreneurs themselves disclosed their profit-maximizing intentions in the early stages of the development of the relationships.

### 3.2. *Communication*

Development of channels of communication was important to CALLMARK: "We know each other, we can call each other, ask questions, raise issues ...". Furthermore, technical facilities (e.g., e-mail) increased the access to people and information across the organizational structure of the exchange partners, which enhanced a greater cooperation. Hence, the integration of communication systems brought the exchanging partners closer together. CALLMARK believed that flexibility is necessary for easy access and incorporation.

Similarly, TEMPSEARCH stated: "We are very open ... we exchange information ... on both sides ... we feel we work in the same business ... we do not feel any rivalry ... we give freely." They thought that they had received more information than they expected. It is notable that so much openness was shown initially. Personal contacts and prior interactions may explain why so few communication problems were noted.

However, COMPUTE faced some problems. Lack of communication eventually caused poor relationship with the exchanging partner. COMPUTE said: "It wasn't me that was stupid ... nothing had actually ever been said." COMPUTE believed the lack of communication increased further when requests were made for more information. Later COMPUTE accepted the insufficient information and noticed that it is insufficient in the own business as well. COMPUTE concluded: "... the two organizations mirror each other ...".

Disclosing confidential information to the exchanging partner exposes one's vulnerability. Thus, a two-way flow of information is essential for creating and sustaining trust. For example, after intense negotiations, the TEMPSEARCH's firm signed contracts with the exchanging partner. This arrangement provided the TEMPSEARCH's firm with access to critical information and "know-how." Thus, when trust has been established, a free information flow is opened up.

Sharing information and communicating in a proper way seem to enhance commitment and trust. In the case of unease with the relationship, straight communication was important to preserve the relationship from further damage. All the entrepreneurs emphasized the communication at all

levels in the organizations and a two-way flow seems to be a prerequisite for enhanced commitment and trust.

### 3.3. *Shared values*

All entrepreneurs indicated the importance of having shared values. COMPUTE commented on the importance of agreed underlying needs and values with the exchanging partner. It was stated that geographical location might in fact be irrelevant in a corporate culture that is of a global perspective. Furthermore, it was noted that cultural differences need to be managed effectively in the internationalization process. TEMPSEARCH and his exchanging partner stated reasons to develop the relationship further as follows: "... we could buy into their concept ... and we shared common values ...". By sharing common values and being open-minded, the base for a future relationship is created. To CALLMARK, it was very important to adapt to the new culture.

The importance of shared values was expressed by the coworker of TEMPSEARCH: "... my parents taught me that values are of the utmost importance ... honesty, integrity and personal values should be the first issue in our lives. I felt that they [the business associate] had a value system ... even if not identical with my own." This illustrates a tendency to be aware of that values act as a base for developing business-to-business relationships. These values appear to be based on integrity, respect and trust. The entrepreneurs expressed such values after a period of evaluation and feedback. In summary, all the entrepreneurs regarded shared values as a critical facilitator of exchange relationships.

### 3.4. *Relation termination costs and benefits*

COMPUTE acknowledged that they needed to make money. If the wrong people come on board, the business must pay for it in the long term. Some of the entrepreneurs did not explicitly consider the relationship termination costs but argued that the relationship should be ended as soon as the benefits are no longer to be expected. TELESERV stated: "Whenever you're a sales guy you have to qualify the opportunity and at any minute you should be ready to just walk away from the opportunity if you have confirmed that you no longer have a chance, you shouldn't continue to spend money ...".

The analysis reveals that termination costs may not always be monetary. CALLMARK said: "The fear of failure kept us going [initially]. We had made a commitment that we would do it ...". An anticipation of failure thus seems to increase the interest in maintaining the relationship.

Relationship benefits were naturally noted as an important prerequisite for relationship exchange. Increased profitability, customer satisfaction and/or performance were some benefits mentioned by the respondents. COM-

PUTE's exchange partner remembered COMPUTE expressing a desire to make a contribution: "... that not only had commercial value, but also that provided a certain social benefit."

In general, the entrepreneurs discussed no alternative relationships. However, some termination costs were noted. Although physical investments may be crucial and increase dependence, it was noted that individual costs (i.e., lose once face) also may do this. All the entrepreneurs felt that they received benefits from their partner, which convinced them of the value to maintain the relationship.

### 3.5. *Trust*

Trust was present in all the relations discussed. As TEMPSEARCH pointed out: "... we traveled in Europe but did not find a partner to our liking ..." Similarly, CALLMARK noted: "... it's the honesty that comes as being important. You are cutting much deeper into the organization and taking much more responsibility for their business in a way that says the relationship is important and I have to trust what you can do." NORTHTEL was convinced in this regard: "lot of these things in the beginning was totally built up on trust. Trust between individuals and trust of them." Trust was regarded as a critical facilitator of the relationship. TEMPSEARCH likewise said: "They were nice people ... they seemed competent and we felt that we could trust them." According to COMPUTE: "... from the very beginning it was as much a developing of a personal relationship as it was a business relationship." As an example, COMPUTE's family met the exchanging partner's family, which was the start of a very open and honest relationship for all concerned. This highlights that the relationship that developed between the families was important in doing business.

One particular issue that arose from the analysis was that the entrepreneurs became good friends with the exchanging partners and that the relationship initially was built on trust and respect for each other. This was confirmed in the interviews with all of them. To quote TEMPSEARCH: "... they were very humble ... they made us feel that we had something to contribute ... we did not think at first that they had the leading edge in the business ... but they showed dedication ... which is more important than to possess the best system today ... our confidence in them grew out of that ... we felt that we could trust them." COMPUTE stated in a similar way: "We got on very well from day one ... there was a lot of similarities — our own relationship clicked." Additionally, TELESERV recalled one of the reasons that made him feel comfortable: "... the initial chairman of the board is a person I know and had been doing business with in the past."

In addition to the finding that trust is an important factor with regard to partner selection, all the entrepreneurs testified the relevance of trust in developing the relationship. Personal liking and honesty created the foundation for trust

and were considered important before engaging in more involved form of commitment.

### 3.6. *Commitment*

CALLMARK recalled that it took 18 months to establish good sound relationships at all levels of the associate organization. CALLMARK further stated that efforts at maintaining the relationship were achieved through attending meetings and getting involved in the exchanging business. This was also confirmed by NORTHTEL who indicated how important it was for him to find good worthy relationships and to maintain them.

One phase in the decision to commit to a business-to-business relationship involves negotiations and signing contracts. TEMPSEARCH was of the opinion that the negotiations constituted a very difficult stage in maintaining the relationship. However, once the negotiations were over, commitment was felt to be the underlying basis for the relationship. In contrast, COMPUTE emphasized the importance of developing a psychological contract between the parties. Signing an agreement signaled the end of this process and started a new period of productive exchanges.

Although COMPUTE struggled with some communication problems with the exchange partner, both felt committed to each other and made efforts to maintain the relation. COMPUTE remembered that the partner allowed him a reprieve on royalties for 4 months, which enabled the relationship to continue. Contrary to the others, TELESERV commented on the importance of a high degree of autonomy in the business relation. In a similar vein TELESERV argued that commitment with a high degree of autonomy is necessary to feel satisfied with the relationship.

In general, the data from the entrepreneurs support the proposition that commitment is an underlying basis for a business-to-business relationship. Negotiations and signing contracts are important, although not sufficient for a high degree of commitment. Incentive to maintain the relationship also requires some sort of psychological contract between the business associates.

## 4. *Discussion*

The aim of this case study was to analyze international business-to-business relationships in the service sector. In drawing on the Commitment–Trust theory, operationalized as the KMV model, evidence was found for all the factors (commitment, trust, relation termination cost and benefits, shared values, communication and lack of opportunistic behavior) assumed in this theory to be at work when business-to-business relationships develop. In addition, there was no strong support for the importance of other factors not identified by the theory, such as fairness, perceived relationship effectiveness or prior beliefs regarding the likelihood that the exchanging partner will reciprocate.

ate acts of trust and commitment [12–15]. It is thus suggested that the theory may be quite general since it has been successfully used in previous analyses of other types of business-to-business relationships (e.g., Ref. [4]). However, it cannot be inferred with certainty that these factors are necessary since counterfactual cases need to be examined in order to make such an inference. That is, it is still not known with certainty whether the entrepreneurs had established the relationships if, for instance, they had had less commitment and trust in their exchanging partners. In addition, it is difficult to infer with certainty that the determinants are of trust and commitment. Therefore, the results must remain tentative being in need of additional studies to establish causation, for instance, through structural-equation modeling (e.g., Ref. [24]).

In business research (e.g., Ref. [4]), the influence of opportunistic behavior is indicated by the fact that self-maximization decreases commitment and trust. None of the entrepreneurs in this study expressed that their business associate acted as to maximize their own profit. This may be a possible explanation why they felt committed to and thought they could trust their business associates. An expectation in the start-up phase expressed by several respondents was that they would share costs and benefits, for instance, due to technological advancements. This would result in better delivery of services and possible development of services for their customers.

There is little doubt from the results that communication increases both commitment and trust. For instance, in several of the cases, the entrepreneurs documented an open and free information flow already initially in the relationship. This seemed to increase their sense of trust. In one case, one of the entrepreneurs felt dissatisfied with the communication with the exchange partner, which obviously affected the entrepreneur's feelings of commitment. Accepting the insufficient communication was then an important factor in preventing the relationship from further damage. All the entrepreneurs emphasized the communication at all levels in the organizations and a two-way flow seems to be a prerequisite for enhanced commitment and trust.

All the entrepreneurs emphasized that trust is a critical antecedent to commitment. In a majority of the business relationships examined in this study, trust was developed in prior social interactions. Thus, personal friendships were established before making any business commitment whatsoever. The results in this way indicate that trustworthiness is an initial significant factor when deciding with whom to do business. Personal liking and honesty created the foundation for trust and was considered important before engaging in more involved forms of commitment.

A significant factor is commitment. All the entrepreneurs repeatedly emphasized a desire to maintain their relationship with the exchanging partner. In some cases, entrepreneurs expressed a feeling of commitment not until they got involved in their mutual business. For example, in one case, an entrepreneur established commitment by attending the

exchange partner's meetings and communicated at all levels in his organization. This example demonstrates strategic behavior that some of the respondents engaged in. It is also important to note that negotiating and signing contracts with the exchanging partner enhanced commitment. Although formal contracts are an important phase in relationship commitment, involvement and psychological contracts were clearly also significant. For instance, credibility is important since it shapes the approach toward negotiating and contracting. From the interviews, it thus appears as if both contracts and psychological properties of a relationship are important but play different roles. It is apparent that social and economic rules mix in business-to-business relationships. In fact, interpersonal factors such as involvement and credibility may dominate over exchanges of money and goods.

An additional finding regarding trust and commitment was that they are prerequisites for long-term business-to-business relationships. None of the entrepreneurs explicitly discussed alternative exchange partners. This may be due to the fact that they were committed to each other by different investments and/or that they were to some degree satisfied with their present partner. However, one entrepreneur stated that individual costs increased dependence to the exchanging partner. This implies that one may continue the relationship rather than losing one's face. All the entrepreneurs felt that they received benefits and that they shared the same values, which convinced them of the benefit to maintain the relationship.

Finally, it may again be stressed that the Commitment–Trust theory, operationalized as the KMV model, was supported in the present study. The advantage of identifying psychological factors in business-to-business relations has direct managerial implications. For instance, the results presented in this study and previous studies suggest that entrepreneurs should engage in business relations with an exchanging partner that can be trusted; they should support and facilitate communication; and, finally, they should attempt to sustain and develop shared values instead of behaving in an opportunistic manner. Specific actions for entrepreneurs to take are increasing the access of communication channels across the organizational structure (e.g., e-mail), be open-minded for cultural differences and develop personal, as well as business relationships.

## References

- [1] Dwyer FR, Schurr PH, Oh S. Developing buyer–seller relationships. *J Mark* 1987;51:11–27.
- [2] Ganesan S. Determinants of long-term orientation in buyer–seller relationships. *J Mark* 1994;58:1–19.
- [3] Thorelli HB. Networks: between markets a hierarchies. *Strategic Manage J* 1986;7:37–51.
- [4] Morgan MR, Hunt SD. The commitment–trust theory of relationship marketing. *J Mark* 1994;58:20–38.
- [5] Blau PM. *Exchange and power in social life*. New York: Wiley, 1964.
- [6] Cook KS, Emerson RM. Power, equity and commitment in exchange networks. *Am Sociol Rev* 1978;43:721–39.

- [7] Foa UG, Foa EB. Resource theory: interpersonal behavior as exchange. In: Gergen KJ, Greenberg MS, Willis RH, editors. *Social exchange: advances in theory and research*. New York: Plenum, 1980.
- [8] Williams FL. The family as an economic system: a conceptual model supported by empirical research. *Psychol Mark* 1993;10:111–30.
- [9] Johansson J, Vahlne J-E. Management of foreign market entry. *Scand Int Bus Rev* 1992;1:9–27.
- [10] Mathieu JE, Zajac DM. A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychol Bull* 1990;108:171–94.
- [11] Williamson OE. *Markets and hierarchies, analysis and antitrust implications*. New York: Free Press, 1975.
- [12] Ring PS, Van de Ven HH. Structuring cooperative relationships between organizations. *Strategic Manage J* 1992;13:483–98.
- [13] Bucklin LP, Sengupta S. Organizing successful co-marketing alliances. *J Mark* 1993;57:32–46.
- [14] Stuart FI, McCutcheon D. Problem sources in establishing strategic supplier alliances. *Int J Purchasing Mater Manage* 1995;31:3–9.
- [15] Messick DM, Wilke H, Brewer MB, Kramer RM, Zemke PE, Lui L. Individual adaptations and structural change as solutions to social dilemmas. *J Pers Soc Psychol* 1983;44:294–309.
- [16] Moorman C, Deshpandé R, Zaltman G. Factors affecting trust in market research relationships. *J Mark* 1993;57:81–101.
- [17] Dahlström R, Nygaard A. An exploratory investigation of interpersonal trust in new and mature markets. *J Retailing* 1995;71:339–61.
- [18] Kumar N, Scheer LK, Steenkamp J-BEM. The effects of perceived interdependence on dealer attitudes. *J Mark Res* 1995;32:348–56.
- [19] Anderson E, Weitz BA. Determinants of continuity in conventional industrial channel dyads. *Mark Sci* 1989;8:310–23.
- [20] Johnston R. The determinants of service quality: satisfiers and dissatisfiers. *Int J Serv Ind Manage* 1995;6:53–71.
- [21] Mattsson J. How bank loan officers evaluate persons applying for credit. *Int J Bank Mark* 1993;11:25–34.
- [22] Yin RK. *Case study research*: Sage Publications. California, 1990.
- [23] Flanagan JC. The critical incident technique. *Psychol Bull* 1954;51:327–57.
- [24] Hoyle RH, editor. *Structural equation modeling: concepts, issues and applications*. California: Sage Publications, 1995.