The Measurement of Guanxi: Introducing the GRX Scale

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Industrial Marketing Management: Special Issue ‘Business Marketing in the BRICs’
First submitted May, 2009; Revised and submitted Oct 2009; Revised and re-submitted Jan 2010.

Abstract

This study posits and examines a measurement scale for measuring guanxi based on three Chinese relational constructs – ganqing, renqing and xinren. Focusing on Anglo-Chinese buyer-seller relationships, the research reports the findings from six qualitative in-depth interviews and survey data obtained from over 200 Taiwanese trading companies. Based on exploratory and confirmatory factor analyses the findings from the final second-order confirmatory factor analysis of the guanxi model identified 11 items for measuring ganqing, renqing, xinren and guanxi respectively. The results offer a useful starting point in order for business practitioners to assess their guanxi and at the same time provide academics with a scale for operationalizing the measurement of guanxi.

Keywords: guanxi, ganqing, renqing, xinren, relationship quality, China, Taiwan, scale development.

1. Introduction

In recent years, much attention has been directed towards the emerging economies of the world, particularly the BRIC countries as the four largest developing markets. Incidentally,
BRIC is neither a political group nor an economic community, but a term or acronym used to refer to the fast growing economies of Brazil, Russia, India, and China (Peng, 2009). According to Goldman Sachs, the combined economies of the BRIC countries could soon overtake the current richest countries of the world if this upward spiraling trend continues (Wilson and Purushothaman, 2003). Given that the typical motives for investors to enter foreign markets are to seek new markets, improve their efficiency and acquire resources (Dunning, 1981), the BRIC countries are rapidly becoming attractive markets for international companies due to their huge market size (45% of the world’s overall population), fast emerging consumer demand and spending power (Roodman 2007; Bird and Cahoy, 2007).

Whilst a cross-cultural comparison based on Hofstede’s (2001) five dimensions suggests that the four BRIC countries share certain values, they also differ in other cultural aspects. For instance, when compared to the U.S. and the world average, the BRIC countries score high on Power Distance and Long Term Orientation but low on Individuality. However, the Uncertainty Avoidance scores for Brazil and Russia are much higher on average than for India and China which appear much lower than average.

A significant feature is the Long Term Orientation scores, for which China is extremely higher than the world average as well as the other BRIC countries. This reflects the unique business philosophy that is rooted in traditional Chinese culture which emphasizes the long term nature, and is often rooted in exclusive business networks or guanxi ties. Given culture is the ‘collective programming of the mind’ which distinguishes the people of one country to another (Hofstede 2001), a close examination of country-specific culture and core values is imperative for understanding business practice. International firms doing business with the BRIC countries therefore need to understand and manage distinctive business cultures in each country.
The notion of *guanxi* has also been compared to the development of business relationships in other cultures. Usunier (2000) suggests that *guanxi* corresponds with *Kankei* in Japan and *Kwankye* in Korea, as each has a social element that is important for leveraging business. More specifically, Alston (1989) analyzed the business principles in Japan, Korea and China and discussed the similarities and differences amongst Japanese *wa* (group harmony and social cohesion), Korean *inhwa* (harmony based on respect of hierarchal relationships) and Chinese *guanxi*. Michailvoa and Worm (2003) meanwhile studied the concept of personal networks in Russia (*blat*) and China (*guanxi*) and found that whilst the two shared some similarities during the command economy period, they have experienced increasing differentiation since.

An increasing amount of the literature has however tended to compare the practice of *guanxi* with relational concepts developed in the West (Yau et al. 2000; Lee, Pae and Wong, 2001). Mavondo and Rodrigo (2001) for example suggested that the relational concept is not unique to the Western literature and has long since been recognized in China. Pearce and Robinson (2000) did conclude however, that the way business is conducted in China and the West strikingly differs. They emphasize that relationships may be jeopardized if attention is not given to cultural preferences and understanding the role of *guanxi*.

Several scholars have argued that such differences associated with the nuances of how business is undertaken stems from their contrasting legal systems (Arias, 1998; Wong and Chan, 1999). For example, in Western societies, such systems are highly developed and governed through written contracts, whereas the Chinese have historically tended to rely more on the development of practical relationships, with less emphasis on written contractual forms (Yen, Yu and Barnes 2007). In brief, the focus of the West, based on individualism and the legislative obsession for the rights of individuals is contrary to that of Chinese societies (Trimarchi and Tamaschke, 2004).
As such, this manuscript focuses particularly on business in a Chinese context by exploring further the notion of Chinese *guanxi*. Since the 1980s, the topic of Chinese *guanxi* has received significant attention and various conceptual papers and empirical research studies have been undertaken to explore and explain the influence of *guanxi* (meaning ‘relationship’ and ‘connections’ in the Chinese context) in business relationships, Chinese entrepreneurship and the Chinese economy (Ambler, 1995; Dunfee and Warren, 2001; Jacobs, 1979; Hwang, 1987; Luo, 1997a).

More recent studies have also gone beyond the single-dimensional concept of *guanxi* by exploring the individual relational constructs (e.g., *renqing*, *ganqing*, and *xinren* or *xinyong*) that together measure the quality of *guanxi* (Kipnis, 1997; Chen and Chen, 2004; Wang 2007; Wang, Siu and Barnes 2008). However, much of the research in this area tends to be conceptual, which requires further empirical testing. In an attempt to capture the quality of *guanxi*, several academics have thus used Western constructs to evaluate or explain relationships with Chinese counterparts (Wong, 1998; Mavondo and Rodrigo, 2001).

However, given that quite different mechanisms exist between *guanxi* in a Chinese cultural context and relationship marketing in Western societies (Wang 2007; Wang, Siu and Barnes 2008), questions have been raised regarding the suitability of employing Western constructs when measuring relationships with Chinese counterparts (Tsang, 1998; Ambler and Stlyes, 2000). Due to this lack of valid measurement scales that can be used for empirical investigation on the relationships between *guanxi* and other related variables, Lee and Dawes (2005) thus highlights the need to develop indigenous measures from the Chinese cultural perspective.

This research seeks to fill these empirical gaps and is based on data obtained from a sample of over 200 trading firms in the Republic of China. It aims to develop and validate a
measurement scale of guanxi using the key constructs of ganqing, renqing and xinren in the Chinese context. In particular, the research objectives of this study are twofold:

(1) To develop and verify a measurement scale for ganqing, renqing and xinren.

(2) To assess the multi-dimensionality of guanxi in Anglo-Chinese business relationships.

Given the lack of existing literature and the somewhat exploratory nature of developing a guanxi measurement scale, this research makes an initial effort to develop and validate a multi-dimensional instrument from a Chinese cultural perspective. This is in response to the call for further research from Tsang (1998), Ambler and Styles (2000) and Lee and Dawes (2005). In the following section, we first present an overview of the guanxi concept and these three interrelated constructs. We then report our findings for developing and validating the measurement scales of ganqing, renqing and xinren, as dimensions of guanxi. Finally, we discuss our research contributions, implications and future research directions.

2. Conceptual Background

The notion of guanxi has been deeply rooted in Chinese tradition for thousands of years. It is renowned as a concept which is embedded in Confucian social theory and has its own logic in forming and constituting the social structure of Chinese society (Luo, 2001; Zhou et al., 2007). In the Modern Chinese Dictionary (1998), guanxi was defined as: (1) connections of a certain nature between two people or two parties, (2) a state of mutual functions and mutual impacts among things and (3) links or involvement.

Despite the explanations provided by dictionaries, guanxi cannot be easily defined in just a few words or in one sentence, since it is a cultural phenomenon that consists of different elements (Dunfee and Warren, 2001). This explains why in the extant literature, most
academics tend to define *guanxi* in slightly different ways. For example, Yeung and Tung (1996, p.54) refer to *guanxi* as forming a ‘Tight, close-knit network’; while Davies (1995) considers *guanxi* as continual social interactions within the network place where its members cultivate repetitively. Moreover, Luo (1997a) describes the concept of *guanxi* with more focus on its material obligations and its influence on Chinese networks. He comments:

“*guanxi refers to the concept of drawing on connections in order to secure favors in personal relations. It is an intricate and pervasive relational network which Chinese cultivate energetically, subtly, and imaginatively*” (Luo, 1997a, p.44).

In the business context, *guanxi* encompasses the use of close friends and associates, a network of intermediaries in assisting with general business activities (Bruun, 1993; Yeung and Tung, 1996). Socializing is widely used for the purpose of developing and nurturing mutual trust and affection between business partners so that relationships can evolve over the long-term (Standifird and Marshall, 2000; Wong and Leung, 2001; Armstrong and Yee, 2001). Developing *guanxi* with government officials may also be important, as it can help bypass and overcome legal and administrative hurdles or act as a mechanism to protect one’s business against unforeseen risks (Ambler, 1995; Lovett et al., 1999; Dunfee and Warren, 2001).

In Chinese influenced societies there are many different forms of *guanxi*. Whilst some may have a positive bearing on business performance and economic efficiency, others may help an individual company to secure its position in the market - but damage institutional processes. A ‘dark side’ to *guanxi* therefore also exists which questions the ethical concerns associated with conducting business in this manner. As with strategies, it is a business’s responsibility to evaluate the ethicality and impact of its moves. *Guanxi* should not be used as a strategy to change or break the rules of business, instead, it should be considered only as an alternative to smooth the progress of business within legal boundaries (Chen, 2001). Thus,
despite being part of guanxi practice, the back-door policy is not encouraged for Western firms due to the negative effects that it might cause (Dunfee and Warren, 2001).

3. Guanxi and its Dimensions

Recognizing the significant impact of guanxi and its influence on every day dealings in Chinese business society, it is important for Western firms to identify how strong their guanxi is, or specifically how to measure the quality of guanxi between the firm and its Chinese counterpart, as bad guanxi is never considered advantageous (Lee and Xu, 2001). The extant literature indicates that the guanxi concept has been discussed in terms of three closely related constructs, ganqing, renqing and xinren (Hwang 1987; Jacob, 1979; Wang 2007) and these three constructs collectively are considered to reflect the quality of guanxi (Kipnis 1997). As such, we construe these three items as individual dimensions of guanxi and thus develop a multi-dimensional measure in this study.

3.1 Ganqing

Ganqing can be translated into English as ‘feelings’ and it implies affection, sentiment and emotion. Ganqing reflects the tenor of a social relationship between two people or two organizations, as well as an emotional attachment that exists among parties of a network (Wang, 2007). Chen and Chen (2004) explain:

“Ganqing refers to the degree of emotional understanding, connections and the sharing of feelings of happiness and fears alike. Additionally, it refers to a sense of loyalty and solidarity, the willingness to take care of each other under all circumstances.” (p.315).

Similar to feelings, people can have good or bad ganqing towards others. It tends to build following social interactions and it is most likely to occur when people work together, co-operate and are good to each other (Jacob, 1979). In Chinese, ganqing is a phrase that is
often used to describe the quality of a relationship between two parties. For example: ‘you ganqing’ – literally translates as ‘have ganqing’ and implies that there are some feelings and a bond between two parties. ‘Ganqing hao’ means ‘good ganqing’ and suggests there are good and positive feelings between the exchange parties. ‘Ganqing shen’ translates as ‘deep ganqing’ i.e. there is a considerable amount of emotional attachment and is usually used to describe a particular social relationship that has been established over a long period of time (Chen and Chen, 2004).

In addition, ganqing is often used to describe the feelings between different types of guanxi dyads (Kipnis, 1997). For example, when it is used in a family context, good ganqing refers to good family bonds. When it is used among friends and people with equal status, good ganqing refers to good friendship. Likewise, when two colleagues speak of having good ganqing, it means that the two people have developed a good rapport at work. Moreover, when the phrase ‘deep ganqing’ is used between couples, it implies that their love for each other is strong.

Similar to guanxi, the easiest way to improve ganqing is through social interactions i.e. wining and dining together, visiting and participating in one’s events (Seligman, 1999; Lee and Xu, 2001). By undertaking social activities together, there is an opportunity to better nurture ganqing and reinforce guanxi - assuming that both parties have enjoyed the occasion. This explains the association between guanxi and ganqing (Kipnis, 1997). The better the ganqing, the better and closer the guanxi – and vice versa. In short, the interdependence between ganqing and guanxi has created a mutual impact on each attribute and this explains why ganqing is often used as an indicator of how close guanxi is between two parties (Kipnis, 1997).

In business relationships, the concept of ganqing is linked to social bonding (Mavondo and Rodrigo, 2001). According to Wilson (1995), social bonding represents a degree of
mutual personal friendship and liking shared by the buyer and seller. This definition highlights some of the similarities between the two, as they are both used to describe the degree of feelings i.e. personal friendship and affection between two parties. In addition, because social bonding recognizes the influence of personal relations on business relationships (Mavondo and Rodrigo, 2001), it has again demonstrated some form of affective element between the two exchange parties.

In summary, ganqing refers to the emotional side of guanxi (Chen and Chen, 2004). In line with guanxi, ganqing can be established and improved through social interactions (Kipnis, 1997). Because ganqing is strongly associated with guanxi, it is often used as an indicator of guanxi. However, despite such interdependence and mutuality, ganqing can not be taken as the sole element of guanxi - as guanxi is much broader than emotional ties, but also includes other important attributes such as material obligations and the exchange of favors among others (Jacobs, 1979).

3.2 Renqing

In Chinese-English dictionaries, renqing is usually translated as (1) sensibility, human sympathy and human kindness, (2) favor, favoritism and (3) a gift (Eye, 2007). However, in practice, renqing often incorporates humanized obligation such as gift or favor (Kipnis, 1997). It is often used as:

“The special treatment of an individual, the allocation of resources to another party as a ‘gift’ in the process of a market transaction, to tighten up the bonds between parties” (Wong and Leung, 2001, p.13).

Renqing in the Chinese context is very similar to the owing of a ‘favor’ in an English context (Wong and Leung, 2001). It can both be given and received as a transaction (Wang, 2007). Renqing reflects reciprocity, which is emphasized in the Confucian philosophy (Chan, 1963; Fang, 1999). According to Jacobs (1979), renqing and ganqing are complimentary. The
methods of materializing positive *ganqin*, such as gift giving, wining and dining and practicing ritualized decorum are also used as ways of exchanging *renqing*.

The giving and receiving of *renqing* is like practicing an intricate art in Chinese. It has to follow the rule of reciprocity, as stated in the ancient Chinese proverb: if one receives a drop of beneficence from other people, one should return to them a fountain of beneficence (Hwang, 1987). People who share *guanxi* in business are especially bonded by this social obligation of reciprocity. For example, if an exchange party receives a favor, he or she owes *renqing* to the benefactor and should be ready to pay back in the future once circumstances permit. In order to secure healthy *guanxi*, a high value is placed on the obligation of reciprocation by the Chinese (Wang, 2007). However, the practice of *renqing* does not require an immediate return (Hwang, 1987). Ambler (1995) states:

“*Favors are banked, to be repaid when the time is right, if ever. There is no hurry to use up the guanxi; like insurance, one hopes not to need it, but its existence is reassuring*” (p.28).

For instance, the receiver is not expected to rush into returning the owed favor to the benefactor. He or she should store the favor for as long as it takes and return it at the right time, when the other party needs it. This is reflected in another Chinese proverb: ‘it is better to provide a poor person with coal on a snowy day than give flowers to the rich’, this is similar to the English phrase – ‘a friend in need is a friend indeed’. Hence, a gift that is needed is more valuable than a superfluous one. Additionally, the repayment value of the favor should be at least of equal value if not greater than that of the original gratitude (Kipnis, 1997).

Non-repayment is regarded as immoral (Luo, 2001). Such rejection can hurt the original benefactor’s feelings as well as make the person lose face (*mianzi* or *lien*). Face implies one’s respect, status and moral reputation in Chinese society (Wong and Leung, 2001) and it is also a form of self-image in terms of approved social status (Hwang, 1987). Causing a Chinese
person to lose face is like physically attacking him or her. Therefore, it will leave a negative impact on guanxi and result in an obvious damage to the long-term relationship (MacInnis, 1993).

However, and despite this, renqing may still not always be returned in some circumstances, particularly if one party decides to break the reciprocal rule (Luo, 2001). It usually occurs when one party has lost interest in maintaining the guanxi, and so he or she decides not to return the favor which is requested by the other. Such twisting of the reciprocal rule was often exercised in the past by Chinese politicians as a way of displaying the power change and to show their new status (Guo, 2001). Bruun (1993) comments:

“The ability to grant favors is associated with power, and prestige can be drawn from it” (p.232).

Therefore, when a person deliberately refuses to return a favor that is owed, the person is terminating the guanxi purposely. They are making an implicit statement that they are currently in a powerful position so that they do not require the benefits of maintaining such guanxi with the original benefactor any more. In Chinese, such behavior is highly criticized as it is against not only the reciprocal rule, but is also contrary to the feeling and empathy aspect of renqing, which reflects on the ability to see a situation from the other person’s perspective (Wang, 2007). Hwang (1987) suggested that a person who is versed in renqing is well equipped with empathy. In particular, a person is viewed to possess renqing if they have empathy towards other’s emotions and feelings, and are ready to help those that are in need.

As a result, when a desperate request is turned down, it is the most unforgivable thing that one can do to the original benefactor in order to damage guanxi. In conclusion, renqing consists of two parts – reciprocity and empathy and is practiced through the exchange of favors (Hwang, 1987; Luo, 2001). The greater the exchange of favors there is, the closer the two parties are knitted together. This explains why renqing follows the strict rule of
reciprocity on a long-term basis, because without the norm of reciprocity, *guanxi* is no longer an advantage in the interpersonal game.

### 3.3 Xinren

*Xinren* is a Chinese word relating to trust (Chen and Chen, 2004). It is mostly used as a verb and is translated as: to trust in, to believe in, to confide in, to have confidence (or faith) in, to put stock in, to rely on, to place (or put) dependence on and to give credit to (Eye, 2007). Sometimes it is also used as a noun i.e. there is *xinren* in this *guanxi*, which means that there is trust, reliance, credence, belief and dependence existing in this relationship. Nevertheless, and similar to *guanxi*, *xinren* takes time to build. In a *guanxi* network of businesses, *xinren* is gradually developed among members of the network, through repeating activities of favor-exchanges (Wong and Chan, 1999). In addition, *xinren* is often linked with another word *‘xinyong’* which implies the trustworthiness of a person and consists of a person’s reliability and sincerity (Chen and Chen, 2004). In Chinese, one would only have *xinren* with the other party, in so far as the other party is evaluated as having good *xinyong* (credibility). It literally says that one should only trust a person who is trustworthy.

In addition, the way Chinese judge the trustworthiness of a person is by evaluating the extent to which one keeps his/ her’s promises based on past history and reputation (Wong, 1998). When transferring the idea into a business context, it is the Chinese business people’s belief that trust should be a central mechanism and lubricant in complex business networks. Menkhoff (1993) comments:

“To be trusted by others and to maintain one’s trustworthiness are frequent explanations for success in business affairs and the continuation of commercial relations” (p. 44).
The exceptional emphasis on trust among the Chinese comes from their environmental uncertainties (Tsang, 1998). In countries where business standards and legal regulations are not fully exercised, trust consequently plays a significant role. It helps facilitate a smoother and more efficient transaction as well as eliminating opportunistic behavior and risk (Wong and Leung, 2001). In short, trust limits the possibility of opportunistic behavior in a business environment that lacks strict enforcement of the law (Luo, 2001) and becomes an asset which is greatly valued among the Chinese (Standifird and Marshall, 2000).

In addition to ganqing and renqing, xinren is posited here as one of the most important components of guanxi and a key constituent of any successful partnership (Tsang, 1998). According to Chen and Chen (2004), trust underlines the differentiated order of one’s guanxi network: the higher the level of trust between two parties, the better the guanxi will be. Armstrong and Yee (2001) found that trust can significantly enhance buyer-seller relationships among Chinese businesspeople. This is because trust is treated as of fundamental importance by the Chinese and it is required at the initial stage of any business relationship. Therefore, mutual trust must be established first before any transactions can take place (Arregle et al., 2000).

Bearing this in mind, when dealing with the Chinese, foreign firms should consider trust to be an utmost priority in their business relations, because if there is no trust, the formalized contract is meaningless (Ambler, 1995). In fact, for the Chinese, a formal contract is more likely to be drawn up at a later stage after some degree of mutual trust has been established. In comparison, this differs from the Western view that a contract should ideally be finalized before any formal cooperation or joint venture is undertaken (Wong and Chan, 1999). Xinren therefore represents one of the most highly respected elements in Chinese business relationships, as it helps to smooth transactions and prevent risks in an environment where legal regulations have historically not tended to be fully exercised.
4. Research Methodology

In order to achieve the research objective, a two-stage combined research approach was employed. This included a preliminary study where in-depth interviews were conducted to collect qualitative data to initially help develop the measurement scales. Second, a questionnaire based survey was administered to validate the proposed measurement scales and provide quantitative findings. The research was undertaken in Taiwan, which is the world’s 19th largest economy (US Foreign Commercial Service and D.O.S., 2006). With a population of 23 million people, compared with other countries in the region - Taiwan enjoys high levels of per capita GDP, purchasing power parity, and household disposable income, ranking it amongst the highest in Asia and making the country an attractive market. As the 16th largest import market in the world (WTO, 2007b), Taiwan provides an ideal location for the research to explore and validate the guanxi related constructs of ganqing, renqing and xinren in a Chinese context (Lee and Xu, 2001; Phau and Chan, 2003).

4.1 Stage One – In-depth interviews

In order to investigate further and develop the proposed scales for the three Chinese relational constructs, in-depth personal interviews were initially conducted with individuals that held responsibility for purchasing in six trading companies i.e. agents or distributors that sourced products from suppliers of an Anglo-Saxon origin, namely from North America, Great Britain, Ireland, Australia or New Zealand.

Twenty-three companies were initially approached and six agreed to take part in the research at this exploratory stage. As most Taiwanese buyers tend to operate at senior levels in their companies and have extremely busy schedules, the six interviews were pre-arranged
via telephone and e-mail in advance. Confirmatory telephone calls were made both two weeks and two days before each scheduled appointment to remind the participants and to reconfirm the meeting time. Each interview was conducted on site, normally in a board room or company meeting room. Moreover, as the participants were all Taiwanese, a list of key questions were translated into Chinese and faxed or e-mailed through two days in advance. The entire interviews were conducted in Mandarin.

With consent from each of the respondents, each interview was recorded. This provided the opportunity to later analyze the dialogue and avoid unnecessary memory loss of any supplementary information / knowledge (Chisnall, 1997). The confidentiality nature of the research was emphasized at the time of interview so that the participants could feel more at ease and willing to share their opinions freely (Saunders et al., 2003). On average, each interview lasted between 60 and 90 minutes. The six interview recordings were firstly transcribed and later saved as Word files for analyzing using Nud*ist (a commonly used computer-assisted qualitative data analysis software).

In order to further enhance the measures of ganqing, renqing and xinren, respondents were asked to give their opinions regarding the notion of these three constructs individually - and the components that they would use to evaluate such constructs. The findings suggest that respondents consider ganqing to be closely related to the occurrence of social interactions. The more social interactions there are between two parties, the better the ganqing, which includes the feeling of friendship and family. Brotherhood was also frequently mentioned by respondents as a feeling that they possessed towards the other party. For instance, one of the participants stated:

“Some suppliers gave me a brotherhood feeling immediately when we met. I could feel a friendly attitude from them when I shook their hands. During interactions, I can feel how close the guanxi is between us” (Mr. Wang, Company A).
When there is *ganqing* between two parties, people take the other party’s feelings into consideration when making decisions. They are also more likely to help out, if the other party is in trouble. One respondent exemplified:

“My father has a group of old friends who are also the owners of other local companies. Due to good *ganqing*, these companies and our company are like an alliance. When one is in need, all the others would try to help out” (Mr. Chen, Company E).

Interestingly, as most of the items suggested by the respondents for measuring *ganqing* were in-congruence with those items developed by Mavondo and Rodrigo (2001) for measuring the construct of social bonds, their 5-item measurement scale was adapted for evaluating *ganqing* in our survey instrument. These five items measure to what extent the buyer socializes with the supplier’s representative outside work, their ability to talk openly, how close the friendship and relationship are and how much the buyer is concerned about the supplier’s feelings before making any decisions. Nevertheless, bearing in mind that the construct of social bonds is not entirely the same as *ganqing*, two new items adopted from the interview verbatim were added to provide a more comprehensive measure for *ganqing*. These included the feeling of brotherhood and the willingness to help out, if necessary.

The interviews also demonstrated that participants found the notion of *renqing* strongly related to giving and receiving favors. They pointed out that when a favor is received, the return of such favor is expected sometime in the future. Because reciprocity is highly valued among the Chinese, not returning a favor is considered rude and damaging to business relations. For example, one participant commented:

“*Renqing* is like a favor that can be given and returned. It is a way of showing politeness, because not returning *renqing* is generally considered bad-mannered and it damages the guanxi” (Ms. Guo, Company D).

In short, the measures suggested by the respondents were very similar to those used by Mavondo and Rodrigo (2001) for measuring the construct of reciprocity, which is the cardinal
rule of renqing. These measure whether the buyer feels obliged to do a favor for the supplier’s representative, the current extent of favor exchanging in the relationship, and the level of embarrassment and damage if a favor is not returned to the supplier’s representative. Nevertheless, as the notion of renqing is closely bonded by the reciprocity rule, an extra item was therefore used in the instrument for the quantitative research stage which was developed from the interview verbatim to measure the buyer’s willingness to grant a favor in the first place.

In terms of xinren, the in-depth interviews revealed that participants tend to link xinren with being frank, honest and keeping promises. For instance, Mr. Huang in Company B commented:

“Xinren is related to honesty and this means being frank and truthful to each other. It is also important to keep one’s word. Promise is debt. If my supplier does not keep his promise, I will not trust him the next time. I will discount his credibility and not believe the words he says”.

Mr. Wang in Company A also made a similar suggestion:

“In a Chinese way, if I trust you as a friend or a partner, I will never break my words to you. There is no need for a contract, as a piece of paper means very little to our trusting friendship and can not guarantee anything”.

Therefore, when one makes false claims or fails to deliver on his words, he or she will be considered untrustworthy. Some participants felt that xinren is also linked to benevolence, and so it can be easily damaged when the opposite party only shows concern over his or her own needs or benefits by acting selfishly. When considering the meaning of xinren as described by the participants, it is very much in-line with the notion of interpersonal trust. The seven-item measure used by Doney and Cannon (1997) was therefore adopted as an appropriate scale for the xinren construct. These items measure the supplier representative’s frankness, honesty, openness, benevolence, caring, trustworthiness and general trust that the buyer has towards the supplier’s representative.
4.2 Stage Two – Questionnaire Survey

In order to further test and validate the proposed measures, a questionnaire survey was conducted as the main study. In an attempt to collect data from Taiwanese buyers regarding their relationship with Anglo-Saxon suppliers, a database was purchased from the Taiwan External Trade Development Council (TAITRA). In total 15,917 importers from various industries were included on the database. Using the filter function provided by TAITRA, the sample frame was narrowed down to 1286 firms that were registered as undertaking business with Anglo-Saxon suppliers. By definition, the Anglo-Saxon suppliers refer to those suppliers based in the USA, Canada, UK, Ireland, Australia and New Zealand (Bennett, 2004; Mead, 2005).

In order to bolster the response, a pre-survey telephone call was made to each of the firms listed. These not only helped in accessing the firms but were useful for identifying key informants, withdraw ineligible companies that had ceased business dealings with Anglo-Saxon suppliers, and verify the e-mail/postal address of the respondents. Of the 1286 firms approached, 360 expressed an interest and were willing to consider completing the survey. For these 360 firms that agreed to take part in the survey, the pre-survey telephone calls also served to verify an appropriate e-mail address where a link to the on-line survey could be sent. Those respondents who did not feel comfortable in completing the survey on-line were offered a hard copy that was mailed to their company address.

Those who agreed during the telephone calls to take part in this survey on-line, were e-mailed the link to the survey within half an hour. A follow-up phone call was then made the next day to ensure that the participants had received the e-mail and the attached link. Then, two weeks later a second follow up phone call was made to those who had not replied (Cooper and Schindler, 2001). For the respondents who requested a hard copy of the
questionnaire, a paper copy was posted the next day, followed by a phone call a week later to ensure that the participants had received it. A further follow up call functioning as a reminder was made two weeks later to those that had not completed the survey.

The questionnaire included the proposed measurement scales for *ganqing, renqing* and *xinren* using seven-point Likert scales, anchored from 1 strongly disagree to 7 strongly agree. In order to avoid respondent selection bias, respondents were asked to complete the questionnaire based upon a working relationship with their fourth largest Anglo-Saxon supplier in terms of unit purchase volume (Bello and Gilliland, 1997). Out of a total of 360 questionnaires that were sent out, 245 were returned. Thirty-seven questionnaires were largely incomplete and therefore not included in the analysis. This provided a grand total of 208 useable responses, which divided by the number of questionnaires sent out, provided a satisfactory response rate of 57.8% (Dommeyer and Moriarty, 1999).

5. Results and Findings

In order to validate the propose measurement scales for the *guanxi* constructs of interest, the data analysis consisted of two stages. A principle components analysis was initially undertaken, followed by a confirmatory factor analysis. In general, the data presents several characteristics associated with Taiwanese importing firms and their business relationships with Anglo-Saxon exporters. Most of the participating Taiwanese firms (89%) were small in size, having fewer than 100 employees. The majority (73%) of business relationships surveyed tended to be long-term i.e. greater than five years and most were at a mature stage (71%). Almost half (48%) of the participating firms had an exclusive agency / distributor agreement and the majority of business relationships were initiated through the suppliers (65%).
The first PCA was run using the 20 items in the proposed measurement scales of *ganqing*, *renqing* and *xinren*. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. The Kaiser-Meyer-Olkin (KMO) value was 0.87, exceeding the recommended value of 0.6 (Kaiser, 1970, 1974) and the Bartlett’s Test of Sphericity reached statistical significance (*p* < 0.05), in support of the correlation matrix (Pallant, 2005). The analysis revealed four components with eigenvalues greater than 1, explaining 36.35, 18.94, 9.37 and 5.10 percent of the variance respectively.

Whilst this finding does not necessarily advocate three relational constructs, on inspection of the Scree plot, a clear break after the third component suggested the retention of three components (Cattell, 1966). This was further supported via the Monte Carlo parallel analysis, which identified the first three components as all having eigenvalues exceeding the corresponding criterion value, whilst the fourth component failed to surpass (see Table 1). Similar to the result of the Scree plot and also bearing in mind that the first three components explained greater than sixty percent of the variance (Norman and Streiner, 1997), these findings challenge the legitimacy of the fourth component and suggest the retention of three components. It was therefore decided to re-run PCA with a specification of three components using a Varimax rotation to aid in the interpretation of the number of components.

______________________

Insert Table 1 about here

______________________

The rotated component matrix (Table 2) displays the predominant factor loadings for each item on the relevant component in bold. This helps highlight the grouping effect of the items. The interpretation of the three components validates previous assumptions in support of three constructs, with *renqing* items loading strongly on Component 1, *ganqing* items
loading strongly on Component 2 and xinren items loading on Component 3. However, as shown in Table 2, the xinren item ‘this supplier’s representative seems to be concerned with our needs’ signals very low loadings (not higher than 0.24) on each of the three components. This could be because the needs of the buyer are over-emphasized. Instead of measuring xinren it perhaps focuses more on exporters understanding the needs of buyers. Considering the purpose of this analysis i.e. to help enhance the measurement scales for the three constructs, this item was dropped from further analysis in order to purify the component loadings.

Another PCA was then run, using the remaining 19 items to reveal three components with eigenvalues exceeding 1, explaining 38.26, 19.84, and 9.64 percent of the variance. Compared with the previous analysis the total variance increased from 64.66 to 67.74 percent. In addition, the internal reliability of the xinren scale (Cronbach’s alpha value) also increased from 0.78 to 0.84. In short, the PCA helped verify the group effect of the items under the three guanxi constructs.

5.1 GRX Scale 1

In order to achieve objective one and further validate the proposed measurement scales, the ganqing, renqing and xinren items were specified in a measurement model for CFA using AMOS 7.0, in which ganqing was measured by seven items and both renqing and xinren by six items each. This generated an over-identified model, where the number of parameters (190) was less than the number of data points (41). This resulted in 149 positive degrees of freedom, thereby rendering it of scientific use. Taking into account the sample size (208), the overall fit
of the model in the CFA was judged by multiple criteria. These indices include the Chi-squared statistics, the probability value, the comparative fit index (CFI), the goodness-of-fit index (GFI), the incremental fit index (IFI), the Tucker-Lewis index (TLI) and the root mean square error of approximation (RMSEA). The acceptable cut-off points of these indices were based on CFI, GFI, IFI, TLI > 0.90, and RMSEA < 0.08 (Byrne et al., 1989; Hoyle and Panter, 1995; Steenkamp and Baumgartner, 1998; Raju et al., 2002).

The CFA of the 19-item Ganqing-Renqing-Xinren (GRX) measurement model resulted in a significant Satorra-Bentler SCALED Chi-square statistic ($\chi^2 = 603.71$, $p = 0.00$, N = 208, df = 149, CMIN/DF = 4.05) suggesting the fit of the data to the hypothesized model is not entirely adequate (Byrne, 1989). This is also reflected by the values of the model fit indices, as they all failed to meet their criteria. For example, GFI (0.75), CFI (0.84), IFI (0.84) and TLI (0.82) all fell below the cut off. This was also reflected in the RMSEA (0.12), which was greater than 0.1, indicating a great error of approximation (Browne and Cudeck, 1993). In short, the results infer significant room for improvement to further enhance the proposed measurement scales of ganqing, renqing and xinren, as it would be meaningless to test a substantive theoretical model, when the measurement model for the constructs in the structural model does not hold (Jöreskog, 1993).

5.2 GRX Scale 2

According to Cui and Adams (2001), one approach for exploring an improved model is to continue the estimation of the model with the original measure items using the information generated from the analysis and then incrementally modifying the model until a better fit can be achieved. In order to improve the measurement scale, this deduction approach was employed by gradually withdrawing individual items with the lowest estimate coefficient on their posited underlying construct - so that the inter-item consistency and the construct’s
validity could be enhanced. Those items that had lower inter-item correlation and comparative lower loadings on the constructs were therefore withdrawn (Cadogan, 2006; Liu et al., 2008). In short, this elimination process reduced 8 items with low inter-item correlations to leave an overall measurement scale of 11 items in total. This consisted of 4 items for ganqing and renqing and the remaining 3 items for xinren (see Figure 1).

Insert Figure 1 about here

An inspection of the parameter estimates revealed that all the indicators’ estimated coefficients on their posited underlying construct factors were significant. This provides evidence of convergent validity for the measurement model (Anderson and Gerbing, 1988). Discriminant validity of the constructs was also evident by the correlations that were significantly different from unity between each dimension (Bagozzi and Philips, 1982). The $R^2$ values were all at a reasonably high range (0.46 – 0.96) and the Cronbach’s alpha values for ganqing 0.87, renqing 0.88 and xinren 0.91 confirm that the items are internally consistent and represent reliable measures (Nunnally and Bernstein, 1994). This is also confirmed by the value of the Composite Reliability statistics (ganqing 0.79, renqing 0.80 and xinren 0.75), which indicate an acceptable level of reliability for each of the constructs to further ensure the reliability of the measurement model (Fornell and Larcker, 1981; Graham, 2006).

In terms of model fit, the ratio of chi-square to degrees of freedom (2.35) is acceptable, as it is close to 2 (Carmines and McIver, 1981). The type two indices all show favorable results in-excess of 0.9 (CFI 0.96, IFI 0.96, TLI 0.95 and GFI 0.93), whilst at 0.08 the RMSEA also reaches the acceptable cut-off point (Byrne et al., 1989; Steenkamp and
Baumgartner, 1998; Hair et al., 1998; Raju et al., 2002). In short, the findings suggest that the modified GRX 11-item model fits the data well and can be regarded as a useful approximation for the measurement scales.

6. Discussion: Moving Towards a Guanxi Model

Having achieved objective one, we then moved on to objective two, which is to assess the multi-dimensionality of guanxi in Anglo-Chinese business relationships. According to Kipnis (1997), these three constructs of ganqing, renqing and xinren are closely associated with each other and together reflect the quality of guanxi. Therefore, it is assumed that their correlations can be jointly explained by the overall construct of guanxi. With the notion of CFA, the variance common to all measures that reflects meaning at a higher level of abstraction can be captured through the influence of a second-order factor (Cui and Adam, 2001). In this case, the correlations amongst the 11 items of ganqing, renqing and xinren are assumed to be accounted for by a second-order factor i.e. guanxi that is not directly measured by any of the individual measurement items (see Figure 2). The key advantage of applying this second-order guanxi model is that it presents guanxi’s multidimensionality based on these three underlying Chinese relational constructs (Bagozzi, 1994).

____________________
Insert Figure 2 about here
____________________

The model fit statistics show favorable results for all the type two indices (CFI 0.95, IFI 0.95, TLI 0.94 and GFI 0.91). This signals a reasonable fit between the data and the proposed guanxi model. The parameter coefficients for the indicators are similar to those in the GRX model. The squared multiple correlations ($R^2$) for the structural equations (i.e. the relation between the first-order factors and guanxi were substantial (above 0.50) for ganqing
and renqing, but significantly less so (below 0.50) for xinren. Consistent with these, the paths connecting guanxi to ganqing and renqing reveal high loadings (0.88 for ganqing; 0.71 for renqing), whilst the path to xinren reveals a moderately lower loading of 0.21.

6.1 Contribution

Along with globalization, trade between Western and Eastern counterparts is increasingly becoming more important – hence the significance of this research to both academics and particularly Western practitioners to help them understand the concept of guanxi in a Chinese context (Tsang, 1998). Whilst the topic has received significant attention from academics concerning its influence on Chinese business (Luo, 1997a; Dunfee and Warren, 2001; Chen, 2001), research has not tended to empirically develop and validate measurement scales that can be used to evaluate the extent of guanxi between business partners. The research findings have therefore gone some way in helping us to address this void in the literature.

Compared with most research that has tended to be more theoretical or conceptual (i.e. Ambler, 1995; Luo, 1997a; Chen, 2001; Chen and Chen, 2004), this investigation has successfully managed to develop and test scales for measuring the first order constructs of ganqing, renqing and xinren, and the second order construct of guanxi based on empirical data collected from Taiwanese buyers. Considering the unique underlying characteristics of guanxi which are rooted in its high-context culture (Tsang, 1988; Lee and Dawes 2005; Wang, 2007), the validated scales (see Appendix A) are considered useful for future research when measuring the quality of guanxi from a multi-dimensional perspective.

In conclusion, whilst most research in this area has tended to be conceptual or somewhat theoretical in nature, an initial attempt has been made here to advance our understanding of the Chinese notion of guanxi further by developing and validating a guanxi measurement scale in the Chinese perspective. Overall our findings suggest that guanxi
represents a multi-dimensional higher order construct, which provides practitioners with a useful tool for assessing the levels of guanxi with their exchange partners and equally provides academics with a suitable scale for commencing to operationalize its measurement.

6.2 Managerial Implications

The research also has several implications for Western export managers who are keen to develop closer business-to-business relationships with their Chinese partners. First, as the findings of this research reveal the correlations between ganqing, renqing, xinren and guanxi, Western suppliers are advised to focus on these Chinese relationship constructs in order to pursue effective business relations with their Chinese counterparts. In a business relationship, ganqing represents an emotional attachment that is commonly shared between two parties (Wang, 2007). It encompasses the sharing of feelings i.e. happiness and fear, as well as the existence of loyalty, faithfulness and devotion between two parties (Chen and Chen, 2004). In a business context, ganqing between the export representative and the import purchasing manager infers close friendship. In this research, ganqing was proven to have the strongest correlation with guanxi, thus when the buyer develops a strong sense of ganqing towards the exporter, he / she perceives there to be strong guanxi.

In order to nurture better guanxi with Chinese buyers, Western suppliers are recommended to focus on cultivating and enhancing ganqing. The easiest way to do this is through increased social interaction i.e. through making frequent visits and participating in social events together. One participant from the preliminary interviews suggested that an enjoyable social occasion can help business relations:

“I personally prefer taking my suppliers out to a nice restaurant with soothing atmosphere and elegant decoration after our business meetings. I would prefer to have a relatively small group (no more than four people) so that we can all interact with each other and enjoy a good chat. During this time, I will ‘NOT’ talk about our business issues but chat with my suppliers about their families and personal interests in a friendly and relaxing manner. I believe that in this way, the relationship established
between us is more like real friendship than just a business relationship” (Mr. Wang, Company A).

Besides making more of an effort to conduct social interactions, offering help and support i.e. a goodwill gesture is also considered a popular method for improving *gangqing* (Kipnis, 1997). Anglo-Saxon suppliers are therefore encouraged to seek ways in which they can provide assistance and give support where needed. A polite offer to help is likely to go a long way with the Chinese. As outlined earlier, within the Chinese business context, *renqing* consists of both reciprocity and empathy (Hwang, 1987). Following the reciprocal rule, *renqing* is mostly practiced through the constant exchange of favors between parties involved in a business relationship (Luo, 2001; Wong and Leung, 2001). The research concludes that *renqing* also has a strong association with *guanxi*, suggesting that the exchange of favors between two relational parties plays an important role among Chinese buyers. As a result, Western firms are recommended to familiarize themselves with the practice of *renqing* in order to pursue better *guanxi* with their Chinese counterparts. Specifically, firms are advised to practice *renqing* through the exchange of favors as well as gift giving (Kipnis, 1997; Wong, 1998).

The range of gifts can vary from small personal presents e.g. cards, clothes, art objects and theatre tickets, to business-related deals i.e. exclusive representation agreements, efficient service or better credit terms. *Renqing* often follows the rule that the higher the value of the gift, the greater the *renqing*. Therefore, if a greater return is anticipated in the future, then actively providing favors of greater value is mostly encouraged. One participant from the preliminary interviews suggested:

“I do not mind giving a big favor first because I know that by doing so I put the other party in debt. When I need something in return, should I ask for it, then they are obliged to try and help” (Ms. Guo, Company D).
Nevertheless, *renqing* is not just about favors, it also requires empathy (Hwang, 1987). Therefore, Westerners are not encouraged to simply grant favors in an arrogant or condescending manner. Instead, one should provide favors with sympathy and respect to avoid the other party losing ‘face’ and risk damaging the relationship over the long-term (MacInnis, 1993). However, although the exchange of favors is suggested, Western firms should take a considered approach regarding some sensitive issues (Dunfee and Warren, 2001; Su et al., 2003). In particular, caution should be exercised as there is a fine line between gifts with significant financial value and bribery.

*Xinren* is based on interpersonal trust between individuals, rather than at the inter-organizational level between two firms (Chen, 2001). Based on the findings, *xinren* was found to have comparatively less significant correlation with *guanxi*. This may be because although a good level of *xinren* is compulsory as a pre-requisite for relationship development in the Chinese context, once the level of *xinren* has been reached the real quality of on-going *guanxi* may depend more on the level of *ganqing* and *renqing* between two parties.

This does not imply that *xinren* is of less significance, moreover instead of looking at it as a pure *guanxi* enhancing element, it should be treated more as a fundamental factor for establishing *guanxi*. Western suppliers are therefore encouraged to invest their time and effort in developing *xinren* first i.e. focusing on developing *xinren* at the introductory stage of a new relationship. Similar to *guanxi*, because *xinren* can be judged by evaluating the extent to which one keeps his/her promises based on a previous history of dealings (Wong, 1998), Western firms are advised to provide credible business references to enhance their reputation and assure Chinese buyers. Likewise Western firms are advised to honor any promises or agreements that they make during business meetings or social occasions. It does not matter what is promised i.e. from a free football ticket to a significant business deal, there is an
utmost priority to deliver on the promise in full. One participant from the preliminary interviews explained:

“A promise is meaningless unless it is delivered. If a person cannot keep their promise, I will find it very difficult to trust this person or do any business with the firm that he/she represents” (Mr. Huang, Company B).

In short, with the acknowledgment of how Chinese buyers perceive and measure *guanxi* through the likes of *ganqing, renqing* and *xinren*, Western exporters can better equip themselves with knowledge and suitable expectations for doing business with the Chinese. This will not only help them interact with Chinese people in a *guanxi*-enhancing manner, but also provide them with a clear idea about how the Chinese evaluate their business relationships at an interpersonal level (Kipnis, 1997; Yen et al., 2007).

### 6.3 Limitations and Future Research Directions

Although this research has attempted to empirically validate proposed measurement scales for *ganqing, renqing* and *xinren* based on those views among a sample of Taiwanese trading firms, the geographical context of this research is somewhat limited and further research is therefore needed to be undertaken in other Chinese markets. Whilst China itself represents an obvious target, particularly for examining business relationships involving buyers in multinational enterprises and global retailers (Chen, 2001), the nature of the infrastructure surrounding agents, distributors and trading companies is somewhat limited. Despite this, it should be earmarked for future research.

Similarly, a comparison could be drawn in other Chinese-inspired economies, such as Hong-Kong and Singapore. Research findings from these markets would prove appealing, to see whether similarities and differences exist based on the types and nature of the relationships in question. Also, although *guanxi* is deeply embedded in the Chinese culture,
under the influence of globalization, Westernization and free market movements, buyers within the Greater Chinese market may have different views and perceptions regarding how such guanxi attributes should be measured. For example, views from buyers on the Mainland where business laws and regulations are relatively less developed may be significantly different from those views in say Hong Kong. More research is therefore needed to explore this issue in greater depth and specifically in more cities on the Mainland.

Whilst this investigation has focused on understanding guanxi in an industrial marketing context, it would be interesting and insightful to further compare business cultures, especially the business network relationships across other BRIC countries in order to reveal patterns of similarity or differences among such markets. For example, the Indian culture is also collectivist oriented and strongly emphasizes family and relationships. However, what distinguishes India from China is that it is a deeply spiritually inclined country, whereby people tend to be more spiritually conscious and inclined towards religion than in China. Therefore, whilst Chinese business relationships are more dependent on direct person-to-person interaction to cultivate ganqing and renqing (Wang, 2007), the core Indian value revolves around functional interdependence with the universe and having faith in goddess Laxmi by prayer, who can bless you with wealth (Banerjee, 2008).

Compared with the long-term orientation of Chinese business relationships, the Brazilian culture is relatively more short-term oriented, whereby people tend to place enjoyment (emphasizing a comfortable life style, happiness, and pleasure) at the top of their value system, but consider restrictive conformity i.e. a willingness to serve others, as a least important value (Lenartowicz and Roth, 2001). Similarly, when comparing Chinese guanxi networks which emphasize xinyong (reputation based trust) or xinren, ganqing and renqing (Wang, Siu and Barnes, 2008), Russian firms often do not recognize trust as a mechanism for the governance of exchange in business relationships due to suspicion or an expectation of
being cheated (Jansson, Johanson and Ramstrom, 2007). Moreover, because weak ties and less trust is apparent in Russian network relationships, social reciprocity is often ignored and Russian firms tend to have low motivation to make relationship-specific investments (Natjargal, 2007). Future research comparing relational constructs across BRICs will most certainly prove interesting and insightful.

Finally, although our guanxi model consists of three first order constructs – ganqing, renqing and xinren that evaluate and reflect the quality of guanxi between two business parties, the concept is limited. Some could argue that guanxi may consist of additional items such as the level of adaptation required etc (Hwang, 1987; MacInnis, 1993; Chen, 2001; Wong & Leung, 2001). Research now needs to focus further on integrating additional constructs with those of ganqing, renqing and xinren into relatively larger frameworks for testing. This may call for a greater number of observations beyond the current scope but will yield new insights and help develop such guanxi measures in the future.

References:


Figure 1: 11-item GRX Model 2
Figure 2: Guanxi Model
Loading shows in standardized estimates.

*** $p < 0.001$; ** $p < 0.01$

**Table 1: Monte Carlo Parallel Analysis**
<table>
<thead>
<tr>
<th>Components number</th>
<th>Actual eigenvalue from PCA</th>
<th>Criterion value from parallel analysis</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.271</td>
<td>1.5879</td>
<td>Accept</td>
</tr>
<tr>
<td>2</td>
<td>3.788</td>
<td>1.4779</td>
<td>Accept</td>
</tr>
<tr>
<td>3</td>
<td>1.874</td>
<td>1.4015</td>
<td>Accept</td>
</tr>
<tr>
<td>4</td>
<td>1.020</td>
<td>1.3259</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Note: This analysis was run using 20 items with 208 valid cases.

Table 2: Rotated Components Matrix
## Rotated Component Matrix

<table>
<thead>
<tr>
<th></th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ganqing (G1) - I often interact with my supplier’s representative on a social basis outside of work</td>
<td>.141</td>
</tr>
<tr>
<td>Ganqing (G2) - My supplier’s representative and I are able to talk openly as friends</td>
<td>.099</td>
</tr>
<tr>
<td>Ganqing (G3) - If I were to change this business supplier, I would lose a good friend</td>
<td>.293</td>
</tr>
<tr>
<td>Ganqing (G4) - I consider my supplier’s representative as being almost as close to me as family</td>
<td>.179</td>
</tr>
<tr>
<td>Ganqing (G5) - I would consider whether my supplier representative’s feelings would be hurt before I made an important decision</td>
<td>.499</td>
</tr>
<tr>
<td>Ganqing (G6) - I have a brotherhood feeling towards this supplier’s representative</td>
<td>.331</td>
</tr>
<tr>
<td>Ganqing (G7) - I would try my best to help out this supplier’s representative when he/she is in need because he/she is a friend of mine</td>
<td>.486</td>
</tr>
<tr>
<td>Renqing (R1) - I feel a sense of obligation to this supplier’s representative for doing him/her a favor</td>
<td>.793</td>
</tr>
<tr>
<td>Renqing (R2) - I think that “calling in” favors is part of doing business with this supplier’s representative</td>
<td>.874</td>
</tr>
<tr>
<td>Renqing (R3) - The practice of “give and take” of favor is a key part of the relationship between my supplier’s representative and me</td>
<td>.803</td>
</tr>
<tr>
<td>Renqing (R4) - I would feel embarrassed if I was unable to provide a requested favor to my supplier’s representative</td>
<td>.779</td>
</tr>
<tr>
<td>Renqing (R5) - I know that it is a bad business not to return favors to this supplier’s representative</td>
<td>.785</td>
</tr>
<tr>
<td>Renqing (R6) - I am happy to do a favor for this supplier’s representative, when he/she requests one</td>
<td>.787</td>
</tr>
<tr>
<td>Xinren (X1) - This supplier’s representative has been frank in dealing with us</td>
<td>.155</td>
</tr>
<tr>
<td>Xinren (X2) - This supplier’s representative does not make false claims</td>
<td>.198</td>
</tr>
<tr>
<td>Xinren (X3) - We think this supplier’s representative is completely open in dealing with us</td>
<td>-.100</td>
</tr>
<tr>
<td>Xinren (X4) - This supplier’s representative is only concerned about himself/herself (Reversed)</td>
<td>-.082</td>
</tr>
<tr>
<td>Xinren (X5) - This supplier’s representative seems to be concerned with our needs</td>
<td>-.077</td>
</tr>
<tr>
<td>Xinren (X6) - The people at my firm do not trust this supplier’s representative (Reversed)</td>
<td>-.065</td>
</tr>
<tr>
<td>Xinren (X7) - This supplier’s representative is not trustworthy (Reversed)</td>
<td>-.101</td>
</tr>
</tbody>
</table>

Extraction Method: principal components analysis.
Rotation Method: varimax with Kaiser normalisation.
Rotation converged in 4 iterations.

Appendix A:
### Ganqing, Renqing and Xinren Scales

<table>
<thead>
<tr>
<th>Ganqing</th>
<th>Renqing</th>
<th>Xinren</th>
</tr>
</thead>
<tbody>
<tr>
<td>My supplier’s representative and I are able to talk openly as friends.</td>
<td>I feel a sense of obligation to this supplier’s representative for doing him/her a favor.</td>
<td>This supplier’s representative is only concerned about himself/herself (R).</td>
</tr>
<tr>
<td>If I were to change this business supplier, I would lose a good friend.</td>
<td>I think that “calling in” favors is part of doing business with this supplier’s representative.</td>
<td>The people at my firm do not trust this supplier’s representative (R).</td>
</tr>
<tr>
<td>I would consider whether my supplier representative’s feelings would be hurt before I made an important decision.</td>
<td>The practice of “give and take” of favors is a key part of the relationship between my supplier’s representative and me.</td>
<td>This supplier’s representative is trustworthy.</td>
</tr>
<tr>
<td>I would try my best to help out this supplier’s representative when he/she is in need because he/she is a friend of mine.</td>
<td>I am happy to do a favor for this supplier’s representative, when he/she requests one.</td>
<td>(R) refers to reverse scale.</td>
</tr>
</tbody>
</table>

(R) refers to reverse scale.