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# The Influence of Relational Demography and *Guanxi*: The Chinese Case

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## Abstract

Two studies were conducted to investigate the indigenous concept of *guanxi* and its applications in the Chinese context. *Guanxi* refers to the existence of direct particularistic ties between an individual and others. We relate the concept to the idea of relational demography, which refers to similarities or differences between an individual and others on such factors as age, gender, race, religion, education, and occupation. The two studies focused on the importance of *guanxi* and relational demography in Chinese employment settings. In study 1, their importance was examined in a sample of 560 vertical dyads (i.e., between supervisor and subordinate) in Taiwan. In study 2, the effects were analyzed in a sample of 205 horizontal dyads, specifically between business executives and their important business connections (e.g., key customers, suppliers, bankers, government officials) in mainland China. Results support the importance of both *guanxi* and relational demography for subordinate trust in the supervisor, but only *guanxi* is found to be (extremely) important for business executives' trust in their connections. Implications for future cross-cultural research on the effect of common ties are discussed.

*(Guanxi; Trust; Relational Demography; China)*

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Recently, U.S. scholars have become increasingly interested in the effect of demographic factors, especially similarities or differences in demographic profiles of members of a dyad or a team, on employment outcomes such as communication (Zenger and Lawrence 1989), turnover (Wagner et al. 1984), social integration (O'Reilly et al. 1989), attachment (Tsui et al. 1992), interpersonal attraction (Tsui and O'Reilly 1989), and even corporate strategy (Bantel and Jackson 1989) or company performance (Murray 1989). The basic issue addressed in those studies

is whether and how organizational demography (i.e., demographic similarity or difference between two or more individuals) influences the attitudes and behavior of the employees toward each other and how those relationships in turn affect employment outcomes.

Because all samples in that stream of research were drawn from U.S. companies, we do not know whether such demographic effects are generalizable to other social-cultural settings. We therefore conducted a study to explore the idea of relational demography in a different cultural context, China, where socioeconomic background and family origins of individuals are important factors in interpersonal relations (Chiao 1982, Hwang 1987, King 1991). In the Chinese context, relationships based on demographic and background factors are captured in the idea of *guanxi*, the existence of direct particularistic ties between an individual and others (Jacobs 1980, Tsui and Farh 1997). We conducted two studies to explore the importance of *guanxi* and several traditional measures of relational demography in the Chinese work context. In the first study, we analyzed the influence of those variables on subordinates' trust in their supervisors as well as on their job performance and psychological commitment to their employers. In the second study, we investigated the importance of those factors for executives in terms of their trust in their connections and perceived business importance of the connections.

## Theoretical Background

Recent research on organizational demography suggests that a variety of work outcomes are affected by demographic differences between two or more individuals (Tsui, Egan, and Xin 1995). Two basic approaches have been used in demographic studies of groups. One is based

on the composition of the group in terms of certain demographic attributes. For example, the tenure distribution of a group has been found to affect turnover among group members (O'Reilly et al. 1989) and age distribution has been shown to influence the frequency of communication among project team members (Zenger and Lawrence 1989). The second approach is based on the difference between one individual and all others within the group. It is known as relational demography (Tsui and O'Reilly 1989). For example, O'Reilly et al. (1989) found that turnover was more likely for individuals most different from others in company tenure than for individuals less different from others in company tenure. Tsui et al. (1992) reported that individuals more different from others in gender and race were less committed to the organization than individuals less different from others on those two attributes. In assessing the effect of demographic differences between supervisors and subordinates and between business executives and their connections, relational demography is more appropriate than the compositional approach.

The influence of demographic similarity can be explained best by social categorization and social identification processes, which are central ideas in social identity theory. According to that theory (originally developed by scholars in England and Australia, and confirmed in North America), people derive their identity largely from the social categories to which they belong (Tajfel and Turner 1986). They are more attracted to others who share the same social categories than to those who do not (Turner 1987). Further, any one individual may have multiple sources of identity, and those sources or categories may vary in their salience for different individuals and in different social contexts. For example, in the United States, race and gender appear to be important sources of social identity for most individuals (Tsui et al. 1992). Individuals are more likely to form friendship relations with others who are similar to themselves than with those who are different in race (Thomas 1990) or in gender (Ibarra 1992). In addition to categorizing themselves, people categorize others on the basis of observed or known social or personal attributes. Further, people could be attracted to others in the absence of personal knowledge or friendship if they are members of the same category. Such "in-group" attraction based on group membership is qualitatively different from "interpersonal" attraction based on personal friendship between two or more individuals.

Tsui, Xin, and Egan (1995) further proposed that for some demographic variables, dissimilarities rather than similarities may attract. Social norms may be related to the importance of differences in attributes such as age or educational level between individuals who differ in their

employment status within an organization. In the Western culture, and perhaps even more in the Eastern culture, it would be consistent with social status norms for supervisors or individuals holding high level positions to be older and better educated than subordinates or individuals in lower level positions.

Research on performance evaluation has found older employees to be rated generally lower on performance than their younger counterparts in U.S. samples (Waldman and Avolio 1986). Using the relational demography framework, Tsui and Egan (1994) found that older subordinates were rated lower on task performance and citizenship behavior by younger but not by older supervisors. Tsui and O'Reilly (1989) reported that subordinates with less education than their supervisors were liked more than subordinates with more education than their supervisors. Those results suggest the importance of culturally legitimate demographic differences in the relationship between supervisor and subordinate.

Although the effects of relational demography are well established in the U.S. context, whether those dynamics are generalizable to different cultural contexts, specifically the Chinese context, is not known. In considering the culture-boundedness of the social identification process, the question is whether individuals in the Chinese context also derive their identity from social categories to which they belong. Some evidence suggests that the social identification process operates in China.

### **The Social Identification Process in China**

Using college students in Taiwan, Li and Hsu (1995) found support for the basic tenet of social identity theory—random assignment of subjects to arbitrary groups produced in-group favoritism. Two types of relationships were manipulated: in-group versus out-group member (group identity) and friend versus stranger (friendship). The group identity factor was manipulated by using Tajfel's nominal intergroup approach (i.e., subjects were arbitrarily assigned to "red" or "green" groups). The friendship factor was manipulated by asking some subjects to bring a friend to participate in the experiment with them and assigning other subjects a partner (stranger) during the experiment. The subject was to allocate a reward between two members: (1) an in-group member who is a friend versus an in-group member who is a stranger, (2) an in-group member who is a friend versus an out-group member who is a friend, (3) an out-group member who is a friend versus an out-group member who is a stranger, and (4) an in-group member who is a stranger versus an out-group member who is a stranger. The results showed that both group identity and friendship produced bias in reward allocation, but the friendship effect was stronger

than the group identity effect. Subjects systematically allocated more rewards to their friends or their in-group members. A second experiment with a different scenario produced similar results. The authors concluded that the social identity model applies to Chinese people.

A study using both Chinese and U.S. subjects provided evidence on the family as an important source of social identity. Li (1993) had a group of college students in Taiwan and a sample of students in the United States respond to scenarios in which a driver caused a chain accident and fled the scene. The subjects were asked to judge the fairness of the driver's behavior and the amount of fine to be imposed should the driver be caught. The relationship of the driver to the subjects was varied and randomly assigned. The driver was (1) the subject, (2) the father of the subject, or (3) a stranger. Results showed that Chinese subjects displayed equal favoritism or bias (i.e., a more lenient judgment) toward their fathers and themselves in relation to strangers. U.S. subjects, in contrast, displayed favoritism only to themselves and treated their fathers and strangers equally. A follow-up experiment showed that favoritism decreased as the relationship between the Chinese subject and the driver (offender) became more distant (i.e., spouse favored most, followed by brother/sister, classmate, and stranger).

Bond and Hwang (1986) reviewed the social psychological literature on interpersonal attraction involving Chinese samples. They concluded that most Western models of interpersonal attraction (e.g., Byrne 1971), from which social identity theory is derived, are applicable to Chinese people. In total, research evidence suggests that social identification and categorization processes influence interpersonal relations in the Chinese context, at least among college students in Taiwan. Therefore, we have some basis for expecting demographic similarity to influence relationships between people in Chinese work contexts.

### **The Importance of *Guanxi* in the Chinese Context**

The concept of *guanxi*, in comparison with relational demography, emphasizes a different set of background factors in interpersonal relationships. According to Chiao (1982) and King (1991), *guanxi* in traditional Chinese society is based on factors that promote shared social experience between and among individuals. They include being a relative (close or distant), having the same natal or ancestral origin, being a former neighbor, classmate, colleague, teacher/student, or supervisor/subordinate, having the same hobbies, and so on.

Tsui and Farh (1997) compared and contrasted *guanxi* to relational demography and suggested that the two ideas are conceptually related but nonequivalent. They traced

the cultural origin of *guanxi* and found the word *lun* used in Confucian ideology to refer to the concept of *guanxi*. According to Confucianism, an individual is fundamentally a social or relational being. Social order and stability depend on properly differentiated role relationships between particular individuals (King 1991). Confucius defined five cardinal (dyadic) role relations (called *wu-lun*): emperor-subject, father-son, husband-wife, elder-younger brothers, and friend-friend. Yang (1993, pp. 29–30) stated: "As a highly formalistic cultural system, *wu-lun* required each actor to perform his or her role in such a way that he or she should precisely say what he or she was supposed to say, and not to say what he or she was not supposed to say. In order to be a good role performer, the actor actually had to hide his or her free will. . . . That is why Chinese has been said to be situation-centered or situationally determined."

In a relation-centered world, social relations are accorded great significance, and relationships are often seen as ends in themselves rather than means for realizing individual goals. Because of the emphasis on differentiated relationships, attention to others in China is highly selective and is most characteristic of relationships with "in-group" members. Many observers of Chinese social relations (e.g., Butterfield 1983) have noted that in comparison with Westerners, the Chinese have a much stronger tendency to divide people into categories and treat them accordingly. That tendency to treat people differentially on the basis of one's relationship with them is why *guanxi* is of such importance in Chinese societies.

Tsui and Farh (1997) further described the different principles of interaction and social treatment between individuals who are connected by different *guanxi* bases. The general rule of exchange for individuals having close kinship ties is role obligation (as defined in *wu-lun*), which implies unconditional protection. Loyalty (and related favoritism) to family members is an obligation and is rendered largely without anticipation of reciprocity. A different set of exchange principles governs the relationship with individuals having other forms of particularistic ties such as being a distant relative, being a former classmates, or coming from the same hometown. Such individuals are what Yang (1993) termed "familiar persons." The relationship with them has both utilitarian and expressive components. Interpersonal favors and generosity are rendered with the anticipation that they will be reciprocated (Hwang 1987, King 1989). Tsui and Farh (1997) described a third category of relationship, that with strangers or mere acquaintances, in which social identification is the primary mechanism. Strangers with whom one has common identity will be favored, whereas those without

such common identity will be treated with caution or discretion.

Clearly, particularistic ties, especially those on kinship, are important bases of *guanxi* in traditional China. However, as Chinese societies undergo modernization, are those ties diminishing in importance? Yang (1986, 1988) reviewed numerous studies on the issue and found that as a result of modernization, Chinese people have become less socially and more individually oriented. However, some of the most important traditional attitudes, beliefs, and values (such as familistic and relationship orientation) persist and are unlikely to be replaced by modern ones. For example, two modern Chinese people meeting for the first time often inquire of each other, "Where is your home province?" Chinese people are attracted to others of the same provincial origin (which implies the same dialect). Such in-group attraction may explain the large number of "provincial associations" among overseas Chinese. Incidentally, "home province" is understood to mean the birthplace of the ancestors of one's father.

A recent experimental study (Earley 1993) involving a group of managers from mainland China showed the salience of provincial origin and kinship tie for in-group identification. The experimenter told the managers in the in-group condition that their presumed group members (whom they did not know or see) were primarily individuals from the same region of the country as themselves, who shared common interests, and were distantly related to one another. Managers in the out-group condition were told that they did not share such relationships. Results showed that collective Chinese managers performed significantly better (i.e., contributed more to the group task) in the in-group condition than in the out-group condition in a simulation exercise. The implication is that *guanxi* in terms of same natal origin and (distant) kinship ties may create shared group identity that causes the subjects to be more conscientious in performing group tasks. Xin and Pearce (1996), using a group of business executives in mainland China, further substantiated the importance of *guanxi* for business executives in China. It is a powerful mechanism by which those executives obtain resources, information, or support in business situations.

In summary, the ideas of *guanxi* and relational demography are conceptually related yet distinct in some aspects. *Guanxi* is based on particularistic ties that involve interpersonal interactions between individuals whereas relational demography is based primarily on the individuals' physical or personal attributes. Individuals with common attributes may not necessarily have opportunities for personal interaction. Both sets of factors may influence the relationship between an individual and others

at work, through role obligation and friendship in the case of *guanxi* or through social identification in the case of relational demography. This is not to suggest that social identification does not occur among Chinese who share particularistic ties. In fact, all bases of *guanxi* are sources of Chinese people's social identity. However, beyond social identification, role obligation and friendship, where applicable, play a more prominent role in influencing behavior in their social relationships (Tsui and Farh 1997).

### Study 1: Relational Demography and *Guanxi* in Chinese Vertical Dyads

Research on demographic differences or similarities between supervisor and subordinate has examined a variety of demographic factors and several attitudinal and behavioral outcomes. For example, Tsui and O'Reilly (1989) directly tested six relational demographic variables: age, company tenure, gender, race, education, and job tenure. They found four of the six variables to be related to performance ratings of the subordinate by the supervisor and the supervisor's liking for the subordinate. They further found both similarity and difference in educational level to be associated with supervisor's liking for the subordinate. Vecchio (1993) analyzed the effect of difference in age on supervisor's ratings of subordinate performance. Tsui et al. (1992) provided evidence on the importance of relational demography for employees' psychological commitment to and intent to stay with their employer. Would a similar dynamic be observed in the Chinese context?

Preliminary work on the social identification process in China suggests that the similarity-attraction dynamic operates in the Chinese context. Therefore, we have reason to expect replication of the relational demography effects in Chinese employment relationships. In other words, similarity in the vertical dyad on demographic attributes such as age, education, and gender should be associated with outcomes such as favorable performance evaluations by the supervisor and high commitment to the organization by the subordinate.

Would *guanxi* in the vertical dyad lead to similar outcomes? The most important outcome of *guanxi* connection may be trust between two individuals. Trust among members of the in-group and distrust among members of the out-group is one of the strongest characteristics of interpersonal relations in China (Yang 1993). Therefore, we expect trust of the supervisor by the subordinate, and vice versa, to be the most logical outcome of *guanxi* in the vertical dyad. Because of strong in-group favoritism, we expect the supervisor to give subordinates with *guanxi* connections higher performance ratings than subordinates

without such common ties. Similarly, subordinates related to the supervisor on one or more *guanxi* bases are likely to be more loyal and committed than subordinates who are outsiders.

In a cultural context with high power distance, as in China, relational norms should be very important. Individuals in a position of high power or status (e.g., supervisors) are expected to be different in their personal attributes from individuals of low status (e.g., subordinates). However, the situation may be complicated by the social cultural norms surrounding particular attributes such as age of the individual. In China, age carries special status, with older individuals accorded a high level of respect. Hence, subordinates who are older than their supervisors may be treated with respect, but may be especially sensitive to the status incongruence between their ages and their employment positions. Therefore, the positive reaction of a younger supervisor toward an older subordinate (who observes the respect, according to social norms) may be neutralized by the negative or ambivalent reaction of the older subordinate (who thinks he/she deserves the higher status position because of age). The complex social psychological dynamics interacting with the social cultural norm makes the effect of age difference in the Chinese vertical dyad unclear.

The dynamic associated with educational difference may be more straightforward. In Chinese culture, as in the United States, educational level implies knowledge and skills. Supervisors are expected to be better educated than subordinates. If a subordinate is better educated, the supervisor may feel threatened. The better educated subordinate may resent the higher status of the less educated supervisor. In general, we would expect subordinates to be more accepting and trusting of supervisors, and to be more committed, when the supervisors are more rather than less educated than the subordinates.

The preceding conceptual analysis leads to three hypotheses.

**HYPOTHESIS 1.** *Similarity in demographic attributes such as age, gender, and educational level in the vertical dyad is associated positively with a high level of trust in the supervisor by the subordinate, a high performance evaluation by the supervisor, and a high level of commitment to the organization by the subordinate.*

**HYPOTHESIS 2.** *Guanxi between the supervisor and the subordinate (i.e., direct particularistic ties) is associated positively with a high level of trust in the supervisor by the subordinate, a high performance evaluation by the supervisor, and a high level of commitment to the organization by the subordinate.*

**HYPOTHESIS 3.** *Legitimate culturally expected differences in educational level between the supervisor and the subordinate (i.e., supervisors having more education than subordinates) are associated with a high level of trust in the supervisor by the subordinate, a high performance evaluation by the supervisor, and a high level of commitment to the organization by the subordinate.*

### Sample and Procedure

The sample was a group of insurance salespersons and their supervisors drawn from a large life insurance company in Taiwan that specializes in selling to individuals and families rather than to corporate accounts. Using a stratified sampling plan based on geographic regions, we selected 792 salesperson-supervisor dyads. We obtained complete data from 560 of the dyads, an effective response rate of 74%. The representativeness of the sample was confirmed by comparing the respondents with the nonrespondents on average age, educational level, sales performance, and gender distribution.

The data were collected in group sessions at company sites during working hours. The respondents were told by the research team that the study was being conducted for research purposes only. Although they were asked to put their names on the questionnaire, they were assured that the results would be kept confidential and seen only by the researchers. The salespersons and their supervisors completed their questionnaires independently.

### Measures

**Relational Demography.** Measures of the three demographic variables (age, gender, and education) were obtained from both the subordinates and the supervisors. Age was measured by five categories (1 = under 30, 2 = 31–35, 3 = 36–40, 4 = 41–45, and 5 = over 45). Gender was coded 1 for men and 2 for women. Education was measured by four levels (1 = less than high school, 2 = high school, 3 = technical degree, and 4 = college degree and higher). To be consistent with previous research (e.g., Tsui and O'Reilly 1989), we created the relational demographic scores by squaring the differences between the subordinates' and their supervisors' values for the demographic variables. For ease of presentation, we constructed similarity measures by reversing the distance score (i.e., subtracting the distance score from its maximum possible value). We obtained dichotomous similarity scores on the gender variable, with 1 indicating that the subordinate and the supervisor were of the same gender and 0 indicating that they were of different gender.

**Guanxi.** We examined eight particularistic ties: former classmate, relative, same last name, same natal origin, former colleague, former teacher/student, former boss/subordinate, and former neighbor. Using a checklist

with a yes/no response format, we asked the subordinates to indicate whether those ties were present between them and their immediate supervisors. Similarly, we asked the supervisors to indicate whether those ties were present between them and their subordinates. We recorded the presence of *guanxi* in a dyad only when both members independently reported the presence of a tie. Otherwise, we recorded an absence of *guanxi* for the dyad. We obtained dichotomous scores on *guanxi* variables, with 0 indicating the absence of *guanxi* and 1 indicating its presence.

**Trust in Supervisor.** Employee trust in his or her supervisor was measured by four items taken from the trust in/loyalty to the leader scale developed by Podsakoff et al. (1990). The items were (1) "I have complete faith in the integrity of my supervisor"; (2) "My supervisor would try to gain an advantage by deceiving employees" (reversed scored); (3) "I feel a strong loyalty to my supervisor"; and (4) "I would support my supervisor in almost any emergency". All items were measured on a seven-point disagree-agree Likert scale ( $\alpha = 0.87$ ).

**Subordinate Performance.** The supervisor evaluated the subordinate on four aspects of work: meeting sales quotas, completing work assignments on time, contribution to the performance of the unit, and overall performance. Each dimension was measured with two items, one positively and one negatively worded, for a total of eight items ( $\alpha = 0.91$ ). Each item was measured on a seven-point scale (1 = strongly disagree, 7 = strongly agree). In addition, we obtained an objective performance measure, the total amount of life insurance sold by the salesperson in the four-month period prior to the administration of the survey. That information was taken from company records.

**Commitment.** Subordinate commitment to the organization was measured by two scales: psychological commitment and intention to quit. The first was a six-item scale taken from Mowday et al. (1979). The original scale has 15 items, but we eliminated 6-negatively worded items as well as 3 items that measured intention to stay, which were redundant with our intention to quit items. The same seven-point disagree-agree scale was used for all six items ( $\alpha = 0.89$ ). The employee intention to quit scale had four items ( $\alpha = 0.80$ ), such as "I often think of quitting my present job." Each item was measured on a seven-point scale (1 = strongly disagree, 7 = strongly agree).

In summary, we used a total of five dependent variables: subordinate trust in the supervisor, two measures of subordinate performance, and two measures of subordinate commitment to the employer. The commitment

and trust scales were originally written in English. Translation of the original English version into Chinese was accomplished through a multistage translation and back-translation procedure described by Brislin (1980).

### Analysis

Multiple regression analysis was used to estimate the effects of relational demography and *guanxi* on the five outcome measures (Hypothesis 1 and Hypothesis 2), with simple demography of both members of the dyad as control variables. Analysis of variance was used to test Hypothesis 3. We first created three groups of dyads based on difference in educational level reported by the supervisor and the subordinate. One group consisted of dyads with supervisors who were better educated than the subordinates, one consisted of dyads with members who were similar in educational level, and one consisted of dyads in which the supervisors were less educated than the subordinates.

### Results

Table 1 summarizes the descriptive statistics for the demographic variables. The sample was predominantly female (91% of the supervisors and 93% of the subordinates), but 13% of the dyads were of mixed gender. The overall educational level for the sample was not high, as only 21% of the supervisors and 15% of the subordinates had technical or college degrees. Generally the supervisors were older than the subordinates, with 78% of the former and 62% of the latter being more than 35 years of age. Table 1 also shows the extent to which the eight types of *guanxi* were present between the supervisors and the subordinates in the sample. In general, *guanxi* was not pervasive. We found no former teacher/student tie in any of the 560 supervisor-subordinate dyads and only two (0.04%) former boss/subordinate ties, so those *guanxi* bases were not included in subsequent analysis. For the remaining six *guanxi* bases, the rate of occurrence ranged from 2.1% to 3.4%. To check the reliability of our *guanxi* measures, we obtained an accuracy index for each type of *guanxi* by dividing the percentage of agreement reported by the dyads by the total number of dyads. The accuracy index was over 93% for all but former colleague *guanxi*, for which it was 86.6%. Those results indicated that our *guanxi* measures were reliable.

Mean, standard deviation, reliability, and intercorrelation for all variables are reported in Table 2. The intercorrelations yield several interesting observations. First, all subordinate outcome variables are correlated significantly, the highest correlation being  $r = -0.50$  (between intention to quit and psychological commitment). Second, none of the relational demographic variables are correlated significantly. Third, three of the *guanxi* variables

**Table 1** Study 1: Sample Demographic Profile and *Guanxi* in the Vertical Dyad (N = 560)

Demographic Variables	Subordinate %	Supervisor %	Relational Demography	
			Same %	Different %
Gender				
Male	7	9	87	13
Female	93	91		
Education				
Less than high school	28	24	41	59
High school	57	54		
Technical degree	11	17		
College degree and higher	4	5		
Age				
Under 30	16	6	28	72
31–35	22	16		
36–40	23	35		
41–45	25	32		
46 and older	14	11		
<i>Guanxi</i>	Yes(1) <sup>a</sup>	No(2) <sup>a</sup>	Accuracy (1) + (2)	
Former classmate <sup>b</sup>	3.4	96.6	NA	
Relative	3.2	93.0	96.2	
Teacher/student	0.0	96.8	96.8	
Same last name	2.9	92.9	95.8	
Same natal origin	3.4	90.9	94.3	
Former colleague	2.1	84.5	86.6	
Former boss/subordinate	0.4	93.4	93.8	
Former neighbor	2.5	90.7	93.2	

<sup>a</sup>“Yes” indicates percentage of dyads in which both supervisor and subordinate reported the presence of *guanxi*. “No” indicates percentage of dyads in which both supervisor and subordinate reported absence of *guanxi*.

<sup>b</sup>Former classmate *guanxi* was unavailable for the supervisor. The percentage reported are based on the self-report of the subordinate.

(relative, same last name, and same natal origin) are very highly correlated ( $r = 0.58$  to  $0.70$ ). Fourth, the correlations between the independent variables (demography and *guanxi*) and dependent variables are generally small or nonsignificant.

The regression results for Hypothesis 1 and Hypothesis 2 are summarized in Table 3. The overall regression model is significant for trust in supervisor only. Of the

three relational demographic variables, similarity in educational level and similarity in gender are significantly related to trust in supervisor. However, the beta coefficients for both variables are negative, contrary to Hypothesis 1. Further analysis on the gender difference variable suggests that male subordinates with male supervisors expressed a lower level of trust ( $M = 4.85$ ) in their supervisors than any other subordinates (ranging from  $M = 5.58$  to  $5.86$ ). Further analysis on the educational difference variable indicates that subordinates similar in education to their supervisors reported lower trust ( $M = 5.53$ ) than subordinates less educated than their supervisors ( $M = 5.75$ ). Their trust level was similar to that of subordinates who were more educated than their supervisors ( $M = 5.47$ ). Hence, Hypothesis 1 is not supported.

The results in Table 3 show that two of the six *guanxi* variables, being a relative and being a former neighbor, are significantly and positively associated with subordinate trust in the supervisor. Those results provide support for Hypothesis 2, but on only two of the six *guanxi* bases. Together they account for 4% of unique variance in the trust variable, net of the effect of all other independent variables.

Results of the one-way analysis of variance for Hypothesis 3 are summarized in Table 4. They are generally consistent with Hypothesis 3. Supervisors who were better educated than their subordinates were trusted more by the subordinates ( $M = 5.75$ ) than supervisors who were similarly or less educated ( $M = 5.53$  and  $5.47$ , respectively). That finding is consistent with the relational norm hypothesis (Hypothesis 3) and explains the negative beta for the effect of the relational education variable on trust reported in Table 3. Significant differences are found also on supervisory ratings of subordinate performance. However, the means of the supervisory ratings are consistent with the similarity-attraction hypothesis (Hypothesis 1) but not with the relational norm hypothesis (Hypothesis 3). Supervisors who were similar to their subordinates in educational level gave higher performance ratings to the subordinates ( $M = 5.49$ ) than supervisors who were less educated ( $M = 5.16$ ) or more educated ( $M = 5.38$ ) than their subordinates. The difference in the latter two groups is not significant. That result explains the positive beta ( $0.08$ ,  $p < 0.08$ ) for the effect of the relational education variable on performance ratings reported in Table 3.

In summary, the results of study 1 provide some support for both the *guanxi* and relational demography hypotheses. Two of the *guanxi* variables and educational difference consistent with relational norms are important for subordinate trust in supervisors, and educational difference consistent with similarity-attraction affects supervisory ratings of subordinate performance.

**Table 2 Study 1: Means, Standard Deviations, Reliabilities, and Intercorrelations of Subordinate Outcomes and Demographic Variables**

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Sales performance (in NT 00000)	9.98	6.12	NA																		
2. Supervisor ratings of performance	5.37	1.14	0.38	0.91																	
3. Intention to quit	2.71	0.83	-0.22	-0.10	0.80																
4. Psychological commitment	5.43	0.98	0.13	0.09	-0.50	0.89															
5. Trust in supervisor	5.59	1.06	0.06	0.12	-0.25	0.45	0.87														
6. Age similarity	13.78	2.86	0.11	0.02	-0.02	-0.01	-0.02	NA													
7. Education similarity	7.86	1.75	0.07	0.04	0.05	-0.08	-0.11	0.06	NA												
8. Gender similarity	0.87	0.34	0.04	-0.02	-0.02	-0.01	-0.05	0.02	0.07	NA											
9. Former classmate (1 = yes, 0 = no)	0.03	0.18	-0.02	-0.02	0.09	0.00	0.00	-0.12	0.02	0.04	NA										
10. Relative (1 = yes, 0 = no)	0.03	0.18	-0.01	-0.03	0.04	-0.04	0.14	-0.01	-0.01	-0.02	0.02	NA									
11. Same last name (1 = yes, 0 = no)	0.03	0.17	-0.02	0.00	0.07	-0.08	0.05	0.02	0.04	0.00	0.03	0.70	NA								
12. Same natal origin (1 = yes, 0 = no)	0.03	0.18	0.00	-0.01	0.04	-0.06	0.09	0.01	0.04	0.01	-0.04	0.58	0.62	NA							
13. Former colleague (1 = yes, 0 = no)	0.02	0.14	0.00	-0.06	0.03	-0.03	0.04	0.07	0.03	-0.02	0.04	-0.03	-0.03	0.04	NA						
14. Former neighbor (1 = yes, 0 = no)	0.03	0.16	0.04	0.02	-0.03	0.05	0.14	0.00	0.05	0.03	0.10	0.17	0.18	0.22	-0.02	NA					
15. Supervisor age	3.25	1.05	0.02	0.04	0.02	0.04	-0.02	0.00	-0.01	0.09	0.14	0.00	0.02	-0.01	-0.06	0.01	NA				
16. Supervisor education	2.02	0.78	0.00	0.08	0.01	0.05	0.11	0.00	-0.31	-0.17	-0.03	0.05	0.00	0.01	0.06	-0.02	-0.14	NA			
17. Supervisor gender (1 = m, 2 = f)	1.91	0.29	0.04	0.02	-0.02	-0.01	0.03	0.00	0.06	0.66	0.03	-0.01	0.02	0.03	0.01	0.05	0.11	-0.20	NA		
18. Subordinate age	2.98	1.30	0.14	0.08	-0.02	0.13	0.00	0.20	-0.02	0.03	0.01	-0.11	-0.06	-0.10	-0.02	0.23	-0.01	0.05	NA		
19. Subordinate education	1.92	0.75	-0.06	0.01	0.03	-0.04	-0.01	-0.09	-0.14	-0.19	0.03	-0.03	0.02	0.01	0.00	-0.03	-0.02	-0.07	-0.10	NA	
20. Subordinate gender (1 = m, 2 = f)	1.93	0.25	0.08	-0.01	0.00	-0.02	0.00	0.07	0.07	0.50	0.05	0.01	0.00	0.01	-0.01	0.00	0.08	-0.06	0.15	0.06	-0.20

Note:  $|r| \leq 0.08$ ,  $p < 0.05$ ;  $|r| \leq 0.11$ ,  $p < 0.01$  (two-tailed test); Cronbach alpha values for multitem scales are on the diagonal.

**Table 3 Study 1: Effects of Relational Demography and Guanxi in the Vertical Dyads**

Independent Variable	Dependent Variable <sup>a</sup>				
	Trust ( $\beta$ )	Supervisor Ratings ( $\beta$ )	Sales Performance ( $\beta$ )	Commitment ( $\beta$ )	Intention to Quit ( $\beta$ )
Demographic Similarity					
Age	-0.02 (0.04)	0.01 (0.04)	0.07 (0.05)	-0.03 (0.04)	-0.02 (0.04)
Education	-0.09** (0.04)	0.08* (0.04)	0.07 (0.05)	-0.06 (0.04)	0.06 (0.04)
Gender	-0.16** (0.07)	-0.04 (0.07)	-0.04 (0.07)	0.00 (0.07)	-0.03 (0.07)
Guanxi					
Former classmate	-0.01 (0.04)	-0.02 (0.04)	-0.02 (0.05)	-0.01 (0.04)	0.08 (0.04)
Relative	0.16*** (0.06)	-0.05 (0.06)	0.03 (0.06)	0.04 (0.06)	-0.01 (0.06)
Same last name	-0.10 (0.06)	0.03 (0.06)	-0.05 (0.06)	-0.09 (0.06)	0.07 (0.06)
Same natal origin	0.03 (0.06)	0.00 (0.06)	0.01 (0.06)	-0.02 (0.06)	0.00 (0.06)
Former colleague	0.04 (0.04)	-0.06 (0.04)	-0.01 (0.04)	-0.03 (0.04)	0.02 (0.04)
Former neighbor	0.13*** (0.04)	0.02 (0.04)	0.04 (0.05)	0.07 (0.04)	-0.05 (0.04)
Simple Demographics-Supervisor					
Age	-0.01 (0.04)	0.04 (0.04)	-0.01 (0.05)	0.01 (0.04)	0.02 (0.04)
Education	0.08 (0.04)	0.12*** (0.05)	0.02 (0.05)	0.03 (0.05)	0.03 (0.05)
Gender	0.14*** (0.06)	0.06 (0.06)	0.05 (0.06)	-0.01 (0.06)	-0.01 (0.06)
Simple Demographics-Subordinate					
Age	0.01 (0.04)	0.07 (0.04)	0.13*** (0.05)	0.13*** (0.04)	-0.02 (0.04)
Education	-0.02 (0.04)	0.03 (0.04)	-0.01 (0.05)	-0.04 (0.04)	0.03 (0.04)
Gender	0.06 (0.05)	0.00 (0.05)	0.08 (0.06)	-0.03 (0.05)	0.01 (0.05)
Overall R <sup>2</sup>	0.07	0.03	0.04	0.04	0.02
Adjusted R <sup>2</sup>	0.05	0.00	0.01	0.01	0.00
Overall model F	2.83***	1.06	1.39	1.45	0.74
Degrees of freedom	15,544	15,544	15,489	15,544	15,544

<sup>a</sup>The number in parentheses is the standard error for the beta coefficient.

\* $p < 0.10$ .

\*\* $p < 0.05$ .

\*\*\* $p < 0.01$ .

**Table 4 Study 1: Educational Difference in the Vertical Dyad and Subordinate Outcomes**

Outcome Measure	Supervisor Education Relative to Subordinate Education						One-Way F value
	More Educated (N = 186)		Similarly Educated (N = 229)		Less Educated (N = 145)		
	Mean	SD	Mean	SD	Mean	SD	
Sales performance	9.89	6.05	10.55	5.90	9.21	6.51	1.93
Supervisor ratings	5.38 <sup>a,b</sup>	1.20	5.49 <sup>a</sup>	1.06	5.16 <sup>b</sup>	1.18	3.76*
Organizational commitment	5.51	0.94	5.40	0.95	5.37	1.09	1.00
Intention to quit	2.68	0.77	2.75	0.83	2.70	0.88	0.37
Trust in supervisor	5.75 <sup>a</sup>	0.95	5.53 <sup>b</sup>	1.09	5.47 <sup>b</sup>	1.14	3.53*

<sup>a,b</sup>Means not sharing common superscripts differ significantly at the 0.05 level on Fisher's least significance difference test.

\*  $p < 0.05$ .

## Study 2: *Guanxi* and Relational Demography in Chinese Horizontal Dyads

The purpose of study 2 was to analyze how relational demography and *guanxi* between business executives and their connections may influence the executives' relationships with the connections and whether similarity contributes to a perception of the connection's importance to the executives' business and career success. Business executives establish a variety of connections with powerful outsiders such as key customers, suppliers, and governmental officials. The importance of good personal relationships to doing business in developing countries has been widely discussed (Fox 1987, Lane and Simpson 1984). Many observers have noted that *guanxi* is endemic, especially in Chinese businesses (Alston 1989, Hall and Xu 1990, Jacobs 1980, Lockett 1988, Yang 1994). Xin and Pearce (1996) confirmed the importance of *guanxi* for business executives in China, especially for executives of private enterprises. They reasoned that *guanxi* substituted for institutional structure, enabling managers in private enterprises to acquire needed resources, personnel, information, and other support.

Executives having networks is certainly not a new idea. The difference here is the basis of the connections or network members. Research in the United States has found gender to be an important base for the development of both instrumental and social networks. For example, Ibarra (1992) found that both men and women have more members in their social network of the same than of different gender. What kind of demographic factors and *guanxi* bases are important in the relationship between executives and their business associates in China? Xin and Pearce (1996) did not examine specific bases of *guanxi* between the executives and their connections. However, work on *guanxi* in political elections (Jacobs 1980) suggests that candidates with *guanxi* ties to the voters, such as being from the same hometown, having kinship ties, and being former classmates, are more successful in political elections than candidates without such ties. What are the outcomes of lateral *guanxi* connections among business executives? Apparently *guanxi* based on particularistic ties may affect Chinese executives in two ways. First, they may exhibit a high level of trust toward connections with whom they share particularistic ties. Second, they may perceive business connections with particularistic ties to be important for the success of their business and careers because presumably such connections would be more willing than others to share information or extend resources important for the executives' business pursuits. Relational demography, in contrast,

may have more influence on social relations than on economic benefits. First, similarity in gender or age does not imply that the similar others are necessarily well endowed with valuable resources. Second, research on social networks does not always find the similarity-attraction effect in instrumental networks. For example, Ibarra (1992) found more mixed gender memberships in female than in male managers' instrumental networks. We therefore expect relational demography in the lateral dyads to be related to trust in connections but not to their importance for business success, and we expect *guanxi* to be related to both trust in connections and their perceived importance for business and career success.

**HYPOTHESIS 4.** *Similarity in demographic attributes such as age, gender, and educational level between a business executive and his or her business connections is associated positively with the executive's trust in the connections.*

**HYPOTHESIS 5.** *Guanxi in terms of particularistic ties between a business executive and his or her business connections is associated positively with the executive's trust in the connections and perceived importance of the connections for the executive's business and career success.*

### Sample

The sample consisted of 32 executives of 32 different organizations in a central Chinese city with a population of one half million people in late 1992. In China, finding executives who are willing to talk about connections openly with someone they do not trust is difficult. To overcome that problem, we relied on the connection of one of the authors, whose close relative is an executive for the state-owned insurance company in that city. As all businesses in that area are required to obtain insurance policies from the state-owned insurance company, the manager of the insurance company knew a large number of local business people. With the introduction of the insurance executive, we recruited a sample of 32 managers to participate in the study. Only one executive declined to be interviewed. Although we used a convenience sample, we took care to ensure broad representation. For example, all managers were in different companies (i.e., 15 state-owned companies, 8 collective-hybrid companies, and 9 private companies). They were heads of organizations or directors of key functional units such as operations, finance, or marketing in a variety of industries such as financial services, industrial manufacturing, textile manufacturing, transport, and retail and wholesale trade.

### Interview Procedure

Data were collected in structured interviews, each of which lasted 60 to 90 minutes. Each interview began with

a statement ensuring the interviewee that all information would be confidential and would be used only for research purposes. After the descriptive information about the executive and the company (e.g. enterprise ownership, age, size) was obtained, the interviewee was told:

All managers rely on help from others outside their "unit." Managers deal with nonsubordinates, or those they have no hierarchical authority over, in efforts to develop their organizations as well as solve day-to-day problems. We all know the importance of building relationships with key individuals, but it seems that for cultural and other reasons, this is not discussed much. Therefore, for the following questions, please be brutally honest. Your information will be used solely for academic research. Think of 8 to 10 individuals who are most useful in helping you succeed in this job. Think of those who are useful for day-to-day problems of your current job and those who are helpful to your long-run career success. These individuals are not necessarily the ones you "like" the most, or are close friends with, but those most necessary to your job and career success.

After eight to ten business connections were identified on a piece of paper, the interviewee was asked to write a nickname for each connection (to provide anonymity) and then to copy each nickname on a card of the size of a business card. The interviewee was asked a series of questions about each connection. The response categories for each question were printed on large sheets of paper laid in front of the interviewee. The interviewee was asked to sort the connections (the cards) into appropriate categories (e.g., distrust completely, distrust somewhat, etc.) in response to each of the questions. Since it was the interviewee who recorded the responses (by placing the card in the appropriate box of the response sheet) and not the researcher, that procedure minimized judgments or inferences by the interviewer, and thus decreased experimental bias in the data collection process. From the 32 interviews, useful data on 212 lateral business connections were obtained.

### Measures

*Relational Demography.* Measures on the three demographic variables (age, gender, and education) were taken for both the executives and each of their connections. As we did not interview executives' connections, all of the data were reported by the executives. Age was measured in years. Gender was coded 1 for men and 2 for women. Education was measured by three levels (1 = high school or lower, 2 = technical degree, and 3 = college degree and higher). The relational demographic scores for age, gender, and education were created in the same way as those in study 1, with higher scores indicating greater similarity.

*Guanxi.* To measure *guanxi* between the executive

and each connection, we asked the executives, "How did you first establish a tie with the connection?" They were given a list of categories: relatives, hometown, former classmates, political activities, work relationship (i.e., met each other through normal work relationships), and others. Interviewees were asked to indicate which of the categories best represented the primary tie with the connection. Of 212 lateral relations, nine were classified as relatives ties, five as natal origin ties, 22 as former classmate ties, none as formed through political activities, 169 as work relationships, and seven as others (primarily ties established through introduction by mutual friends). Because the study focused on direct particularistic ties (versus the absence of such ties), the seven cases classified as "others" were not included in subsequent analyses.

The measurement of *guanxi* differed between study 1 and study 2. First, the *guanxi* categories were not identical. In study 2 we included factors that were found in preliminary interviews to be most relevant for mainland Chinese managers. Second, the presence or absence of each *guanxi* base was measured independently in study 1, whereas in study 2 the bases were treated as "orthogonal" categories. We used the latter approach to assess the influence of the primary ties and to avoid redundancy among some *guanxi* bases that would make it difficult to compare the effects of different bases. For example, relative, same last name, and same natal origin were found to be highly correlated in study 1 ( $r = 0.58, 0.62, \text{ and } 0.70$ , respectively). Third, the presence of *guanxi* was recorded only when it was confirmed by independent reports of both the supervisor and the subordinate in study 1. *Guanxi* in study 2 was indicated solely by the report of the business executive. The high level of interrater agreement in reporting bases of *guanxi* in study 1, however, suggests that self-reports of *guanxi* are reliable and valid, and unlikely to be tainted by systematic biases. Because each executive reported multiple connections, one potential problem is nonindependence of measures in that there may be more homogeneity within than between interviewee responses on the dependent variables. We used a WABA analysis (Dansereau et al. 1984, Klein et al. 1994, Yammarino and Markham 1992) to test that potential problem. The corrected  $F$  from the WABA analysis was not significant for the dependent variables. Variance was present both within and between interviewees, suggesting that it is appropriate to treat each dyad as an independent unit. A similar data procedure was used by Xin and Pearce (1996).

*Trust in Connection.* Although trust as a variable has received considerable attention in the literature, we are aware of no scales that measure trust in lateral business connections. We developed four new items to measure

lateral trust in the Chinese context: (1) “To what extent do you trust this connection?” (1 = distrust completely, 2 = distrust somewhat, 3 = uncertain, 4 = trust generally, 5 = trust completely); (2) “Do you suspect that this connection withholds information of importance to you?” (1 = no, 2 = yes); (3) “Do you withhold information of importance to this connection?” (1 = no, 2 = yes); and (4) “How visible is your relationship with the connection?” (1 = known to the public, 2 = known to our friends only, 3 = private, few people knew). As the four items were of different metrics, they were first standardized and then combined to form a composite measure. The alpha for the scale is 0.74.

**Business Importance.** The perceived importance (for business and career success) of each connection was measured by five items: (1) “How important is the relationship to you?” (1 = not important, 2 = sometimes important, 3 = important but not critical; 4 = vitally important); (2) “How do you describe the interdependence between you and the connection?” (1 = little mutual interdependence, 2 = the connection relies on me more than I relies on him/her, 3 = we mutually rely on each other, 4 = I rely on the connection more than he/she relies on me); (3) “This connection is useful for future business expansion” (1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree); (4) “This connection is important to your future career development” (anchors same as for item 3); and (5) “This connection is useful as a defense against unexpected threats” (anchors same as for item 3). The items were first standardized and then combined to form a composite measure. The alpha for the measure is 0.89.

Because new scales were used to measure the two dependent variables, an exploratory factor analysis was conducted to assess construct independence. Using Kaiser’s criterion and varimax rotation, we found that two factors accounted for 65% of the variance. The rotated factor matrix shows items loading clearly and highly (between 0.65 and 0.88 for all items) on the a priori scales with no cross loading.

### Analysis

Multiple regression was used to estimate the effects of relational demography and *guanxi* on trust in the connection and business importance, with simple demography of both the business executives and their connections as controls. Because *guanxi* was measured by four mutually exclusive categories (relative, classmate, natal origin, and work), dummy-variable coding was used. The three dummy variables represented relative, former classmate, and same natal origin, separately. For each dummy variable, all connections categorized as having such a tie

(e.g., relative) received a 1 and all others received a 0. That system of coding was particularly useful as it allowed the three *guanxi* groups to be compared with the work group (i.e., the group in which particularistic ties were absent and connections were known through work). After multiple regression analysis, we used analysis of variance to compare differences in means on the dependent variables across the four *guanxi* groups.

### Results

Table 5 summarizes the descriptive statistics for the demographic variables. The sample was predominantly male, with 82% of the business executives and 84% of the connections being male; 29% of the dyads were of mixed gender. The overall educational level for the sample was high, as only 16% of the focal managers and 22% of the connections had a high school or lower level of education. Generally, the connections were slightly older than the focal managers (43.3 versus 41.3). Of the three types of particularistic *guanxi* ties, former classmate *guanxi* was most prevalent (10.7% of the connections), followed by relative (4.4%) and natal origin (2.4%).

**Table 5 Study 2: Sample Demographic Profile and *Guanxi* in Horizontal Dyads (N = 205)**

Demographic Variables	Managers (%)	Connection (%)	Relational Demography	
			Same (%)	Different (%)
Gender				
Male	82	84	71	29
Female	18	16		
Education				
High school	16	22	43	57
Technical degree	63	43		
College degree and higher	21	34		
Age				
Under 30	10	12	28	72
31–35	19	13		
36–40	14	14		
41–45	27	13		
46 and older	31	47		
Primary <i>Guanxi</i>				
Former classmate	10.7			
Relative	4.4			
Same natal origin	2.4			
Work (none of the above)	82.4			

The mean, standard deviation, reliability, and intercorrelation for all variables used in study 2 are reported in Table 6. The table affords several interesting observations. First, trust and business importance are moderately correlated ( $r = 0.29, p < 0.01$ ). Second, all three *guanxi* dummy variables are correlated significantly with the executive's trust in the connection, but none of them are correlated significantly with perceived business importance. Third, age similarity is correlated positively with trust, whereas gender similarity is correlated positively with business importance.

The regression results for relational demography and *guanxi* are summarized in Table 7. The overall regression model is significant for both trust and business importance. However, none of the relational demography or *guanxi* variables are significant for business importance, whereas the three *guanxi* variables (but none of the relational demography measures) are highly significant for trust in the connection. Those three *guanxi* variables account for 43% of unique variance in trust.

Results on the simple demography variables show that younger executives and executives with a low level of education expressed a higher level of trust in their connections. Further, executives with a low level of education perceived their connections to be more important for their business or career success. The connection's educational level is correlated positively with both trust and perceived importance of the connection.

One-way analysis of variance was conducted to explore

further the effect of specific *guanxi* bases on trust in the connections and perceived importance of the connections. The ANOVA results, summarized in Table 8, suggest that relative, classmate, or natal origin *guanxi* led to a higher level of trust in the connections than the control (i.e., connections known through work but not through any of the three particularistic ties). Post hoc comparisons showed no significant difference in the level of trust among the three *guanxi* groups. *Guanxi* bases had no effect on perceived business importance of the connections.

In summary, results from study 2 establish the importance of *guanxi* based on particularistic ties. Business executives expressed a higher level of trust in connections who were related to them, were former classmates, or were of the same natal origin. Although similarity in demographic profile did not seem to matter, the educational level of the connection was important for trust and perceived importance to the executive's business and career success.

## Discussion

### Study 1: Vertical Dyads in Taiwan

Our overall conclusion from study 1 of 560 vertical dyads in a large life insurance company in Taiwan is that both a relational norm on education and *guanxi* seem to influence the subordinate's trust in the supervisor. We did not find a similarity-attraction effect on trust by any of the demographic factors. The findings provide some insight

**Table 6** Study 2: Means, Standard Deviations, Reliabilities, and Intercorrelations of Outcomes and Demographic Variables (N = 202)

Variable	Means	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Trust in connection	0.00	0.75	0.74													
2. Business importance	0.00	0.83	0.29**	0.89												
3. Age similarity	821.30	170.60	0.18*	-0.05	NA											
4. Education similarity	8.01	1.36	0.04	0.09	0.20**	NA										
5. Gender similarity	0.70	0.46	0.03	0.17*	-0.02	0.13	NA									
6. Relative (1 = yes, 0 = no)	0.04	0.20	0.28**	0.04	-0.11	0.04	-0.03	NA								
7. Same natal origin (1 = yes, 0 = no)	0.02	0.16	0.21**	0.07	0.07	-0.16*	-0.18*	-0.03	NA							
8. Former classmate (1 = yes, 0 = no)	0.11	0.31	0.53**	0.02	0.27**	0.07	0.05	-0.07	-0.06	NA						
9. Work (1 = yes, 0 = no)	0.83	0.38	-0.66**	-0.07	-0.20**	-0.01	0.05	-0.44**	-0.35**	-0.76**	NA					
10. Manager age	41.42	8.23	-0.02	0.03	0.27**	0.17*	0.03	-0.11	0.16*	0.06	-0.06	NA				
11. Manager education	2.05	0.60	-0.07	-0.15*	-0.26**	0.07	0.00	0.11	-0.12	0.00	-0.01	-0.56**	NA			
12. Manager gender (1 = m, 2 = f)	1.17	0.38	-0.07	-0.08	0.06	-0.10	-0.62**	0.04	0.10	-0.08	0.00	-0.01	-0.08	NA		
13. Connection age	43.35	9.40	0.01	0.03	-0.05	-0.04	-0.08	0.11	0.08	-0.03	-0.07	0.13	-0.10	0.05	NA	
14. Connection education	2.12	0.75	0.12	0.18*	0.00	0.02	0.06	0.00	0.14*	-0.08	0.01	0.11	-0.07	-0.06	-0.10	NA
15. Connection gender (1 = m, 2 = f)	1.15	0.36	-0.02	-0.22**	-0.03	-0.18**	-0.56**	-0.02	0.11	0.07	-0.10	-0.08	0.12	-0.09	0.04	-0.11

\* $p < 0.05$ ; \*\* $p < 0.01$  (two-tailed test); Cronbach alpha values for multiitem scales are on the diagonal.

**Table 7 Study 2: Effects of Relational Demography and Guanxi in Horizontal Dyads**

Independent Variables	Dependent Variable <sup>a</sup>	
	Trust ( $\beta$ )	Busines Importance ( $\beta$ )
Demographic Similarity		
Age	0.04 (0.06)	-0.12 (0.08)
Education	0.04 (0.06)	0.12 (0.08)
Gender	-0.14 (0.11)	-0.01 (0.14)
Guanxi		
Relative	0.33** (0.05)	0.04 (0.07)
Same Natal Origin	0.25** (0.06)	0.11 (0.07)
Classmate	0.58** (0.05)	0.08 (0.07)
Simple Demographics-Manager		
Age	-0.18** (0.07)	-0.14 (0.09)
Education	-0.16* (0.07)	-0.23** (0.09)
Gender	-0.17 (0.09)	-0.10 (0.12)
Simple Demographics-Connection		
Age	-0.01 (0.05)	0.04 (0.07)
Education	0.12* (0.05)	0.15* (0.07)
Gender	-0.15 (0.09)	-0.20 (0.12)
Overall R <sup>2</sup>	0.49	0.14
Adjusted R <sup>2</sup>	0.46	0.08
Overall Model F	15.43**	2.47**
Degrees of Freedom	12,189	12,189

<sup>a</sup>Number in parenthesis is standard error for beta coefficient.

\*  $p < 0.05$ .

\*\* $p < 0.01$ .

on the development of trust in the vertical dyad in the Chinese context, especially subordinates' trust of supervisors. *Guanxi* based on family connections or having been neighbors is important. Individuals with those

*guanxi* bases are perceived as in-group members and therefore accorded a high degree of trust. We also found support for the relational norm idea. Subordinates appeared to be most favorably disposed to supervisors who were better educated than themselves, and hence to have high trust in those supervisors. Such trust may be due to an inference of competence and legitimacy associated with educational level. The social status norm attached to educational level may be particularly strong in Taiwan. In reviewing the academic achievement of Chinese students, Stevenson and Lee (1996) noted that education and scholastic achievement are time-honored Chinese traditions. The national testing system for selecting civil servants was instituted nearly 1,500 years ago. Proficiency in a variety of subjects was required, with special emphasis on Confucian classics. The importance of scholarship persists in Chinese public service. For example, of the 39 current cabinet members in Taiwan, 27 hold a doctorate and four have a master's degree (Stevenson and Lee 1996, p. 133). In light of that cultural tradition, the importance of education difference (in a direction consistent with the relational norm) in the vertical dyad sample is not surprising.

Why are the relational norm and *guanxi* variables important for trust but not for other outcomes in the vertical dyad such as commitment? Two explanations are possible. First, the target of commitment we measured was the company, not the supervisor. Perhaps a subordinate can have high loyalty to a supervisor (which is included in the trust variable) but not to the company as a whole. Second, the commitment effect found in the previous relational demography studies was based on demographic differences between employees in a work unit, not just differences between the employee and the supervisor (Tsui et al. 1992). The commitment effect observed may be a result of social identification with others in the work

**Table 8 Study 2: Effects of Primary Guanxi on Trust and Business Importance in Horizontal Dyads**

Outcome Measures	Guanxi Bases								One-Way F value
	Relative (N = 9)		Former Classmate (N = 22)		Same Natal Origin (N = 5)		Work (N = 168)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Trust	0.95 <sup>a</sup>	0.77	1.12 <sup>a</sup>	0.55	0.96 <sup>a</sup>	0.63	-0.23 <sup>b</sup>	0.55	51.8*
Business importance	0.11	1.02	0.05	0.87	0.38	0.91	-0.03	0.82	0.49

<sup>a,b</sup>Means not sharing common superscripts differ significantly at the 0.05 level on Fisher's least significant difference test.

\*  $p < 0.01$ .

unit rather than with the supervisor. Future research using work unit demography would be useful to replicate in the Chinese context the commitment outcomes found in U.S. samples.

In our sample, male subordinates with male supervisors expressed lowest level of trust in their supervisor. That finding could be sample- or occupation-specific. The workforce was female-dominated, and most of the supervisors were female also. Therefore, social status and occupational success may be associated with female gender. As a result, male subordinates working for male supervisors may have been less satisfied than the others, which would account for their lower trust. Future research exploring the relational gender variable in different industries and different occupations would be desirable.

We found a similarity-attraction effect for education. Subordinates received higher performance ratings when they were similar to their supervisors in education. Why did we not observe a similarity-attraction effect for age and gender—demographic variables that are often found to be important in organizational demography research in the U.S. context? Our preliminary results suggest that similarity-attraction may indeed involve different factors in different cultures. They indicate that *guanxi*—particularistic ties—rather than personal demographic factors may be the primary bases for social identification in China.

In summary, in our female-dominated sample of insurance salespersons in Taiwan, we found some support for the importance of both relational norms (on education) and *guanxi* (based on kinship and being a former neighbor) for subordinates' trust in supervisors. Many studies in the United States have shown the importance of trust. In the vertical dyad literature, trust in the supervisor by the subordinate has been reported to be an essential element for building a high quality leader-member relationship (Dansereau et al. 1973). Recent studies have indicated the important role of trust in the supervisor in determining subordinate responses. For instance, Podsakoff et al. (1990) found the effects of leader behaviors on employee's citizenship behaviors to be mediated by followers' trust in their leaders. Similarly, Konovsky and Pugh (1994) found trust in supervisor to mediate the relationship between procedural fairness and employee citizenship behavior. Lawler (1971) had previously pointed out the vital role of trust in the supervisor in the successful implementation of any organizational reward programs. Further, low level of trust is said to be one of the first problems managers should tackle in designing effective performance appraisal programs (Bernardin and Beatty 1984). The writings cited affirm the importance of subordinate trust in the supervisor as a requirement for a

high quality relationship in the dyad. Our findings suggest some factors that may influence the development of trust in the vertical dyad in Taiwan.

We focused on subordinates' trust in the supervisor, and future research should examine whether such trust is mutual. Are supervisors likely have more trust in subordinates with whom they share particularistic ties or similar demographic profiles? In general, the trust variable has the promise of helping us understand the "black box" in demography research that Lawrence (1996) described.

### Study 2: Horizontal Dyads in Mainland China

Unlike the *guanxi* variables in study 1, which accounted for a relative small amount of variance in the outcomes, those in study 2 accounted for a substantial amount of variance (43%) in business executives' trust in their connections. Our findings suggest that being related, having been classmates in the past, and being of the same natal origin are particularly strong ties for business executives and their connections. Business associates with such ties are viewed as in-group members and are trusted more than connections without them, such as those known through the course of work. Our results confirm the importance of direct particularistic ties as bases of *guanxi* (Jacobs 1980), especially for trust between individuals.

Although trust is found to be strongly correlated with *guanxi*, perceived business importance is not, contrary to our expectations. One possible reason is "the strength of weak ties" argument put forth by Granovetter (1973) more than two decades ago. He interviewed men about how they found their current jobs and included sociometric items asking for the names of close contacts. The results showed that job leads often came from distant contacts. As Burt (1992) has convincingly argued, the strength of weak ties lies in their function as a bridge between otherwise disconnected social clusters. The information flows that go through weak ties may not be as voluminous or reliable as those that go through strong ties, but are valuable nevertheless because of their non-redundancy and ability to integrate otherwise disconnected social clusters into a more coherent whole.

Another reason is that the connections included in our study were all important, so there was relatively little variance in the importance variable. In the interviews, we asked the executives to identify connections who were important to their businesses and their careers. We did not ask them to select connections on the basis of trust. Hence, all of the connections may have been important, but not all of them were equally trusted by the executives. Future research should explore other characteristics of connections (including their social and economic status and other personal factors) as predictors of business importance.

From the simple demography results in Table 7, we found the educational level of the connection to influence the executives' perception of the connection's importance. Perhaps education is a form of human capital implying greater knowledge and access to technical information, which are important in the growing market economy of mainland China. Also, connections with more education might occupy more important and higher level positions in government agencies that control resources and information needed by the executives. The connections were perceived to be more important by business executives with less education than by executives with more education. Again, the importance of education in the Chinese social cultural setting is underscored (Stevenson and Lee 1996). Interestingly, the educational level of the executive and of the connection, rather than their relational similarity or difference, is what influenced perceptions. In other words, a highly educated connection was valued by executives with any level of education. Similarly, a less educated executive tended to perceive connections to be important regardless of the connections' actual educational level.

None of the gender variables (simple or relational) were related to the dependent variables. We examined the gender composition of the connections for both the male and the female executives and found that most of the connections were male for both groups. That finding is consistent with Ibarra's (1992) observation that the instrumental networks of both men and women are composed predominantly of men.

### Summary

We conducted two studies, using two very different samples (sales personnel and their supervisors in one and executives and their business connections) in the other in two different Chinese contexts (Taiwan and mainland China) to test the influence of relational demography and *guanxi*. Despite the sample differences, we found *guanxi* based on particularistic ties to be important in both samples, and especially for business executives in China. We found some evidence that relational norms based on education may be important for trust in the vertical dyad, but did not find the effect in lateral relations. We did not find an attraction effect based on age or gender in either sample. Our results in total suggest the possibility of different bases of attraction and social identification in the Chinese and U.S. contexts.

One possible reason for the generally weaker findings on the *guanxi* variables in study 1 than in study 2 is the lack of variance on those factors in study 1. In that sample, less than 5% of the dyads answered "yes" to any of the eight *guanxi* variables. Therefore, that sample provided a very conservative test of the *guanxi* hypothesis.

Why was *guanxi* more prevalent in study 2 than in study 1? Two explanations are possible. One is the difference in the work performed by the two samples. The sample in study 1 consisted of salespersons in a large life insurance company whose high pressure occupation demands short-term, unambiguous performance outcomes. In such a context, there is little opportunity or need to use *guanxi* in selecting personnel. The interpersonal relationship between the supervisor and the subordinate is not relevant to good sales performance by the subordinate. The sample in study 2 occupied positions that involved a high level of task complexity and ambiguous performance outcomes. In a relation-centered world, personal trust is particularly important under such circumstances. Therefore, executives are likely to rely on *guanxi* to select key business associates. As Tsui and Farh (1997) suggested, *guanxi* may be most pervasive in the inner power circle of large companies where task complexity is high and performance outcomes are ill-defined. A second and related explanation is the difference between vertical and lateral relationships. In the supervisor-subordinate dyad, the relation is formal and subordinates may be assigned to the supervisor (or supervisors may be restricted in which subordinate they can hire). In contrast, the lateral relations of executives are informal and executives are more free to choose the persons they want to use in business activities. In other words, *guanxi* is more prevalent in lateral relations perhaps because people largely can choose their horizontal relationships whereas the choice of vertical relationships is more constrained.

Both explanations suggest that *guanxi* may play an important role in the choice of a relationship, and that the choice may subsequently affect the dynamic (i.e., mutual trust) in a relationship. Subordinates may trust their *guanxi*-based bosses more because those bosses may have gotten them their jobs. Executives may trust their *guanxi*-based associates more because those associates have provided them valuable help. In both cases *guanxi* generates expressions of trust because the subordinates "owe" their bosses their jobs or because the executives "owe" their associates their success, not necessarily because of friendship or role obligation due to particularistic ties between the two individuals. Future research to isolate the effects of *guanxi* due to choice and *guanxi* due to role obligation or friendship would be interesting and desirable.

One interesting commonality in the *guanxi* results from the two studies is the importance of kinship ties for both the vertical and the horizontal dyads. That finding confirms the importance of the family for individuals in Chinese society, both in the relatively well developed economy of Taiwan and in the emerging economy of mainland China. The importance is carried over into the business

setting. The implication is that although family connections may be replaced by institutional rules for employment decisions, kinship is still an important source of identity and therefore individuals related to oneself are trusted more than others with whom one is not related. Interestingly, relative age is not significant in either sample, suggesting that age is not a factor for similarity-attraction in the Chinese cultural context. Given the "respect the elder" cultural norm and the changes in values in modern China (exemplified in Taiwan and Hong Kong), research on the meaning of age and age norms (Lawrence 1987) in Chinese employment settings would be interesting and useful.

## Conclusion

We performed a preliminary test on the effect of relational demography and *guanxi* on work relationships (e.g., trust) and outcomes (e.g., performance) in both vertical and horizontal dyads in the Chinese contexts. The results do not replicate the attraction effect based on demographic similarity found in studies with U.S. samples. *Guanxi* based on several direct particularistic ties was important for trust, however. The strong results for *guanxi* between business executives and their connections in study 2 suggest the possibility that the "old boy network" may be present and important in all cultures.

The results in total suggest that there may be different bases for similarity-attraction and social identification in the Western and the Eastern contexts. Kinship, neighbor, and hometown variables are important in China. However, the relevance of those particular factors in the West is both a theoretical and an empirical question that warrants further research. Further, as our study focused on the dyad, extension into a network of relationships based on *guanxi* would be worthwhile. The idea of *guanxi* could be explored at the organizational level as well. A Chief Executive Officer's network of connections (based on *guanxi* or relational demography) may have important implications for the success of his or her organization. Exploration of those ideas in different cultural contexts would be particularly valuable for generating useful knowledge on a global scale.

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