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Power, conflict, and cooperation: The impact of guanxi in Chinese marketing channels

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Abstract

This paper tests the impact of *guanxi* on behaviors among firms in a Chinese marketing channel. *Guanxi* is operationalized in this paper as emotional closeness and interactive state. We find that the emotional closeness between channel-boundary personnel of firms has a positive impact on their exercise of noncoercive power, a negative impact on their exercise of coercive power, and a negative impact on the perceived conflict between them. In addition, emotional closeness has an indirect but positive impact on perceived cooperation. Interactive state between the boundary personnel of two firms has a positive impact on a firm exercising noncoercive power and a negative impact on perceived conflict between them. At the same time, it is positively related to a firm exercising coercive power. This shows not only the significant influence of *guanxi* on a firm's channel behaviors but also the constructive effects of both emotional closeness and interactive state on marketing channel behaviors in China.

Key words: *guanxi*, marketing channel, exercise of power, conflict, cooperation

1. Introduction

Given the diversities of the world's social cultures, differences in channel behaviors are expected in different countries (Kale & McIntyre 1991). Chinese culture has been differentiated from Western culture in many aspects (Hofstede 1980). One of the important aspects is in *guanxi*, i.e., interpersonal relationships (Chadee & Zhang 2000; Leung, *et. al.* 2005; Luo 1997; Wong & Tam 2000). Living in a multiple-tier *guanxi* net in Chinese society, individuals are valued by their ability to live harmoniously with others and by how they perceive themselves in this *guanxi* net (Yang 2000). Since *guanxi* activities are, to a large extent, Chinese life itself, it is natural for Chinese to participate in social activities through the path of *guanxi* rather than through other paths (Zhuang & Xi 2003). Therefore, Chinese take advantage of *guanxi* not only in their daily lives but also in their political and economic lives (Gold, *et. al.* 2002). *Guanxi* is a valuable resource for mutual trust and cooperation between individuals or organizations and plays a more important role in doing business in China than in other countries (Arias 1998; Li, *et. al.* 2004). This is widely recognized and makes *guanxi* one of the hottest topics in Chinese business research (e.g., Chadee & Zhang 2000; Lee & Dawes 2005; Leung *et. al.* 2005; Luo 1997; Wong & Tam 2000). Although there have been a number of articles published on channel behaviors and on Chinese *guanxi*, few have connected the two (Lee & Dawes 2005). To fill this gap, we investigate the influence of *guanxi* on the exercise of power, conflict, and cooperation in Chinese marketing channels.

The significance of this topic emanates from the fact that China is the most populous nation in the world with rapidly and steadily growing consumer incomes and thus is an attractive market for many foreign companies. An effective marketing channel may provide a sustainable competitive advantage to international marketers operating in China. However, developing an effective distribution channel depends on cooperation among channel members, and conflicts among them are common due to their different or contradictory interests. It is thus imperative for these companies to learn about Chinese marketing channels, including both the channel structure (Goldman & Zhao 1998; Zhuang, *et. al.* 2003) and the behavior of channel members (Liu & Wang 1999; Zhuang & Zhou 2004).

From the perspective of theory development, the differences in channel behaviors in different cultures have been observed in the nature of the relationships between some behavioral factors such as power and exercise of power (Kale 1986) as well as dependence and power

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(Zhuang & Zhou 2004). These differences may also appear in important factors that influence channel management such as interpersonal relationships or *guanxi* (Lee & Dawes 2005), the variable that we are concerned with in this study. This study will shed light on how Chinese channel members interact with each other through their boundary personnel. Furthermore, it may enhance our knowledge of marketing channel behaviors in different cultural contexts, and help managers doing business or planning to do business in China improve their management of Chinese marketing channels.

In subsequent sections we first review relevant literature and present a number of hypotheses. Then we articulate the methodology of our research including research settings, sampling methods, and measurements. After presenting our results, we conclude with a discussion of our findings, their implications, and limitations, and suggest directions for future studies.

2. Framework and hypotheses

2.1 Guanxi as states, behaviors, or norms

Guanxi, a Chinese word pronounced gowan-she, literally consists of two Chinese characters. The character "*guan*" refers to a gate or a hurdle, while "*xi*" means a tie. Taken together, *guanxi* means "pass a gate or a hurdle and get connected" (Ambler 1994).

When used as the subject of academic research, *guanxi* refers to the social connections between or among individuals and/or interactive behaviors based on these connections (Chadee & Zhang 2000; Lee & Dawes 2005; Leung, *et. al.* 2005). The concept is complex and confusing due to its multi-faceted nature (Ambler 1994; Lee & Dawes 2005; Lee, *et. al.* 2001). *Guanxi* has been used to mean different but related things, including *guanxi* states, *guanxi* behaviors, and *guanxi* norms (cf., Lee & Dawes 2005; Leung, *et. al.* 2005; Wong & Tam 2000; Lee, *et. al.* 2001).

- *Guanxi* state indicates the qualities of a relationship between individuals. A *guanxi* state between two individuals can be "good" or "bad" depending upon how close the relationship is or how well their interactions are perceived.

- *Guanxi* behavior indicates the activities and efforts by which an individual develops, maintains, or employs *guanxi*, e.g., "to pull" or "to look for" *guanxi*.

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- *Guanxi* norm indicates the rules governing *guanxi* behavior, e.g., the rules of *renqing* (reciprocal favor) and *mianzi* (face).

Guanxi states or *guanxi* bases were typified by Yang (1992) as family ties, acquaintance ties, and non-acquaintance ties. These ties imply both the qualities of the interpersonal relationships and the principles of how one person in a dyadic relation should treat the other person (Yang 1992; Zhuang & Xi 2003). For instance, the *guanxi* in family ties, rooted in blood ties between family members and relatives, normally is better than the *guanxi* in acquaintance and non-acquaintance ties, and a person should take as much responsibility as possible and not ask for, or even think of, gain when interacting with another person in the family. In contrast, having no long-lasting relationships, the *guanxi* in non-acquaintance ties is ordinary, and a person may deal with another person in these ties based on a calculation of gains and losses.

A *guanxi* state may be developed or maintained for its own sake or for other purposes (Lee & Dawes 2005; Yang 2000; Zhuang & Xi 2003). For its own sake, harmonious interpersonal *guanxi* is believed to be an important source of happiness; while for other purposes, *guanxi* may be used as a tool to gain economic or political benefit. Although *guanxi* is often utilized as a tool and some *guanxi* has been especially developed for this purpose, this instrumental *guanxi* is not highly respected (Yang 2000; Zhuang & Xi 2003). Chinese, in their psycho-culture, like natural interactions to follow *yuan*, the predetermined *guanxi* bases (e.g., *qin yuan*, rooted in blood ties including family members and relatives; *di yuan*, the geographic ties existing between or among individuals who share a neighborhood or township; *shen yuan*, the spiritual ties existing between or among individuals who share the same religion; and *ye yuan*, the ties between or among individuals who share working experiences in the same industry), and the emotional closeness derived from these interactions. This emotional *guanxi* brings more mutual trust, happier feelings, and greater mutual concern for the individuals in the *guanxi* net, making it one purpose for living.

Guanxi behavior may, in turn, improve or deteriorate *guanxi* state (Wong & Tam 2000; Yang 2000; Zhuang & Xi 2003). Based on the above three ties, Chinese tend to distinguish between *zijiren* (individuals in the inner circle or insiders) and *wairen* (individuals outside the inner

circle or outsiders). Family members are initially insiders, non-acquaintances are outsiders, and acquaintances vary between insiders and outsiders — very close acquaintances are insiders while the others are outsiders. Chinese tend to trust and help insiders with little or no concern for gain and loss. An outsider may become an insider or an insider may become an outsider depending upon whether his or her *guanxi* behavior improves the quality of his or her relationship with others.

Individuals use different skills to develop, maintain, or improve their *guanxi* with desirable individuals. This common practice is called "to pull *guanxi*". For example, in order to develop *guanxi* (to get connected) with one individual (B), another individual (A) may first look for someone (C) who has connections with both A and B, or in other words, is in the family or a close acquaintance of both A and B. If C can be found, then it is easy for A to build *guanxi* with B through C's bridging role (Zhuang & Xi 2003). Furthermore, the *guanxi* state between A and B can be greatly improved with C's involvement. After good *guanxi* between A and B has been established, A can employ B to get connected with more useful persons, i.e., to develop more useful *guanxi*. In this way, Chinese can expand their *guanxi* net (Yang 2000). *Guanxi* behaviors in doing business were vividly described by Wong and Tam (2000) following a four Ts procedure: testing, trial, trust, and teaming.

Interactive behaviors between individuals are governed by *guanxi* norms such as the rules of *renqing* and *mianzi*. *Renqing* is the assistance or favor that one gives others. *Renqing* requires that, in a group, all members should help those in need and that all assistance or favors should be repaid (Lee & Dawes 2005). If a friend gets into difficulty, one should give assistance, and after it has been received, the recipient should return it as soon as the opportunity arises (Hwang 1987). Those who do not repay assistance are considered to be "mean", "untrustworthy", or "having lost face". *Mianzi* or face, on the other hand, is an individual's claimed sense of having a positive image in a social context (Bond 1991). One is given face when he or she is made to feel respected or important. One's face may be lost by inappropriate behavior. Losing face brings shame to the loser. Causing others to lose face is considered an aggressive act (Tung & Yeuang 1996). *Mianzi* as a *guanxi* norm requires an individual to give face to others and to protect the face that they have (Bond 1991).

Chinese use the term *guanxi* to mean these three facets interchangeably, and its real meaning must be understood from the context in which it is used. Although previous research (e.g.,

Hwang 1987; Lovett, *et. al.* 1999; Park & Luo 2001; Lee & Dawes 2005) has tended to integrate these facets and operationalize the construct as: closeness (*guanxi* state), affect (*guanxi* state), *renqing* (*guanxi* norm), and *mianzi* (*guanxi* norm), to avoid any confusion, we use the word to mean *guanxi* state throughout this paper and only examine the impact of *guanxi* state by operationalizing the construct as emotional closeness and interactive state between the boundary personnel of suppliers and retailers[1].

We have three reasons for doing this. First, although *guanxi* is interchangeably used to mean *guanxi* states, *guanxi* behaviors, and *guanxi* norms in Chinese social lives, the most frequently used meaning of *guanxi* is *guanxi* state. When individuals say "Our *guanxi* is good", "I have *guanxi*", or "old *guanxi*", they are using *guanxi* to mean *guanxi* state or somebody that they have a good relationship with or frequent contact with. Thus, when investigating the role that *guanxi* plays in Chinese marketing channels, we should start with the impact of *guanxi* state.

Second, using interactive state to capture guanxi state was required by the context of this research setting. We conducted our research based on the self-reported data of suppliers' sales representatives. The questionnaires were distributed with the retailers' help. This made the respondents very sensitive to some of the emotional statements that measured *guanxi* states such as "I like him", and "We are good friends" (Churchill & Iacobucci 2007). They might have thought that the survey was for the retailers, so they might have been uncomfortable revealing their real attitudes to the retailers' staff in order to avoid any future trouble. It was suggested, during a focus group discussion with retailers' managers and suppliers' sales representatives, that we use less emotional statements to measure *guanxi* states such as the items that describe interactive states between the suppliers' sales representatives and the retailers' relevant staff, e.g., the items revealing whether or not they frequently give each other gifts during festivals, whether or not they give favors to each other in doing business, whether or not they frequently contact each other socially.

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[1] Please note the difference between g*uanxi* behaviors and interactive states. *Guanxi* behaviors, as defined, are the activities and efforts by which individuals develop, maintain, or employ *guanxi*; interactive states are the perceived qualities of g*uanxi* behaviors between individuals. Although the perception of an interactive state between individuals is derived from their *guanxi* behaviors, the interactive state between them illustrates how often and how well their *guanxi* behaves. In other words, *guanxi* behaviors emphasize the procedure and efforts, while interactive state pays more attention to the frequency and qualities of the interactions.

Third, as discussed above, emotional vs. instrumental purpose is an important dimension of *guanxi*, and is independent of interactive state in this context and should be considered separately. *Guanxi* states were relatively simple in the context of this research setting. Almost all of the dyadic relations were between acquaintances — individuals knew each other well because of their frequent work contacts, but few had blood ties. Therefore, their interactive states to a large extent manifest their *guanxi* states — the better their perceived interactive states, the better their *guanxi*. However, *guanxi* may be for emotional or instrumental purposes, and the purpose of *guanxi* is independent of interactive states in the context of this research. Frequent contact between two individuals may be due to their emotional closeness or due to their doing business together. So we include this dimension as a separate factor of *guanxi* state in our research.

2.2 Power and exercise of power in marketing channels

Power in marketing channels refers to one channel member's (source) ability to influence decision variables in the marketing strategy of another member (target) at a different level in a given channel (Gaski 1984). Power can be exercised in several different ways as suggested by those who operationalize power usage as an exercise of a power base (Etgar 1978; Gaski & Nevin 1985; Gaski 1986; Brown, *et. al.* 1995; Kumar, *et. al.* 1998) and those who operationalize it as an influence strategy (Frazier & Summers 1984, 1986; Kale 1986; Frazier & Rody 1991; Gundlach & Cadotte 1994). The first group of researchers classified exercise of power into six power bases, i.e., reward, coercive, legitimate, referent, expert, and information. The second group of researchers, on the other hand, categorized influence strategies into information exchanges, recommendations, requests, promises, threats, and legalistic actions. Nevertheless, the two groups agreed on a fundamental dichotomy: The exercise of coercive power and the exercise of noncoercive power.

The exercise of coercive power refers to a firm's imposition of harsh sanctions upon another firm such as using coercive and/or legitimate power bases, or using threats and/or legalistic actions as influence strategies, while the exercise of noncoercive power refers to a firm's granting of beneficial assistance to another firm such as to use rewards, referents, experts, and/or information power bases, or using information exchanges and/or recommendations as influence strategies (Hunt & Nevin 1974; Gaski & Nevin 1985; Gaski 1986). The key for a source in a channel dyad exercising coercive power is to change the target's attitude or

behavior by causing the target to lose when the target is not compliant (Gaski 1984). On the contrary, the key for a source exercising noncoercive power is to change the target's attitude or behavior by providing the target with suggestions or benefits when the target is compliant (Gaski 1984).

A source's power is embedded in its resources valued by the target, derived either from the target's dependence on the resource or from the source's abilities to reward or punish the target by mobilizing the valued resource (Etgar 1976, 1978; Brown, *et. al.* 1983; Gaski & Nevin 1985; Gaski 1986). A higher level of power, therefore, implies having more valued resources that the source can employ to support influence attempts on the target's behavior. Given the nature of an exchange between channel members as bilateral benefit and mutual dependence, more valued resources (hence higher power) will lead the source to use resources more frequently as a means of supporting (exercise of noncoercive power) when influencing the target. On the other hand, since the target may actively adopt compliance or cooperative actions based on its perception of the source's power, it is less necessary for a source having higher power to employ coercive power to influence the target. This leads to a deviation between power and coercive power usage: A source with a higher-level power may not be a frequent coercive power user. Evidence from research studies points out that a source will be more likely to use noncoercive power (e.g., Frazier & Rody 1991; Frazier & Summers 1986; Gaski & Nevin 1985; Hunt & Nevin 1974) and less likely to use coercive power (e.g., Frazier & Rody 1991; Frazier & Summers 1986) as its power increases. We thus hypothesize that:

H1. In a channel dyad, the higher level of power a source holds, (a) the more likely that it will be to exercise noncoercive power, and (b) the less likely that it will be to exercise coercive power, as influence strategies over a target.

2.3 Guanxi and exercise of power in marketing channels

Apart from power, the degree of inter-firm dependence (Frazier & Summers 1984, 1986; Frazier & Rody 1991; Frazier, *et. al.* 1989), dependence structure (Shamdasani, *et. al.* 2001; Frazier & Summers 1984), channel climate (Etgar 1978; Kim 2000; Mohr & Nevin 1990; Robicheaux & Coleman 1994; Simpson & Mayo 1997), the source's desire to control channels (Gassenheimer, *et. al.* 1996), and the target's counter-power (Skinner & Guiltinan 1985) and autonomy (Gassenheimer, *et. al.* 1996), all may have some effect on a source's

exercise of power. We will consider the possible effect of a new factor, *guanxi* between channel-boundary personnel, on a firm's exercise of power in marketing channels.

Channel-boundary personnel refer to those employees who, as the representatives of the firm, directly and frequently contact the employees of another firm or firms in a marketing channel for coordinating, communicating, or influencing (Carolyn, *et. al.* 2001; Doney & Joesph 1997; Lee & Dawes 2005). For example, in the context of this research, the suppliers' channel managers and salespeople and the department store division managers and management staff are employees of this type. Being spanners of firms in a marketing channel, they play a very important role in a firm's channel management, including exercising power to influence (Frazier & Summers 1986; Gaski & Nevin 1985; Hunt & Nevin 1974), building trust between partners (Carolyn, *et. al.* 2001; Lee & Dawes 2005), enhancing channel cooperation (Skinner, *et. al.* 1992), and resolving channel conflict (Mehta, *et. al.* 1996). The focus of the present study is on the relationship between a supplier's sales representative and a member of a retailer's management staff in a Chinese marketing channel.

As stated above, living and perceiving themselves in *guanxi* nets, Chinese consider *guanxi* to be a valuable asset for participating in social activities. It is important in almost every realm of Chinese life, from politics to business and from officialdom to street life (Gold, *et. al.* 2002). One of the important differences between doing business in China or in a Chinese society and doing business in a Western country is that Chinese place more emphasis on *guanxi*, while Westerners rely more on contracts and rules to regulate or govern market exchanges (Arias 1998; Li, *et. al.* 2004). In Chinese societies, *guanxi* provides businessmen with a necessary base for mutual trust or credit for doing business, helps them consider business on a long-term base, and may be used as a tool to reduce or resolve conflicts (Arias 1998; Luo 1997; Wong & Tam 2000).

To clarify, let us assume that there are two suppliers, S_1 and S_2, doing business with a retailer, R. Although the relationship between S_1 or S_2 and R is inter-organizational, it is bounded by individuals. Suppose s_1 and s_2 are representatives of S_1 and S_2 respectively, and r is a representative of R. The relationships between S_1 and R and between S_2 and R are thus, to a great extent, manifested by the relationships between s_1 and r and between s_2 and r. If the *guanxi* between s_1 and r is better in terms of emotional closeness and interactive state than the *guanxi* between s_2 and r is, are there any differences between the way that R uses power over

S_1 and over S_2?

Because better *guanxi* in terms of emotional closeness brings greater care between r and s_1, r will take better care of s_1 than of s_2 when representing R in doing business with S_1 and S_2. This allows R through r to be able to influence S_1 by using more noncoercive powers such as rewards, information, or expertise and less coercive powers such as warnings, threats, or punishments. Similarly, if the interactive state between r and s_1 is better than the interactive state between r and s_2, r and s_1 will have more social contact. This makes them more willing to help each other in doing business. Therefore, r will use more noncoercive power and less coercive power or at least make coercive power feel less coercive when influencing S_1. Of course, inter-organizational relationships may be bounded by many individuals, but this will not change our above inferences.

Although no research has been found confirming this relationship in the context of marketing channels, this line of argument is consistent with previous researchers (Davies, *et. al.* 1995; Lovett, *et. al.* 1999; Ambler, *et. al.* 1999). They acknowledge that *guanxi* is the informal social bond between individuals that facilitates their exchange of favors. Therefore, we hypothesize that:

H2. In a channel dyad, the greater the emotional closeness of boundary personnel between the source and the target, (a) the more likely that the source will use noncoercive power, and (b) the less likely that the source will use coercive power, to influence the target.

H3. In a channel dyad, the better the interactive state of boundary personnel between the source and the target, (a) the more likely that the source will use noncoercive power, and (b) the less likely that the source will use coercive power, to influence the target.

2.4 Conflict, exercise of power, and guanxi in marketing channels
Channel conflict is defined as a perceived situation in which the goal achievement of a channel member or the effective performance of its instrumental pattern is impeded by another (Etgar 1979; Gaski 1984). It is manifested by perceived disagreements between channel members with respect to important issues of mutual concern (Brown & Day 1981). It is an important variable in marketing channel behavior research, because, first, it is almost inevitable — no conflict often means no cooperation; and second, it is influential — it may

make a difference in channel cooperation, satisfaction, and performance (Duarte & Davies 2003; Magrath & Hardy 1989; Rosenbloom 1973).

Many factors have been identified as causes of channel conflicts, including goal incompatibilities, role incongruities, resource scarcities, perceptual difference in realities, expectational differences, decision domain disagreements, and communication difficulties (Cadotte & Stern 1979; Etgar 1979). However, these factors are only potential causes for conflict between channel members. A channel member's exercise of power, to a great extent, determines whether or not a conflict manifests itself (Gaski 1984).

It has been found that, in marketing channels, exercise of coercive power will increase, while exercise of noncoercive power will reduce, the intensity of perceived conflict (Gaski & Nevin 1985; Lusch 1976). The reasons are as follows. The main reason for a source to use noncoercive power is to influence a target by making it aware of the benefits of its compliance. Compliance induced by the exercise of noncoercive power comes, more often than not, from a target's willingness. This makes a target perceive a conflict as being less intensive. On the contrary, the main reason for a source to use coercive power is to influence a target by having it realize its possible losses if it does not comply. A target's compliance with coercion is thus due more to its limited choices. This makes a target perceive a conflict as being more intensive. We thus hypothesize that:

H4. In a channel dyad, (a) the exercise of noncoercive power by a source will reduce, and (b) the exercise of coercive power by a source will increase, the intensity of conflict perceived by a target.

Guanxi between boundary personnel may have a direct impact on perceived conflict. In business interactions, conflict between partners cannot be totally avoided (Duarte & Davies 2003; Magrath & Hardy 1989; Rosenbloom 1973). However, it is relatively easy to resolve between partners if their boundary personnel are emotionally closer or interact better in the context of Chinese culture. For example, when a conflict occurs between channel members whose boundary personnel are emotionally close and/or interact well, boundary personnel can serve as an informal but easy-to-use communication channel through which a firm can make its position understandable and resolve the conflict or reduce the conflict's intensity (Su, *et. al*. 2008). We thus hypothesize that:

H5. In a channel dyad, both (a) emotional closeness and (b) interactive state of boundary personnel between a source and a target are negatively associated with the intensity of the conflict perceived by the target.

2.5 Cooperation, exercise of power, conflict, and guanxi in marketing channels

Channel cooperation is the joint effort, with voluntary actions, of channel members at different levels in a marketing channel toward individual and mutual goals (Sibley & Michie 1982; Skinner, *et. al.* 1992). Its necessity depends on the mutual dependence of channel members, which in turn result from the specialization of channel members in certain functions (Coughlan, *et. al.* 2001). A good cooperative relationship can benefit partners in many ways such as enhancing capability, creating a good channel environment, using interorganizational resources efficiently, and helping solve conflict-based problems (Mehta, *et. al.* 1996). Many factors may influence a cooperative relationship in a channel. Among the major ones are goal compatibility, domain consensus, role clarity, and evaluation and exchange norms (Skinner, *et. al.* 1992).

Since exercise of noncoercive power is changing an attitude or behavior by providing something beneficial, while exercising coercive power is changing an attitude or behavior by causing loss, the former will lead to a higher level of cooperation, and the latter will lead to a lower level of cooperation. The research findings of two previous studies support these inferences (Skinner, *et. al.* 1992; Sibley & Michie 1982). We thus hypothesize:

H6. In a channel dyad, (a) the exercise of noncoercive power by a source will increase, and (b) the exercise of coercive power by a source will reduce, the level of cooperation perceived by a target.

Previous researchers believed that cooperation and conflict are negatively related in marketing channels (Skinner, *et. al.* 1992). However, few empirical studies have been found that explored this relationship. Logically, firms in marketing channels cooperate with each other for mutual benefit. Nevertheless, given the goal incompatibilities, role incongruities, decision domain disagreements, and communication difficulties between them, conflict is inevitable (Cadotte & Stern 1979; Etgar 1979). Once perceived, conflict negatively affects cooperation. Thus we hypothesize that:

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H7. The more intense a perceived conflict between a source and a target, the lower the level of perceived cooperation between them will be.

The *guanxi* between boundary personnel in marketing channels may directly affect cooperation between their firms. As stated previously, in the context of Chinese culture, better *guanxi* provides channel members' boundary personnel more mutual trust and concern for doing business. This helps channel members build a mutually beneficial network and govern exchange relationships on a long-term basis (Arias 1998; Luo 1997; Wong & Tam 2000). As a result, cooperation between firms is enhanced. More specifically, in a marketing channel dyad, when representing his or her firm to do business with another firm, a boundary individual need the cooperation of the boundary individual or individuals of the latter firm to fulfill their tasks. If this happens between individuals who are emotionally closer or interact better, they are more likely to respond positively because of the better *guanxi* between them — they are more willing to take care of each other and help each other when in need. Superficially, the cooperation is between individuals, but underlying it is the cooperation between the firms that the individuals represent. This line of argument is consistent with that of Leung *et. al.* (2005). They argued and found that, in a Sino-Western context, better *guanxi* between firms' boundary personnel positively affects their mutual satisfaction due to a perceived smaller psychic distance between their firms. We, therefore, work on the logical assumption that good *guanxi* between boundary personnel of firms in a marketing channel will lead to mutually satisfactory cooperation between the firms and propose:

H8. In a channel dyad, both (a) emotional closeness and (b) interactive state of boundary personnel between a source and a target are positively associated with the cooperation perceived by the target.

We summarize the hypotheses into an analytical framework as shown in Figure 1. The focal variable is *guanxi*. It is operationalized as emotional closeness and interactive state and hypothesized to have direct impact on the exercise of both coercive and noncoercive power, and as well as perceived conflict and cooperation. In addition, power is an antecedent, and perceived conflict and cooperation are the consequences of exercise of coercive and noncoercive power.

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Insert Figure 1 about here

3. Methodology

3.1 Sample and survey

This research was conducted in the retail channel of department stores in Xi'an, the largest metropolitan city in Northwestern China. This channel is currently one of the most important channels of consumer goods in China (Zhuang, *et. al.* 2003). We have taken the channel dyad of the department stores and their suppliers as our unit of analysis. The department stores were the sources, and the suppliers were the targets. There are many types of cooperation between department stores and their suppliers. One common practice is for a department store to allocate some of its operational or counter space to its major suppliers, and the suppliers in turn assign their own sales representatives to work in the stores to promote and sell their products. The sales representatives are, on the one hand, responsible to the suppliers, and on the other, governed directly by the retailers in the field. This makes them potentially good informants for this study.

The data were collected based on sales representatives' reports. To pick the sample units, we contacted the 10 department stores with the highest sales volumes in Xi'an. Six agreed to participate in our survey. With the help of their store managers, we identified the suppliers' sales representatives for three of their divisions (electrical appliances, clothing and apparel, and cosmetics) because these divisions had the most sales representatives. We distributed questionnaires to all of the sales representatives identified in these three divisions, instructed them in person on how to complete the questionnaires, gave them time to complete the questionnaires, and collected the copies at a later date. Altogether, 352 copies were distributed, and 227 copies were collected. The response rate was 64.5%. A total of 225 were usable for this study. Approximately 75% of the respondents had worked in their positions for more than one year making them well informed on the relationship issues between their firms and the retailers.

The ANOVA shows no significant differences in the respondents' perceptions of the retailer's power and the retailer's exercise of coercive and noncoercive power ($p > 0.05$). This implies that there is considerable agreement across divisions on the variables, and that it is appropriate to combine them for further analysis.

To check for nonresponse bias, 20 sales representatives who did not respond were identified. They were asked to answer from "1" (totally disagree) to "5" (totally agree) with respect to the following two items of the *guanxi* scale: "If not for our company, I would rather not have a connection with him (them)," and "I believe that if he (they) did not want something from our company, he (they) would rather not have a connection with me". The results of the sample t-tests show that the differences in the answers between the respondents and the non-respondents were not significant ($p > 0.05$). This suggests that nonresponse bias was insignificant.

3.2 Measures

The questionnaire included six scales and ten questions. The *guanxi* scale was created specifically for this study, while the measures of other constructs were adapted from previous studies using a translation/back-translation procedure to ensure equivalence (Adler 1983; Sekaran 1983). They were pre-tested in a pilot study.

We could not find any appropriate scales for the measurement of *guanxi* in the relevant literature at the time that we conducted the research (e.g., Ambler 1994; Chadee & Zhang 2000; Luo 1997; Wong & Tam 2000). We were unable to design our scale by referring to the paper of Lee and Dawes (2005) since our data collection was finished before its publication. We, therefore, had to design our own scale. First, following the procedure suggested by Churchill (1979), we generated 20 items including G2 to G7 to capture interactive state (GX_{ACT}) and G1, G8, and G9 to capture the perceived emotional closeness (GX_{EMO}) between a supplier's sales representative and the named retailer's relevant staff from the perspective of the supplier's sales representative. The original items included such items as "I like him (them)", "He (they) like me", "We are good friends", "I trust him (them)", and "I am happy when we get together". These items measure emotional closeness more directly. However, during a focus group discussion with the retailers' managers and the suppliers' sales representatives, we were told that these items were too sensitive for the respondents in this context, and that the respondents might not reveal their real attitudes to the retailers' individual(s) in order not to have any trouble in doing business with them in the future. Therefore, we decided to delete these items and measure *guanxi* state by using the less sensitive items listed in Table 1.

Insert Table 1 about here

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According to the managers and sales representatives in the focus group, the items finally selected for measuring GX_{ACT} (G2 to G7) reflect the major aspects of the interactions between boundary personnel of the firms in this context, while those for measuring GX_{EMO} (G1, G8, and G9) are appropriate and applicable when reversely coded. For example, G8 states "If not for my company, I would rather not have a connection with him (them)." Reversely coded, it means that "Even if not for my company, I would have a connection with him (them)." Given the context in which the purposes of the contacts are either personal or for business, the reversely coded items are consistent with the meaning of emotional closeness. However, if directly coded, they could mean instrumental *guanxi* — their interactions are for the purpose of doing business. Therefore, we treat emotional *guanxi* and instrumental *guanxi* as being on the opposite ends of one dimension.

In the pilot study, 20 suppliers' sales representatives were asked to fill in the questionnaires. The *guanix* scale and the other scales used in the study were good in terms of internal consistency when tested with Cronbach's α. Finally in the field survey, the respondents were asked to indicate the extent of their agreement or disagreement with the items listed on the *guanxi* scale ranging from 1 (totally disagree) to 5 (totally agree).

The scale of power (PW) was adapted from Gaski and Nevin (1985) and Gaski (1988). Eight items (see Instrument A in the Appendix), with 1 "not at all" to 4 "as much as they wanted", were used to measure the retailers' power from the suppliers' perspective.

The scale of exercise of power was adapted from Gaski and Nevin (1985) and Rawwas et al. (1997). It is a 20-item scale ranging from 1 "never" to 5 "always" (see Instrument B in the Appendix). The first seven items (EP1 to EP7) were designed to measure the frequency of exercise of coercive power (ECPW), and the rest were to measure the frequency of exercise of noncoercive power (ENPW).

The scale of conflict (CONF) was adapted from Brown and Day (1981). According to them, "past perceptions and feelings of conflict lead to expressions of disagreements in written or oral communications between channel members with respect to important issues of mutual

concern" (p.266). Therefore, the frequency and intensity of these disagreements are considered to be "the best indicators of the level of overt conflict that can be obtained in field surveys" (p.266). Furthermore, they found that the intensity dimension performs better than the frequency dimension, so we applied the intensity dimension to measure perceived conflicts between the retailers and the suppliers. This approach has been adopted by researchers in other channel studies (e.g., Brown, *et. al.* 1995; Johnson, *et. al.* 1990; Schul, *et. al.* 1983). The scale was an eight item-scale designed to capture the intensity of the disagreements between a supplier and a retailer about such important issues as their cooperation in advertising, product displays in stores, warranties, and after sales service (see Instrument C in the Appendix).

The scale of cooperation (COOP) was adapted from Skinner et al. (1992). Ranging from 1 "totally disagree" to 5 "totally agree", the seven items in the scale were designed to capture the suppliers' cooperative willingness and the level of cooperation perceived by the suppliers (see Instrument D in the Appendix).

In addition, we took the period of time a sales representative had been working for the supplier in the store (REPtime) as a control variable because it might have a systematic influence on the representatives' perception of various variables in the model. For example, the longer a sales representative had worked in his or her position, the more opportunities he or she had to be influenced to do something, and the more he or she would likely experience and perceive a retailer's exercise of power. The same might be true of a sales representative's perception of conflict and cooperation. REPtime was measured using 1 = "less than one year", 2 = "1 through 3 years", and 3 = "4 years and longer", based on the respondent's report.

3.3 Validation of measures
To validate the measures, we checked their face and content validity, unidimensionality, reliability, convergent validity, and discriminant validity. In terms of face and content validity, instruments of the retailer's power, exercise of power, conflict, and cooperation were adapted from previous studies. They were thought to conform well to the definitions of the constructs and to be an adequate sampling of the domain of the constructs (Gaski & Nevin 1985; Gaski 1988; Rawwas, *et. al.* 1997; Brown & Day 1981; Skinner, *et. al.* 1992). Our consultation with the department stores' division managers and the suppliers' sales representatives also suggested that the contents of the instruments were valid. They reported that it was easy to

understand the meaning of each of the items in the scales and that in general, the instruments covered the major areas of their business operations. The *guanxi* scale was created based on relevant literature, our discussion with store managers and sales representatives, and our pilot study. We believe it reflects *guanxi* state in the context of this research setting.

To check the unidimensionality of our measures, first we performed an exploratory factor analysis (EFA) on each of the measures. For the *guanxi* and exercise of power scales, EFA extracted two factors with Eigenvalues greater than one, corresponding to GX_{ACT} (G2 to G7), GX_{EMO} (G1, G8, and G9), ECPW (EP1 to EP7), and ENPW (EP8 to EP20) as expected. For the rest, EFA extracted only one factor with an Eigenvalue greater than one. Both the Eigenvalue criterion and the Scree Test indicated that only one underlying factor for each of the constructs was present.

Then, we performed a confirmatory factor analysis (CFA) by fitting the measurement model. Because all of the constructs (latent variables), except for GX_{EMO}, were measured by using more than five indicators, before fitting the measurement model, we performed a "partial disaggregation" and generated fewer composite indicators for them using their original indicators following Garver and Mentzer's (1999, p.40) recommended procedure[2]. For example, six items for GX_{ACT} were randomly assigned into three composites, and then the scores within these composites were summed into a final composite indicator. Therefore, the three composite indicators, specifically GX1 (G2 and G7), GX2 (G3 and G5), and GX1 (G4 and G6), were derived from the original indicators of GX_{ACT}.

The first CFA attempt using the composite indicators (Maximum Likelihood method) and G1 as one of the indicators of GX_{EMO} resulted in a measurement model which was generally acceptable in terms of GFI (0.885), IFI (0.928), TLI (0.909), CPI (0.927), and RMSEA (0.045) though χ^2 (330.323, $p < 0.01$) was statistically significant (Hair, *et. al.* 1998; Garver & Mentzer 1999)[3]. However, when inspecting the standardized residuals, the modification indices, and the standardized regression weights, we found that G1 cross-loaded to several

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[2] According to Garver and Mentzer (1999, p.40), it is difficult for structure equation modeling (SEM) to identify the measurement model if too many indicators (a general rule of thumb, more than five) are used to represent a single latent variable. However, "partial disaggregation is a practical SEM application that allows the use of a large number of indicators to represent a latent variable". By using composite indicators obtained from partial disaggregation, "random error is reduced, a complex model is simplified, and the concept of multiple indicator measurement is maintained".
[3] It is recognized that the χ^2 test is sensitive to sample size, and a bigger sample tends to lead to a bigger χ^2. Therefore, when a significant χ^2 appears, researchers can turn to more objective measures of goodness of fit such as GFI, IFI, TLI, CPI and RMSEA (Hair, *et. al.* 1998; Garver and Mentzer 1999).

subsets of items, was associated with substantial modification indices (the highest is 25.294), and had a low standardized regression weight (0.175). This suggests that G1 is a "bad" item and should be deleted from the measurement model (Garver & Mentzer 1999).

After deleting G1, we ran the measurement model again. The CFA results are presented in Table 2. Although χ^2 (260.610, $p < 0.01$) is still significant, it is substantially reduced. Furthermore, GFI (0.906), IFI (0.959), TLI (0.945), CPI (0.958), and RMSEA (0.045) have all improved and are acceptable (Hair, *et. al.* 1998; Garver & Mentzer 1999). The standardized residuals, the modification indices, and the standardized regression weights were then carefully examined in terms of both internal and external consistency. The internal consistencies of the measures were indicated by the standardized regression weights in Table 2 — all of them are positive and statistically significant ($p < 0.01$); most are above 0.70, and only two are below 0.60. The external consistencies of the measures were checked by inspecting the standardized residuals and the modification indices of the measurement model. These suggest unidimensionality of the measures (Anderson & Gerbing 1988; Garver & Mentzer 1999).

Insert Table 2 about here

To check for the measure's reliability, we calculated the construct reliability for each of the five constructs indicated by more than three composites or items (see Table 2). The results reveal that reliabilities for these measures are all above 0.70, the generally acceptable threshold (Hair, *et. al.* 1998; Garver & Mentzer 1999). Two items for GX_{EMO} have a Pearson's correlation equal to 0.595 ($p < 0.01$).

To check the measure's convergent and discriminant validities, we inspected the standardized regression weights and the values of construct correlation (see Table 2). Given the model's goodness of fit, all of the composites or items' standardized regression weights were significant in the correspondent constructs ($p < 0.01$), demonstrating convergent validity for each of the measures. All the absolute values for construct correlation were significantly below one, providing discriminant validity of the constructs (Anderson & Gerbing 1988; Hair, *et. al.* 1998).

4. Data analysis and hypothesis testing

Structural Equation Modeling (Maximum Likelihood method in AMOS 4) was used for the data analysis based on the research framework (Figure 1). REPtime (the period of time a sales representative had been working for the supplier in the store) was controlled as an exogenous variable due to its significant correlation with ECPW and ENPW (see Table 2). The results are reported in Table 3.

Insert Table 3 about here

The model is acceptable in terms of overall goodness of fit. Although χ^2 is significant ($p < 0.01$), GFI (0.901), IFI (0.955), TLI (0.944), CPI (0.954), and RMSEA (0.046) achieved the suggested thresholds (Hair, *et. al.* 1998; Garver & Mentzer 1999).

To test the hypotheses, we looked at the "direct effect" in Table 3. It shows that, first, the standardized coefficient of PW (sources' power) for ENPW (sources' exercise of noncoercive power) is positive and significant (0.258, $p < 0.05$), and that for ECPW (sources' exercise of coercive power) is negative and significant (-0.279, $p < 0.05$). This corresponds with the predictions of H1a and H1b, so they are supported. That is, the stronger a firm's power the more likely it is to exercise noncoercive power and the less likely it is to exercise coercive power.

Second, the standardized coefficient of GX_{EMO} (emotional closeness) for ENPW (sources' exercise of noncoercive power) is positive and significant (0.175, $p < 0.05$), and that for ECPW (sources' exercise of coercive power) is negative and significant (-0.329, $p < 0.05$). This is consistent with the predictions of H2a and H2b, so they are supported. The stronger the emotional closeness of boundary personnel between firms the more likely they are to use noncoercive power and the less likely they are to use coercive power.

Third, the standardized coefficients of GX_{ACT} (interactive state) for both ENPW (a source's exercise of noncoercive power) and ECPW (a source's exercise of coercive power) are positive and significant (0.219 and 0.227 respectively, $p < 0.05$). This is consistent with the prediction of H3a but inconsistent with the prediction of H3b, so H3a is supported and H3b is

rejected. The interactive state of boundary personnel between firms is positively associated with a firm's exercise of both coercive and noncoercive power.

Fourth, the standardized coefficient of ENPW (sources' exercise of noncoercive power) for CONF (conflict) is not significant (0.100, $p > 0.05$), while the standardized coefficient of ECPW (sources' exercises of coercive power) for CONF (conflict) is positive and significant (0.649, $p < 0.05$). This is against the prediction of H4a but consistent with the prediction of H4b. Therefore, H4a is rejected and H4b is supported. A firm's exercise of noncoercive power does not reduce, but its exercise of coercive power increases, the conflict perceived by a target.

Fifth, the standardized coefficients of both GX_{EMO} (emotional closeness) and GX_{ACT} (interactive state) for CONF (conflict) are negative and significant (-0.200 and -0.184 respectively, $p < 0.05$). This is consistent with the predictions of H5a and H5b — perceived conflict is negatively associated with both the emotional closeness and the interactive state of the boundary personnel between firms. Therefore, they are supported.

Sixth, for COOP (cooperation), the standardized coefficient of ENPW (source's exercise of noncoercive power) is significantly greater than zero (0.410, $p < 0.05$), while the standardized coefficient of ECPW (source's exercise of coercive power) is significantly smaller than zero (-0.362, $p < 0.05$). These findings support both H6a and H6b, i.e., the exercise of noncoercive power by a firm increases, while the exercise of coercive power decreases, the level of cooperation perceived by a target.

Seventh, the standardized coefficient of CONF (conflict) for COOP (cooperation) is negative and significant (-0.228, $p < 0.05$). This finding supports H7, i.e., the perceived conflict between firms is negatively related to the perceived cooperation between them.

Finally, neither the standardized coefficient of GX_{EMO} (emotional closeness) nor GX_{ACT} (interactive state) for COOP (cooperation) is significant (-0.062 and 0.043 respectively, $p > 0.05$). These findings are not consistent with H8, thus H8 is not supported. The perceived cooperation between firms is not directly associated with either the emotional closeness or the interactive state of their boundary personnel.

5. Discussion

Taking retailers and their suppliers as the unit of analysis, this study investigates the impact of guanxi on the exercise of power, conflict, and cooperation in a Chinese marketing channel. It tests eight hypotheses. H3b, H4a, H8a, and H8b are rejected, and the rest are supported.

The rejection of H3b is unexpected. However, after elaborating on the context and our research operation, we offer a possible explanation below. In this situation, interactive state is derived from the sales representatives' perceptions based on their interactions and social connections with the retailers' relevant staff. The more interactions and social connections between a sales representative and the retailer's staff, the better interactive state is perceived. Therefore, it is likely that the hypothetical causal relationship between GX_{ACT} (interactive state) and ECPW (retailers' exercise of coercive power) is reversely linked: A better perceived interactive state might start from retailers' exercise of more coercive power.

The interactions between the representatives and the retailer's staff were due largely to their obligations — they all have to work well with each other on behalf of their firms. Therefore, if a retailer is exercising more coercive power over a supplier threatening their cooperative relationship, the supplier's sales representative has an obligation to deal with the problem. One of the methods he or she can employ is "to pull *guanxi*". To do this, he or she needs to take advantage of as many opportunities as possible to be socially connected with the retailer's staff. As a result, interpersonal interactions increase, and the interactive state is perceived better. This makes the retailer's staff exercise more noncoercive power over the supplier that the sales representative is representing. In other words, the retailer's exercise of more coercive power occurs first, followed by more interactions and better perceived interactive state between boundary personnel, and finally the retailer's exercise of noncoercive power. However, when asked to simultaneously evaluate interactive state and a retailer's exercise of coercive and noncoercive power, the sales representative may give all three high marks. This causes both ECPW (retailers' exercise of coercive power) and ENPW (retailers' exercise of noncoercive power) to be positively associated with GX_{ACT} (interactive state).

Given the results of testing H4b and H5b, this explanation is reasonable. On the one hand, a retailer's exercise of coercive power over a supplier increases the intensity of a conflict

between them, which in turn is perceived by the supplier's sales representative (the result of testing H4b). On the other hand, a good interactive state between a supplier's sales representatives and the retailer's staff can decrease a conflict (the result of testing H5b). Therefore, whenever a sales representative feels that a higher level of coercive power is being used, to avoid or ease the conflict, he or she starts "to pull *guanxi*". This improves his or her personal interaction and hereafter his or her perceived interactive state with the retailer's staff.

If this is true, we should not deny the negative relationship between interactive state and a channel member's exercise of coercive power (H3b). Whether or not this is true deserves further study using a better research design.

The rejection of H4a and the support of H4b seem to suggest that, in context, a target is sensitive only to a source's exercise of coercive power when feeling the intensity of conflict between them. This may be due to the nature of exercise of noncoercive power in marketing channels and the Chinese idea of conflict. As stated previously, the main reason for a source to use noncoercive power is to influence a target by making the target aware of the benefits of cooperating. The more that noncoercive power is exercised by the source, the more beneficial the relationship is thought to be and thereafter a higher level of cooperation will be perceived by the target. Exercise of noncoercive power should, therefore, have a direct impact on cooperation rather than conflict. This is consistent with the results of testing H4a and H6b. Moreover, Chinese believe that conflicts between cooperators should be avoided whenever possible (Arias 1998; Davies, *et. al.* 1995; Li, *et. al.* 2004). Given the relationship between the exercise of coercive power and conflict, Chinese are more sensitive to each other's exercise of coercive power. Once coercive power is used, the target will perceive it as an escalation in the conflict.

Regarding H8a and H8b, we find that neither emotional closeness (GX_{EMO}) nor interactive state (GX_{ACT}) directly affect perceived cooperation (COOP) as shown in the "direct effect" of Table 3. Nevertheless, when looking at the "total effect" of Table 3, we do observe an indirect and positive impact of emotional closeness (GX_{EMO}) on perceived cooperation (COOP). The coefficient of GX_{EMO} for COOP in the "total effect" is 0.180. Based on the results of this study, emotional closeness might affect cooperation through several paths. For instance, it might increase the level of cooperation by the use of more noncoercive power (the testing

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results of H2a and H6a), and/or by a reduction in the exercise of coercive power and channel conflict (the testing results of H2b, H4b, H5a, H6b, and H7).

To test for possible mediating effects, we performed a hierarchical regression analysis after summing the scores of composites or items within each of the constructs into single indicators (e.g., G8 and G9 were summed into GX_{EMO}, while CPP1, CPP2, and CPP3 were summed into COOP). We took COOP as the dependent variable and REPtime, PW, GX_{EMO}, GX_{ACT}, ENPW, ECPW, and CONF as the independent variables. The results are reported in Table 4.

Insert Table 4 about here

As shown in model COOP1, both the *F* value and the standardized coefficient of GX_{EMO} are significant ($p < .05$) though the standardized coefficient of GX_{ACT} is insignificant and the adjusted R-square is very small. After ENPW, ECPW, and CONF were put into the model (i.e., model COOP2, COOP3, and COOP4), the adjusted R-square was enlarged significantly. Furthermore, the standardized coefficient of GX_{EMO} becomes smaller though still significant ($p < .05$) in model COOP2, and not longer significant ($p > 0.05$) in models COOP3 and COOP4. Taken together, we observe that ENPW has a partial mediating effect, and ENPW and ECPW have a full mediating effect, between GX_{EMO} and COOP (Baron & Kenny, 1986).

5.1 The Effects of Guanxi
In this paper, we created a multi-item scale to measure the two dimensions of *guanxi* state, i.e., interactive state (GX_{ACT}) and emotional closeness (GX_{EMO}), between the boundary personnel of different firms in a Chinese marketing channel based on the characteristics of the research setting and relevant literature. Different from that developed by Lee and Dawes (2005), the *guanxi* scale used in this study employed more descriptive or less emotional items such as those that describe interactive state (i.e., how well or how frequently one contacts with the other in social activities) and those reversely coded to capture emotional closeness. This is considered more appropriate in the context of this research.

Using the two dimensions as separate variables in the data analysis to fit the model, we tested H2, H3, H5, and H8, the four hypotheses related to the effects of *guanxi*. H2, H3a, and H5 are supported, while H3b and H8 are rejected. We offered explanations for the rejected

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hypotheses above. Based on the results and discussion, we can conclude that *guanxi* is indeed a significant factor in influencing a channel member's behavior. More specifically, emotional closeness (GX$_{EMO}$) has a positive impact on retailers exercising noncoercive power (ENPW) and a negative impact on retailers exercising coercive power (ECPW), while interactive state (GX$_{ACT}$) has a positive impact on retailers exercising noncoercive power (ENPW) and is, at the same time, positively related to retailers exercising coercive power (ECPW). These are revealed by our testing of H2 and H3. Both emotional closeness (GX$_{EMO}$) and interactive state (GX$_{ACT}$) have a negative impact on the conflict perceived by a sales representative (CONF). This is revealed by our testing of H5. Additionally, emotional closeness (GX$_{EMO}$) has a positive but indirect impact on a representative's perceived cooperation (COOP). This conclusion is based on our discussion above on the rejection of H8.

The effects of the two-*guanxi* dimensions on a firm's behaviors in Chinese marketing channels are both constructive for a firm's cooperation. It shows that all of the effects of emotional closeness on marketing channel behaviors are desired, i.e., increasing the exercise of noncoercive power, decreasing the exercise of coercive power, reducing conflict, and enhancing cooperation. This can be observed in the "total effect" of Table 3 where the standardized coefficients of GX$_{EMO}$ (emotional closeness) for CONF (conflict) and COOP (cooperation) are both relatively large and in the desired direction (-0.406 and 0.180 respectively).

Interactive state is positively related to a channel member exercising coercive power, which is supposed to induce more conflict. However, it can directly reduce conflict. It is shown in the "total effect" of Table 3 that the standardized coefficient of GX$_{ACT}$ (interactive state) for CONF (conflict) is very small (0.085). If our reasoning for the rejection of H3b is right, the neutralized "total effect" of GX$_{ACT}$ (interactive state) for CONF (conflict) reflects its positive function in weakening the intensity of conflict between the retailers and the suppliers in this context.

It is interesting to compare the findings of our study with those of the recent study conducted by Lee and Dawes (2005). They operationalize *guanxi* as a construct of face, reciprocal favor, and affect, while we operationalize it as a construct of emotional closeness and interactive state. Emotional closeness in our study is similar in meaning to affect in their study. Their study observes the positive and significant impact of affect on the trust between a firm's

boundary personnel, while our study witnesses the desired impact of emotional closeness on the behavior of channel members. Therefore, the two studies both suggest that the dimension of emotional closeness or affect plays a significant and constructive role in doing business in China.

Furthermore, different from face and reciprocal favor in Lee and Dawes's study that actually refer to *guanxi* norms (see the discussion above on *guanxi* concept), interactive state in our study is a dimension of perceived *guanxi* state. Their study does not find any evidence of the significant impact of face and reciprocal favor, while our study finds a significant but complex impact of interactive state on the behavior of channel members. This seems to suggest that we are capturing a more important aspect of *guanxi* in the context of marketing channel behaviors.

5.2 Theoretical implications

Although the importance of *guanxi* in doing business in China has been widely acknowledged, there is little in the literature documenting empirical research and its effect on behavior in Chinese marketing channels (Lee & Dawes 2005). In this study, we investigate the influence of *guanxi* on the exercise of power, conflict, and cooperation in a Chinese marketing channel and find that *guanxi* indeed plays a significant role. Therefore, the findings of our study help fill this gap.

We created a multi-item scale for measuring *guanxi* state and operationalize the construct as emotional closeness and interactive state between boundary personnel of firms in marketing channels. Using this instrument in our research, we observe significant effects of both emotional closeness and interactive state on channel members' behaviors. Moreover, their effects are constructive for channel cooperation. This helps us better understand the interaction between firms in Chinese marketing channels.

We find that emotional closeness between the boundary personnel of the two firms in a channel dyad has a positive impact on a firm exercising noncoercive power, a negative impact on a firm exercising coercive power, and a negative impact on perceived conflict. In addition, it has an indirect but positive impact on perceived cooperation. Interactive state between boundary personnel has a positive impact on a firm exercising noncoercive power and a negative impact on perceived conflict. At the same time, it is positively related to a firm

exercising coercive power. These not only confirm Lee and Dawes's (2005) finding on the effects of emotional *guanxi*, but also, for the first time, provide evidence of the impact of *guanxi* on a channel member's exercise of power, on channel conflicts, and on channel cooperation.

Finally, we distinguish *guanxi* states from *guanxi* behaviors and *guanxi* norms in the concept of *guanxi*, and offer a scale to measure *guanxi* state in the context of a Chinese marketing channel. Employing more descriptive or less emotional items, the scale operationalizes the construct as emotional closeness and interactive state. It was tested in terms of reliability and validity. Though having some weaknesses such as having only two emotional closeness items, it may, with necessary modification, serve as an alternative of *guanxi* scales for future studies, especially when it is used in a similar research context.

5.3 Managerial implications

Our research findings help marketers who are doing business or planning to do business in China improve the effectiveness of their channel management. According to our research, *guanxi* is a significant factor that influences the behavior of firms in a domestic Chinese marketing channel.

Better emotional *guanxi* (closeness) between boundary personnel of the firms in a dyad would make a source firm exercise more noncoercive power and less coercive power. Furthermore, it would directly reduce perceived conflict and indirectly enhance cooperation between the firms. Therefore, in order for a firm to build a better cooperative relationship with its partners by facilitating its partners' exercise of more noncoercive power and less coercive power and inducing less conflict, a firm may encourage its boundary personnel to develop and maintain better emotional *guanxi* with its partners. As argued by Fock and Woo (1998), *guanxi* can be a marketing factor as important as those in the marketing mix, especially in the context of Chinese culture.

Although interactive state between a firm's boundary personnel may be positively related to channel members exercising coercive power, which is supposed to induce more conflict, it directly reduces perceived conflict by serving as an easy communication channel. Given the unavoidability of conflict in the cooperation between firms in marketing channels, a firm should encourage its boundary personnel to be more positive in participating in social

activities with the boundary personnel of its channel partners, e.g., exchanging small gifts during festivals, having dinners together, and taking care for each other in daily life. In this way, even if there are conflicts between the firm and its channel partners, an improved interactive state between its boundary personnel and its channel partners can resolve or lessen them.

In addition, though *guanxi* is often employed and developed as a tool to gain economic or political benefit, Chinese pay more respect to emotional *guanxi*. This was true even in the context of marketing channels as supported by the constructive role of emotional closeness in our study. Therefore, when developing interpersonal relationships between channel members, boundary personnel should put more emphasis on the development of emotional *guanxi*.

5.4 Limitations and directions for future studies
This study has some limitations. The data were gathered from the supplier's side. The results would be more informative if data from both sides of the channel dyad were compared. Future studies may be conducted by using paired data.

The key informants on the supplier side were sales representatives. Though they were very well informed about the relationships between the suppliers and retailers, they are not the supplier's final decision-makers. We can only assume that they represented their company's views. However, this may not actually be true. Future studies should use the final decision-makers as key informants.

The multi-item scale was created to measure the two dimensions of the *guanxi* state, namely interactive state (GX_{ACT}) and emotional closeness (GX_{EMO}), between boundary personnel in a channel dyad in a Chinese marketing channel. Although it was tested for reliability and validity and believed to be appropriate in this context, there are only two items that measured emotional closeness. This scale should be retested and refined in future studies.

Future studies may be carried out in other directions, such as investigating the relationships between *guanxi* and firms adapting to each other and between *guanxi* and a firm's performance. They may also focus on *guanxi* development in Chinese marketing channels given the role that *guanxi* plays. Such research would further improve our understanding of the interactions between firms in Chinese marketing channels and have more useful

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implications for practitioners.

Finally, questions about generalizability remain with respect to other channel types. Therefore, in future research, channels other than department stores should be used as settings.

References

Adler, N.J. (1983). A typology of management studies involving culture. *Journal of International Business Studies*, *14* (2), 29-47.

Ambler, T. (1994). Marketing's third paradigm: *Guanxi*. *Business Strategy Review*, *5*(4), 69-80.

Ambler, T., Styles, C., & Wang, X. (1999). The effect of channel relationships and *guanxi* on the performance of inter-province export ventures in the People's Republic of China. *International Journal of Research in Marketing*, 16(1), 75–87.

Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423.

Arias, J.T.G. (1998). A relationship marketing approach to *guanxi*. *European Journal of Marketing*, *32*(1/2), 145-156.

Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.

Bond, M.H. (1991). *Beyond the Chinese Face*. Hong Kong: Oxford University Press.

Brown, J.R., & Day, R.L. (1981). Measures of manifest conflict in distribution channels. *Journal of Marketing Research*, *18*, 263-274.

Brown, J.R., Johnson, J.L., & Koenig, H.F. (1995). Measuring the sources of marketing channel power: A comparison of alternative approaches. *International Journal of Research in Marketing*, *12*(4), 333-355.

Brown, J.R., Lusch, R.F., & Muehling, D.D. (1983). Conflict and power-dependence relations in retailer-supplier channels. *Journal of Retailing*, *59*(4), 53-80.

Cadotte, E.R. & Stern, L.W. (1979). A process model of interorganizational relations in marketing channels. *Research in Marketing*, *2,* 127-158.

Carolyn, Y.N., Larry, D.C., and Rajesh, S. (2001). The Role of interpersonal liking in building Trust in long-term channel relationships. *Academy of Marketing Science Journal*, *29*(1), 3-16.

Chadee, D.D., & Zhang, B.Y. (2000). The impact of Guanxi on export performance: A study of New Zealand firms exporting to China. *Journal of Global Marketing*, *14*(1/2), 129-132.

Churchill, G.A.Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, *16*(1), 64-73.

Churchill, G.A.Jr., & Lacobucci, D. (2004). *Marketing Research: Methodological Foundations* (9th ed.), California: Southern-Western College Publishing.

Coughlan, A.T., Anderson, E., Stern, W.L., & El-Ansary, A. (2001). *Marketing Channels* (6th edn.), Beijing: Tsinghua University Press.

Davies, H., Leung, T.K.P., Luk, S.T.K, & Wong, Y. (1995). The benefits of "*guanxi*": The value of relationship in developing Chinese market. *Industrial Marketing Management*, *24*(3), 207-214.

Doney, M.P. and Joesph, P.C. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, *61*(1), 35-52.

Duarte, M., & Davies, G. (2003). Testing the conflict-performance assumption in business-

to-business relationships. *Industrial Marketing Management*, *32*(2), 91-100.

Etgar, M. (1976). Channel domination and countervailing power in distribution channels. *Journal of Marketing Research, 13(3)*, 254-262.

Etgar, M. (1978). Differences in the use of manufacturer power in conventional and contractual channels. *Journal of Retailing*, *54*(4), 49-62.

Etgar, M. (1979). Sources and types of intrachannel conflict. *Journal of Retailing*, *55*(1), 61-78.

Fock, H.K.Y. and Woo, K.S. (1998). The China market: Strategic implications of *guanxi*. *Business Strategy Review*, *9*(3), 33-43.

Frazier, G.L., & Summers, J. (1984). Interfirm influence strategies and their application within distribution channels. *Journal of Marketing, 48*(3), 43-55.

Frazier, G.L., & Summers, J. (1986). Perceptions of interfirm power and its use within distribution channels. *Journal of Marketing Research*, *23*(May), 169-179.

Frazier, G. L., Gill, J. D., & Kale, S. H. (1989). Dealer dependence levels and reciprocal actions in a channel of distribution in a developing country. *Journal of Marketing, 53*(1), 50-69.

Frazier, G. L., & Rody, R. C. (1991). The use of influence strategies in the interfirm relationships in industrial product channels. *Journal of Marketing, 55*(1), 52-69.

Garver, M.S., & Mentzer, J.T. (1999). Logistics research methods: Employing structural equation modeling to test for construct validity. *Journal of Business Logistics, 20*(1), 33-57.

Gaski, J.F. (1984). The theory of power and conflict in channels of distribution. *Journal of Marketing, 48*(2), 9-29.

Gaski, J.F. (1986). Interrelations among a channel entity's power sources: Impact of the exercise of reward and coercion on expert, referent, and legitimate power sources. *Journal of Marketing Research, 23*(1), 62-77.

Gaski, J.F. (1988). Distribution channels: A validation study. *International Journal of Physical Distribution & Materials Management, 18*(5), 16-33.

Gaski, J.F., & Nevin, J.R. (1985). The differential effects of exercised and unexercised power sources in a marketing channel. *Journal of Marketing Research, 22*(2), 130-142.

Gassenheimer, J.B., Sterling, J.U., & Robicheaux, R.A. (1996). Long-term channel member relationships. *International Journal of Physical Distribution & Logistics Management, 26*(5), 94-116.

Gold, T., Guthries, D., & Wank, D. (2002). *Social Connections in China*. Cambridge: Cambridge University Press.

Goldman, A., & Zhao, Q. (1998). Intermediate supermarkets in China: Origins, evolution and prospects. *Journal of Marketing Channels, 6*(3/4), 87-108.

Gundlach, G.T., & Cadotte, E.R. (1994). Exchange interdependence and interfirm interaction: Research in a simulated channel setting. *Journal of Marketing Research, 31*(3), 516-532.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis with Readings* (5th Eds.), New Jersey: Prentice-Hall, Inc.

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-related Values*. California: Sage.

Hunt, S., & Nevin, J. (1974). Power in a channel of distribution: Sources and consequences. Journal of Marketing Research, *11*(2), 186-193.

Hwang, K.K. (1987, January). Face and favor: The Chinese power game. *American Journal of Sociology, 92*, 944-974.

Johnson, J.L., Sakano, T., & Onzo, N. (1990). Behavioral relations in across-culture distribution systems: Influence, control and conflict in U.S.-Japanese marketing channels. *Journal of International Business Studies*, *21* (4), 639-655.

Kale, S. H. (1986). Dealer perceptions of manufacturer power and influence strategies in a developing country. *Journal of Marketing Research, 23*(4), 387-393.

Kale, S. H., & McIntyre, R. P. (1991). Distribution channel relationships in divers cultures. *International Marketing Review, 8*(3), 31-45.

Kim, K. (2000). On interfirm power, channel climate, and solidarity in industrial distributor-supplier dyads. *Journal of the Academy of Marketing Science, 28*(3), 388-405.

Kumar, N., Scheer, L.K., & Steenkamp, J.E.M. (1998). Interdependence, punitive capability, and the reciprocation of punitive actions in channel relationships. *Journal of Marketing Research, 35*(2), 225-235.

Lee, D.Y., & Dawes, P.L. (2005). *Guanxi*, trust, and long-term orientation in Chinese business markets. *Journal of International Marketing, 13*(2), 28-43.

Lee, D.J., Pae, J.H., & Wong, Y.H. (2001). A model of close business relationships in China (guanxi), *European Journal of Marketing*, *35*(1/2), 51-69.

Leung, T.K.P., Lai, K., Chan, R.Y.K., & Wong, Y.H. (2005). The roles of *xinyong* and *guanxi* in Chinese relationship marketing. *European Journal of Marketing, 39*(5/6), 528-565.

Lovett, S., Simmons, L.C., & Kali, R. (1999). *Guanxi* versus the market: Ethics and efficiency. *Journal of International Business Studies, 30*(2), 231-248.

Li, S.M., Park, S.H., & Li, S.H. (2004). The Great leap forward: The transition from relation-based governance to rule-based governance. *Organizational Dynamics, 33*(1), 63-78.

Liu, H., & Wang, Y.P. (1999). Co-ordination of international channel relationships: four case studies in the food industry in China. *Journal of Business & Industrial Marketing, 14*(2), 130-148.

Luo, Y. (1997). Guanxi: Principles, philosophies, and implications. *Human Systems Management, 16*(1), 43-51.

Lusch, R.F. (1976). Channel conflict: Its impact on retailer operating performance. *Journal of Retailing, 52*(2), 3-12.

Magrath, A.J., & Hardy, K.G. (1989). A strategic paradigm for predicting manufacturer-reseller conflict. *European Journal of Marketing, 32*(2), 91-108.

Mehta, R., Larsen, T., & Rosenbloom, B. (1996). The influence of leadership style on co-operation in channels of distribution. *International Journal of Physical Distribution & Logistics Management,* 26(6), 32-59.

Mohr, J., & Nevin, J.R. (1990). Communication strategies in marketing channels: A theoretical perspective. Journal of Marketing, *54*(4), 36-51.

Rawwas, M.Y.A., Vitell, S.J., & Bernes, J.H. (1997). Management of conflict using

individual power sources: A retailers' perspective. *Journal of Business Research, 40*, 9-64.

Rosenbloom, B. (1973). Conflict and channel efficiency: Some conceptual models for the decision maker. *Journal of Marketing, 37*(3), 26-30.

Robicheaux, R.A., & Coleman, J.E. (1994). The structure of marketing channel relationships. *Journal of Academy of Marketing Science, 22*(1), 38-51.

Park, S.H., & Luo, Y. (2001, May). Guanxi and organizational dynamics: Organizational networking in Chinses firms. *Strategic Management Journal, 22*, 455-477.

Schul, P., William P., & Taylor E.L., Jr. (1983). The impact of channel leadership behavior on intrachannel conflict. *Journal of Marketing*, *47* (Summer), 21-34.

Sekaran, U. (1983). Methodological and theoretical issues and advancements in cross-cultural research. *Journal of International Business Studies*, *14* (2), 61-74.

Shamdasani, P., Keh, H.T., & Chan, K.T.S. (2001). The efficacy of power and influence strategies in a conventional channel: a Singapore perspective. *Journal of Business & Industrial Marketing, 16*(1), 21-38.

Sibley S.D., & Michie D.A. (1982). An exploratory investigation of cooperation in a franchise channel. *Journal of Retailing*, (4), 23-45.

Simpson, J.T., & Mayo, D.T. (1997). Relationship management: A call for fewer influence attempts? *Journal of Business Research, 39*(3), 209-218.

Skinner, S.J., Gassenheimer, J.B., & Kelley, S. W. (1992). Cooperation in supplier-dealer relations. *Journal of Retailing, 68*(2), 174-193.

Skinner, S.J., & Guiltinan, J.P. (1985). Perceptions of channel control. *Journal of Retailing, 61*(4), 65-88.

Su, C.T., Yang Z.L., Zhuang, G.J., Zhou N. & Dou W.Y. (2008). Interpersonal influence as an alternative channel communication behavior in emerging markets: The case of China. Journal of International Business Studies, Forthcoming.

Tung, R.L., & Yeuang, I.Y.M. (1996). Achieving business success in Confucian societies: the importance of guanxi (connections). *Organizational Dynamics, 25*(2), 54-65.

Wong, Y.H., & Tam, J. L.M. (2000). Mapping relationships in China: *Guanxi* dynamic approach. *Journal of Business & Industrial Marketing, 15*(1), 57-67.

Yang, G.S. (1992). Chinese social orientation: A perspective of social interaction. In G. S. Yang (Eds), *Chinese Psychology and Behaviors* (pp. 87-142), Taipei: Guiguang Publishing Co. Ltd., (In Chinese).

Yang, C.F. (2000). Psychocultural foundations of informal groups: The issues of loyalty, sincerity, and trust. In L. Dittmer, H. Fukui, & P.N.S. Lee (Eds.), *Informal Politics in East Asia* (pp. 85-105), New York: Cambridge University Press.

Zhuang, G.J., Herndon, N.C., & Zhou, N. (2003). The transforming structure of competition in China's retail industry. *Journal of Marketing Channels, 11*(1), 25-51.

Zhuang, G.J., & Xi, Y.M. (2003). An inquiry on the psycho-culture basis of relationship marketing in China. *Management World*, (10), 98-109, (in Chinese).

Zhuang, G.J., & Zhou, N. (2004). The Relationship between power and dependence in marketing channels: A Chinese perspective. *European Journal of Marketing, 38*(5/6), 675-693.

Appendix

Instrument A: Retailer's power (Gaski & Nevin 1985; Gaski 1988)

Please indicate your response to each of the following items by checking: 1 = not at all, 2 = slightly, 3 = moderately, and 4 = as much as they (or we) wanted.

P1   If a retailer wanted your company to lower the prices you charge for your products, what is the maximum amount you would lower your prices?

P2   If a retailer wanted your company to increase the output of one of your products, what is the maximum amount you would increase your output?

P3   If a retailer wanted your company to decrease the output of one of your products, what is the maximum amount you would decrease your output?

P4   If a retailer wanted your company to change the type of advertising and sales promotion you do with your products, what is the maximum amount you would change?

P5   If a retailer wanted your company to change your customer service policy, what is the maximum amount you would change?

P6   If a retailer wanted your company to change your credit policy towards them, what is the maximum amount you would change?

P7   If a retailer wanted your company to change your warranty policy for your products, what is the maximum amount you would change?

P8   If a retailer wanted your company to change the composition of your product line, what is the maximum amount you would change?

Instrument B: Exercised power (Gaski & Nevin 1985; Rawwas, *et. al.* 1997)

Please check the appropriate number to indicate how often a retailer takes each of the following actions in their dealings with your company in order to change your company's actions or decisions: 1 = never, 2 = seldom, 3 = sometimes, 4 = often, and 5 = always.

EP1   Refuse or threaten to refuse to order from your company

EP2   Require your company to cut prices

EP3   Take legal action against your company

EP4   Delay payment

EP5   Decrease or threaten to decrease the order quantity as a penalty

EP6   Delay the order as a penalty

EP7   Withdraw some support

EP8   Help with store displays

EP9   Provide market or sales information

EP10   Provide innovative new product ideas

EP11   Inform your company about competitors' products

EP12   Have a special promotion for your products

EP13   Increase display space for your products

EP14   Provide your company with professional judgment

EP15   Provide your company with useful advice

EP16   Convince your company that they know the market better

EP17   Do things to make us like them

EP18   Work hard to make your company respect their image

EP19   Behave in such a way that they meet our approval

EP20   Refer to their experience in the retail industry

Instrument C: Conflict (Brown & Day, 1981)

Please indicate the intensity of the disagreements between your company and a retailer over each of the following items: 1 = does not exist; 2 = exists, but not intense; 3 = intense; 4 = very intense; and 5 = extremely intense.

CF1   Advertising

CF2   Product display in store and shelf space

CF3   Warranty services

CF4   Product ordering and delivery

CF5   After sales services

CF6   Quality of products

CF7   Product inventory

CF8   Trust policy

Instrument D: Cooperation (Skinner, *et. al.* 1992)

Please indicate how strongly you agree or disagree with the following statements: 1 = strongly disagree, 2 = disagree, 3 = no opinion, 4 = agree, and 5 = strong agree.

CP1   Our future goals are best reached by working with a retailer rather than against it.

CP2   Our future profits are dependent on maintaining a good working relationship with

retailers.

CP3　I think that if we contribute to improve the retailer's performance in the future, they will take care of us.

CP4　Overall, the future of our relationship with a retailer promises to be beneficial to both of us.

CP5　I believe a retailer recognizes the effort we put into selling our products and supports us for it.

CP6　I believe that if a retailer achieves its competitive goals, we will be in a better position to compete with our competitors.

CP7　Our co-operation with the named retailer is successful.

Table 1

The Guanxi Scale and its Reliability

Item	Factor	
	GX$_{ACT}$	GX$_{EMO}$
G1 There is a working relationship between us, and no personal emotions or motivations are involved. #*	-.121	.264
G2 We frequently meet in activities such as having dinner or participate in some social activities.	.674	.075
G3 He (they) often look(s) after me in doing business.	.646	-.076
G4 I would not forget him (them) at festival events, and always present him (them) with something valuable.	.663	-.152
G5 He (they) will not forget me either at festival events, and will always present me with something valuable.	.715	-.123
G6 I think that we are in the same circle.	.581	-.103
G7 Our relationship has lasted for a long period of time.	.586	.063
G8 If not for my company, I would rather not have a connection with him (them).#	-.014	.884
G9 I believe that if he (they) did not want something from our company, he (they) would rather not have a connection with me.#	.091	.872
Cronbach's α or Pearson correlation	.723	0.595[a]
% of Variance	31.765	18.607

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

  # Reversely coded; * Dropped from the analysis after validating the measures; [a] Pearson correlation.

Table 2
Validation of the measures: Standardized regression weights [a]

Composite and item	Construct							
	GX_{ACT}	GX_{EMO}	PW	ECPW	ENPW	CONF	COOP	REPtime
GX1 (G2, 7)	0.626							
GX2 (G3, 5)	0.816							
GX3 (G4, 6)	0.587							
G8		0.795						
G9		0.584						
PW1 (P1, 2, 4)			0.767					
PW2 (P3, 5, 6)			0.636					
PW3 (P7, 8)			0.631					
ECP1 (EP1, 2, 4)				0.789				
ECP2 (EP5, 6)				0.707				
ECP3 (EP3, 7)				0.744				
ENP1 (EP8, 9, 15, 17)					0.823			
ENP2 (EP12, 13, 18)					0.770			
ENP3 (EP10, 14, 19)					0.761			
ENP4 (EP11, 16, 20)					0.768			
CFF1 (CF1, 2, 7)						0.912		
CFF2 (CF3, 4)						0.877		
CFF3 (CF5, 6)						0.808		
CPP1 (CP3, 4, 7)							0.731	
CPP2 (CP2, 6, 8)							0.832	
CPP3 (CP1, 5)							0.692	
REPtime								n.a.
Reliability	0.726	n.a.	0.720	0.791	0.862	0.900	0.796	n.a.
Construct								
GX_{ACT}	1.000							
GX_{EMO}	-0.092	1.000						
PW	0.159	0.049	1.000					
ECPW	0.195*	-0.379*	-0.278*	1.000				
ENPW	0.192	0.154*	0.315*	0.005	1.000			
CONF	0.072	-0.440*	-0.203*	0.703*	0.076	1.000		
COOP	0.035	0.193*	0.108	-0.515*	0.400*	-0.430*	1.000	
REPtime	-0.168*	-0.023	0.039	0.158*	0.256*	0.104	0.093	1.000

NOTES: a) For the measurement model, $\chi^2 = 260.610$, df = 179, CMINDF =1.456, $p = 0.000$; GFI = 0.906, IFI=0.959, TLI= 0.945, CPI=0.958, RMSEA = 0.045. b) All the standardized regression weights in this segment are significant at $p = 0.01$. c) *$p<0.05$. d) n.a. means not appropriate.

Table 3

The Results of Structural Equation Modeling (AMOS): Standardized Effects

Endogenous variable	Exogenous variable							R^2
	REPtime	PW	GX_{EMO}	GX_{ACT}	ENPW	ECPW	CONF	
Direct effect								
ENPW	0.293*	0.258*	0.175*	0.219*	0.000	0.000	0.000	0.185
ECPW	0.176*	-0.279*	-0.329*	0.227*	0.000	0.000	0.000	0.256
CONF	0.000	0.000	-0.200*	-0.184*	0.100	0.649*	0.000	0.534
COOP	0.000	0.000	-0.062	0.043	0.410*	-0.362*	-0.228*	0.432
Total effect								
ENPW	0.293	0.258	0.175	0.219	0.000	0.000	0.000	0.185
ECPW	0.176	-0.279	-0.329	0.227	0.000	0.000	0.000	0.256
CONF	0.143	-0.155	-0.406	0.085	0.100	0.649	0.000	0.534
COOP	0.024	0.242	0.180	0.032	0.387	-0.509	-0.228	0.432

Not: For the structural model, χ^2 = 281.881, df = 190, CMINDF =1.484, p = 0.000; GFI = 0.901, IFI=0.955, TLI= 0.944, CPI=0.954, RMSEA = 0.046.

Table 4
The results of Hierarchical Regression Analysis: Standardized Coefficients

Model	Independent variable							F	Ad-R^2
	REPtime	PW	GX_{EMO}	GX_{ACT}	ENPW	ECPW	CONF		
COOP1	.087	.072	.155*	057				2.879*	.024
COOP2	.008	.002	.128*	.012	.321*			6.525*	.109[b]
COOP3	.078	-.099	.023	.082	.329*	-.440*		15.088*	.273[b]
COOP4	.075	-.112	-.015	.075	.351*	-.317*	-.226*	14.908*	.302 [b]

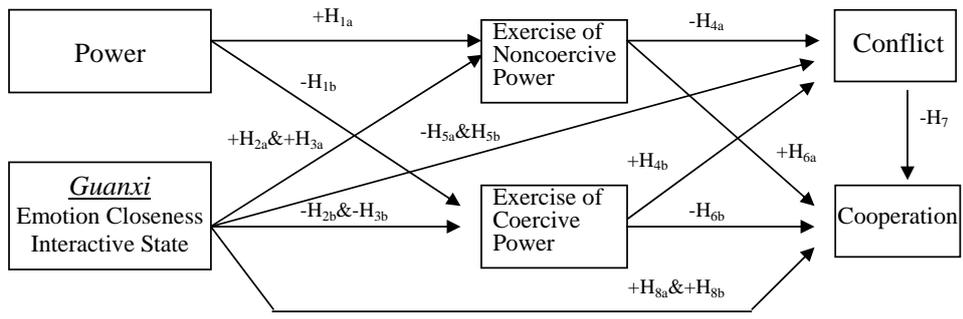Notes: a) * $p < .05$.   b) In the hierarchical regression analysis, the R^2 or F value of the model improved significantly compared with that at $p < .05$.

Figure 1 The Research Framework