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Aaltio, I., & Huang, J. (2018). The guanxi ties of managers in mainland China: a critical analysis based on gender. Gender in Management: An International Journal, 33(7), 577-599. https://doi.org/10.1108/gm-01-2018-0006 The *guanxi* ties of managers in Mainland China – a critical analysis based on gender

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Abstract

Inadequate social networks are often seen as an explanation of the under representation of women in management. Networks contain culture-specific features, as in China where the term *guanxi* is used, defined as a shared common identification held by two or more individuals (Jacobs, 1979). In several studies guanxi has been found to relate positively to success at work both for the individual and the organization, but little is known about it from gender and career perspectives. Referring especially to the earlier studies by Chow and Ng (2004), this paper addresses the meaning of guanxi networks for top women IT managers in mainland China. Using a questionnaire and in-depth interviews we gathered data on the guanxi networks of women IT managers in mainland China. We used interpretive analysis and found that: (1) there is a significant effect of female-to-male dyads concerning power and work-related guanxi bases, such as influence, (2) there is a significant effect of female-to-female dyads concerning questions of private life and crisis, and 3) women IT managers have a relatively limited guanxi base. Our findings support Ibarra's (1993) suggestion that a common strategy for women is to use and develop a functionally differentiated network. Based on findings we further suggest that in building a successful managerial career, women managers in China need to reflect their gender, be gender-sensitive in building up their networks, and stay incorporated at the core networks in the organization whatever gender they represent. We also suggest that because networks are dependent on culturally bound definitions (like guanxi), even the guanxi practices may vary locally in different parts of China.

Introduction

China is a rapidly developing emerging economy with world-wide economic and political influence. In China, manufacturing is nowadays often compensated for by higher technology and professional services, which requires employees with high level skills, well-developed

managerial and leadership capacities together with a global mindset in many business sectors (Cooke *et al.*, 2016). The growing investment level and competitive labor markets provide careers opportunities, often international, also for women (Berik, Dong and Summerfield, 2007). However, the reforms and social changes in China can still be understood in the context of paradoxes in 'people-management', including Western and Eastern oppositions (Warner, 2011, 2009) and the need to underpin HRM with social reality in China exists (Warner, 2011). Within China, some weakening of working conditions has also been reported like growing income insecurity (Berik *et al.*, 2007).

The segregation of work between women and men, and the under representation of women in management has been widely documented in Western literature, and research on China has documented similar tendencies (Liu, 2013, Cooke, 2004). This tendency even exists in non-traditional occupations like information technology (IT) (Kaplan and Niederman, 2006; Trauth, 2006). Summing up several studies, Cho *et al.* (2015, p. 409) discuss the difficulty in assembling unequivocal knowledge in this field. The definitions of management, top management and leading position vary globally. Studies on women management show the importance of family relations in rising to the CEO position: most of these women managers in China are either the founder of the company or have inherited it from powerful fathers. Furthermore, there are fewer women in state owned, large companies, and more in private, foreign-owned and joint venture companies. Women's participation on local grass-root political organizations is scarce and, it has been reported discrimination in employment practices like recruiting, promotion and job assignment (Bidwell *et al.*, 2013).

Researchers have pointed out that inadequate social networks are a hurdle to career success for women (Kaplan and Niederman, 2006; Powell, 2000). However, socializing in general and ways of networking contain habits that are culturally inherited and may not be globally similar. In a larger context, religion and value systems, such as Confucianism in Asia (not only in China) have an impact on social traditions and norms. They are learnt in the family as effective ways of networking and socializing, and used later in working life.

Confucianism is deeply rooted in the Chinese value system, and according to it hierarchy, seniority (Warner, 2011) and relationalism are emphasized in social relations. These values include *guanxi*, a Chinese way of building connection and using networks (Yang, 1994). Widely researched in management studies, the potential benefits from developing and using *guanxi* networks in working life are generally known, whereas research that has explored *guanxi* from the perspective of gender and career are limited (Huang and Aaltio, 2014, Aaltio and Huang, 2008). In one empirical study, Chow and Ng (2004) focused on the personal (*guanxi*) ties of Hong Kong managers and reported that the effect of gender on the closeness of relationships was asymmetrical, with female-to-female dyads being close and male-to-male dyads being distant. However, since Chinese from different geographical areas hold different cultural values (Bond, 1999), and furthermore, that the participants in the study were mostly married male managers in Hong Kong and widely exposed to western cultures, the study results are probably not representative of *guanxi* practices in mainland China. The demographic changes nowadays include movement into urban areas and big cities from countryside, which also have impact on *guanxi*.

In building up one's career, access to valuable informal mentoring using network relations is of considerable importance. In addition to the glass ceiling concept, meaning the barriers for women to enter high managerial positions (Powell, 2000), the "glass cliff" (Ryan and Haslam, 2007) refers to the phenomenon that women are more likely to be appointed to leadership positions that are associated with an increased risk of criticism and failure (Ragins and Cotton, 1999; Ryan and Haslam, 2007). In particular, the structure and enactment of women's networks is of value in order to avoid the risk of the "cliff". Research has also found that overall women have fewer non-kin ties, while men include also more co-workers in their networks (Wellman *et al.*, 2001). The defective networks may be a disadvantage both from the glass ceiling and, glass cliff perspective for women managers in China.

In this empirical study we focus on the *guanxi* networks of Chinese Information Technology (IT) -female managers, using gender as an analytical tool. We understand that *guanxi*-based behavior may lead to organizational practices that meet the gender of women and men differently. Based on the empirical study by Chow and Ng (2004), who explored *guanxi* among managers (66 %

male) in the Hong Kong area with a preliminary gender analysis, this paper addresses the effect of *guanxi* networks on the career trajectories of women managers in the IT industry in mainland China. We especially focus on the characteristics of the *guanxi* networks for these women, especially the composition and structure of their *guanxi* networks. Social network analysis can help in identifying different aspects of *guanxi* more precisely while also providing techniques for studying them (Burt, 1992; Lin, 2001; Wellman *et al.*, 2001). We also discuss the nature of *guanxi* for women managers in the context of current Mainland China and how these networks probably support or hinder their career advancement, as well as the HRM practices related to them.

Conceptual Background and Literature Review

Nature of guanxi

In the Chinese language, *guanxi* has several meanings even though it is based in human interaction and contact, which is permanent and informal by nature (Xin and Pearce, 1996). It is defined as a shared common identification held by two or more individuals (see Jacobs, 1979). Although *guanxi* can be loosely translated as "connection", "social networking" or "special interpersonal relationship", *guanxi* is different from social networking in western societies (for more detail, see Hackley and Dong, 2001, Huang and Aaltio, 2014), being reciprocal with emotional activity (Bedford, 2011), whereas western network is more universal and abstract by definition. It is understood that in Chinese culture to establish the right *guanxi* and to be included in the in-group is necessary for a successful career and business survival. As discussed by Bedford (2011), *guanxi* is a complex social construct with elements of trust and mutual obligation between people. It serves many elements that are relevant in business communication and interaction between people today, combination of perceived "ability and sincerity" (Zhai *et al*, 2013, p. 543). Understanding and utilizing *guanxi* presents a challenge for western firms in China (Li and Wright, 2000).

In this paper, *guanxi* is defined as a network of ties and is analyzed as multi-personal networks, even though it is established via dyadic, person-to-person connections. Scholars argue that social network analysis can help to identify different aspects of *guanxi* more precisely and provide

techniques for studying it (Burt, 1992; Lin, 2001; Wellman et al., 2001). For example, Wellman et al. (2001) suggest three basic issues that arise when unbundling guanxi and analyzing the specific types of supportive relationships, including: (1) what kinds of guanxi are often conveyed in the same ties; (2) what types of dyadic, interpersonal relationships tend to provide what kinds of guanxi; and (3) what sorts of network structures tend to provide what kinds of guanxi? This provides important logical support and inspiration for the current study. We will discuss these respectively in the following sections.

The basis of guanxi composition and network ties

The rules of *guanxi* are taught from a young age (Ho and Redfern, 2010) and are part of Chinese cultural heritage and national characteristics, related to Confucianism. Many principles of *guanxi* are based on such rules as helping those in need or putting family needs first. *Guanxi* is based implicitly on mutual interests and benefits (Yang 1994), such as respect towards seniors coupled with respect from juniors or the soliciting and giving of favors explicitly or implicitly (Wong and Slater, 2002), which refers to the respect for elders that common in Asian values overall. Individual rights in the Chinese context are not universal but *guanxi*-specific and particularistic, and they bind a person to the external context of where she or he lives; that is, "no tie, no obligation, and no rights" (Lee and Dawes 2005, p. 29).

Studies of *guanxi* show several classifications concerning its essential components, based on interaction frequency, aims and its meaning for the partner(s). In general, *guanxi* has many subsets like the reference to close, distant and moderate *guanxi*, and the differentiation of inner and outer social circles (Chen and Chen, 2006). According to Fei (1992, p. 25–33), Chinese society is organized in concentric *guanxi* circles, extending outward from the family (the core) to relatives, friends and business colleagues. These *guanxi* circles comprise the basis of each individual's *guanxi* (Jacobs, 1979). The core of Chinese values is differentiated attitudes toward parents, children, siblings, kinsmen and friends, which Fei (1992) calls the "differentiated mode of association." Yang (1994) categorizes interpersonal relationships (*guanxi* bases) in China into three groups: (1) between family members; (2) between familiar people, such as neighbors, friends, classmates and colleagues; and (3) between strangers or mere acquaintances. This

classification is consistent with that of Hwang (1987), who argues that the relationships with family members primarily consist of expressive ties, with strangers' instrumental ties, and with familiar people with mixed ties. Instrumental ties are unstable and temporary, impersonal and utilitarian, based on the norm of equity (resource allocation based on contribution) (Hwang 1987). Mixed ties are in between, and are somewhat permanent and stable, such as those between friends, within one's hometown, the same area, and the same school. A mixed tie relationship is not as close as a family relationship (expressive ties), where *ganqing* (Bedford, 2011) or a special emotional attachment exists between exchanging parties.

Concerning *guanxi*'s nature as a Chinese social-networking concept (Bu and Roy, 2005), the bases of it can also be categorized as power ties (i.e. the ego's supervisor, who through his or her position of authority may determine whether or not the ego receives a promotion), workflow ties (the ego's colleague who works as a team member with the ego is an example of a workflow tie), strategic information ties (refer to links with whom the ego relies on for information, guidance and coaching), and social support ties (e.g. a friend or family member of the ego offers constant encouragement) (Ibarra, 1993). Power and workflow ties are primarily position-centered and are unlikely to be maintained or are of limited value after the ego or the alter shifts positions, while strategic information and social support ties are person-centered and are based more on interpersonal attraction and trust (Bu and Roy, 2005).

Social resource theorists (e.g. Lin et al., 1981; Burt, 1992) argue that the content of the tie, which determines the nature of the resources embedded within a network, is the most important determinant of competitive advantage. The value and importance of a tie rests in the type of resources it may provide and the extent to which such resources fulfil the focal person's or ego's objectives. By analyzing work-related ties previously identified in the organizational and career literature, Podolny and Baron (1997) revealed that a work-related tie, depending on the extent to which it is position versus person centered, (i.e. induced by firm structure versus interpersonal attraction and trust), and resources versus organizational identity based, (i.e. a conduit of task-related information and resources versus a means of transmitting role expectations and a sense of belonging), may be categorized as a power, workflow, strategic information, or social support tie.

One study of supervisor-subordinate *guanxi* suggests that there are positive and ethical features of *guanxi* as well as unethical and negative features (Han and Altman, 2009). The positive side involves the reciprocal exchange of perceived positive attributes; the negative involves unfairness and supervisor-targeted impression management such as pseudo-loyalty (Dunfee and Warren, 2004; Hackley and Dong, 2001). It has been pointed out possible negative effects of close *guanxi*, connections and their negative externalities at the organizational level (Chen and Chen, 2004; Bedford, 2011). Among the negative effects of *guanxi* practices can be as found by Chen and Chen (2004) cases of favoring that is felt unfair. It is mentioned an effect of *guanxi* on intentions to knowledge sharing, even in cases where it would be beneficial for organizational development (Zhai *et al.* 2013). According to *guanxi*, managers should endeavor to create and maintain good relationships and a harmonious atmosphere in the work place with 'face', which means to maintain recognition and respect from others (Zhai *et al.* 2013). Fostering a knowledge-sharing culture based on good relationships is useful. Overall, organizations may also suffer from maintaining harmony and 'face' instead of solving possible problems.

Among the positive consequences of *guanxi*, is that it provides the means to limit transaction costs, helps individuals gain access to scarce resources, and facilitates strategy implementation (Zhang and Zhang, 2006). Zhai *et al.* (2013) refer also to the possibility of supervisors increase the bi-directional communication between themselves and their subordinates, which would improve *guanxi* between them and increase job satisfaction. Overall, it is difficult to end up with a simple summary of the negative or positive outcomes of *guanxi* (Fan, 2002) and the studies that consider gender in using it are limited also in this sense.

Networking and managerial careers for women

Within organizational research, there is a classical distinction between formal and informal networks (Ibarra, 1993). A formal network refers to a 'set' of individuals with formally specified relationships between supervisors and their subordinates or between colleagues. By contrast, informal networks involve interactive behaviors between individuals whose relationships are more likely to be the result of their own choice, and which may be formed to accomplish work

related tasks or to provide social benefits, or both. Researchers have argued that informal networks are even more important than formal ones (e.g. Burt, 1992).

Bu and Roy (2005) provided a comprehensive framework that captured all types of content in ties that comprise a career success network (CSN), which is a subset of a manager's entire social network (Burt, 1992) that consists of the ties that the manager (i.e. the ego) considers important to his or her job/career success. The results indicated that most of the CSN ties formed by both male and female managers are with men, especially power ties. Professional women are still less integrated into important organizational male networks, which consist of individuals who hold power in the organization. Exclusion from these networks can also perpetuate male customs, traditions and negative attitudes towards women within organizations.

By extending the metaphor of the glass ceiling and the glass elevator (Williams, 1992), Ryan and Haslam (2005, 2007) insist that women without proper networks are more likely than men to find themselves on a "glass cliff" such that their positions of leadership are associated with greater risk of failure. According to Ryan and Haslam (2007), the phenomenon of the "glass cliff" is consistent with previous work, particularly on mentoring (Ragins, 1989; Kaplan and Niederman, 2006), that suggests that the career trajectories of women in organizations differ from those of men because: (1) their patterns of organizational and extra-organizational identification are often different from those of men (Lobel and St. Clair, 1992), and (2) they often lack the opposite sex homosocial (meaning a tendency to prefer members of one's own sex in a network) support networks, infrastructure, and resources that are provided to males both as they ascend the corporate ladder and once they assume the mantle of leadership (Higgins and Kram, 2001; Ragins, Cotton and Miller, 2000). Identity-based support networks might cushion potential cliff falls for female leaders (see Haslam and Reicher, 2006).

Eastern ways of networking offer a context that is based on somewhat different cultural practices compared to China (Huang and Aaltio, 2014). For instance, employees in China may expect a harmonious relationship with their leader accepting a directive leadership style. Furthermore, the *guanxi* based reciprocity may result in a process where the employee, after feeling they benefit from the leader, will try to reciprocate by offering a favor in return (discussed by Nie and Lämsä,

2015). This may become part of the leader-subordinate network and communication practice that in the case of *guanxi* is based on reciprocity and based on trust between the partners.

Networks in general offer many benefits for female managers. However, the benefits are dependent on the strength of the relationships, the extent of the connections or reachability of other contacts, and the degree to which these connections are motivated by and willing to provide goodwill and cooperation (Suseno, 2008). As found by Wang *et al.* (2012), *guanxi* mediates between trust and knowledge sharing and is helpful in building up social capital. Also *guanxi* has been found to be positively connected to high-performance work systems in China (Xian *et al.*, 2017). It seems that overall, the use of *guanxi* networks at work results in positive consequences both at the organizational and individual level. Using the family ties and parental emotional support was found to be a protective factor for exhaust at work for the studied group of people (Lu *et al.*, 2000), as also found at the study of double-career couples (Känsälä *et al.*, 2015.

Composition and structure of women's networks

Overall, composition and structure are basic elements of a network. According to Wellman *et al.* (2001), "social network researchers look at the composition of networks (e.g. network size, network heterogeneity, mean frequency of contact) and the structure of these networks (e.g. density of links among alters)". The literature analyzing networks supports the idea that the size and heterogeneity of a network (its "range") affects its members' access to resources (Burt, 1992; Haines and Hurlbert, 1992; Ibarra, 1993, 1997). Heterogeneous networks that have a variety of network members with different characteristics and networks with more socioeconomic resources can better mobilize supportive network capital (Lin, 2001). Structuralists have also argued that the sex composition of groups and organizations constrains the extent of network contact between men and women co-workers (Blau, 1977). Women's exclusion from the formal network structure in an organization has negatively affected their advancement within the corporate environment and participation on corporate boards. If women are also excluded from informal networks, they consequently lack access to real-time information via the grapevine (Handley, 1994).

Organizational studies of *guanxi* networks have focused on supervisor-subordinate relations (Zhang and Deng, 2016; Nie and Lämsä, 2015) even though it is originally a much broader concept. The study by Zhai *et al.* (2013) found that especially workplace supervisor-subordinate *guanxi* had a positive effect on job satisfaction, while co-worker *guanxi* was not as significantly related to it. The research suggests that in a high power distance country like China the relationships between the leaders and the led are of special meaning for affectivity and well-being at the workplace.

Gender has seldom been part of analyses in *guanxi* research. Chow and Ng (2004) found that the effect of gender on the closeness of *guanxi* relationships is asymmetrical with female-to-female dyads being close and male-to-male dyads being distant. The majority of the participants in the study were, however, married male managers, who have been widely exposed to western cultures, and the study results are probably not illustrative of women managers' *guanxi* in mainland China. This research does not discuss the meaning of family ties, which in China have special characteristics and an individual has an ethical obligation to satisfy the needs of family members (discussed by Bedford, 2011).

Our study is an empirical investigation concerning the characteristics of the *guanxi* bases (composition and structure) of Chinese women managers, and our inquiry explores:

- 1) What is the nature of *guanxi* networks among Chinese women managers?
- 2) Are the *guanxi* networks of Chinese women managers gendered concerning work and life networks?
- 3) What is the quality and meaning of women's *guanxi* networks in the context of Chinese society (Mainland China) and from a career point of view?

As argued by Zhai *et al.* (2013), in addition to understanding the *guanxi* basis, which is more about dividing and classifying *guanxi* the ties, there is an approach that searches the *guanxi* quality. This means the dynamics, and elasticity of interpersonal *guanxi* relationships. In this empirical investigation we study *guanxi* using particularly the approach of *guanxi* basis, but also quality approach is used in the way that we aim to understand its dynamics and meaning for the studied women's careers and networks.

Data and methods

In this study it is used a methodological approach that combines both a questionnaire and face-to-face interviews. The interviews were used because we accept that concepts concerning network building might be culture dependent and need discussion and definitions, and we used a questionnaire because we needed some quantitative data to build up the network structures for composition comparison. Both methods were based on earlier studies concerning the *guanxi* networks. This dual approach therefore was meant to increase both the validity (the conceptual clarifications) and the reliability of the study using triangulation. The interview data could also be used to some extent independently, describing the experiences and feelings expressed by the participants of the study; that is, to study *guanxi* from a qualitative perspective (Zhai *et al.*, 2013).

Sampling

To explore the composition of *guanxi* networks and their gendered nature, we collected data from 21 women IT managers in southern China, which is the first area opening up to internationalization and is known for having a well-developed economy. In this study, a manager is defined as a person who plans, organizes, motivates, directs and controls in the organization with at least one subordinate. Data collection included face-to-face interviews and a questionnaire.

As sometimes encountered in an emerging society such as China, data collection can be a difficult task. Asking questions in any form may be viewed with suspicion (Wright and Hoa, 2001), especially in an industry with fierce competition like IT. We adopted a simplified name-eliciting method that allowed the participants and their associates to remain anonymous. This is very important also for the individual interviewed people and helps the participants to dispel their suspicions. In addition, there can be problems with commitment to the study among such an 'elite' group because women in managerial positions in the IT industry are few and all have a busy schedule. To surmount these difficulties and in order to find motivated interviewees suitable for the study, the 'snowball' method (Singleton and Straits, 1999) was used. A senior editor of an "IT Column" from a popular newspaper in southern China introduced the first author, a native

Chinese who conducted the data collection, to the would-be participants who were women managers from IT companies in the region. Then, each participant was asked to introduce one or two female counterparts in the field. The language used in the interviews and questionnaires was Mandarin.

The demographic characteristics of the participants are presented in **Table 1.** For the 11 married participants, 6 of them have one child, and among the others, one claimed not to have had a baby. The majority of the participants have university degrees, with 33.4% holding master degrees or higher. The median age is between 31 and 40 years old. The hierarchical positions of the 21 participants include one CEO, five at one level down from CEO, and fifteen department managers.

INSERT TABLE 1 ABOUT HERE

Questionnaire

As the literature analyzing networks posits that individuals in a network usually interact on the following content: advice, information, influence, socializing and crisis (Ibarra, 1997), we designed our questionnaire based on these five situations to explore the composition and structure of women managers' core discussion *guanxi* networks. As previous results indicate that 95 percent of people report fewer than five individuals in their (core discussion) network (Marsden, 1987), the participants were asked to identify up to five associates they interacted with in each of the following content areas: (1) 'from whom you seek advice on a decision you have to make', (2) 'from whom you seek information on what is going on in the organization', (3) 'from whom you seek help when you want to influence the outcome of an important decision at work', (4) 'from whom you seek help in times of (personal) crisis', and (5) 'whom you socialize with outside work'. We adopted a simplified name-eliciting method that allowed the associates to remain anonymous (Marsden, 1987), and to facilitate trust and reliability among participants of the study. Out of the five network content areas, it is possible to seek favors from the first three (advice, information, and influence), which are more work-related, and from the last two (crisis and socialization), which are more life-related.

However, work and life are not always separated but overlap. From a cost perspective, both 'advice' and 'information' can be considered to have similar values. However, 'influence' requires the favor granter to do more than conversing with the recipient and the favor granter should show his/her power, professional expertise or rich experience as having influence (Chow and Ng, 2004), which comes close to life relations. Therefore, the content of the 'influence' network belongs to power-related ties. Similarly, help during a 'crisis' situation suggests a level of deep involvement and trust, be it at work or in private life. Unlike Chow and Ng (2004), we did not exclude the 'socialize' content from the analysis because in the contemporary information society, one cannot live alone without 'socializing', especially in terms of the work-life balance. To 'socialize' is also important in today's information society with expectations of well-being also at work.

Concerning the design of the questionnaire, five Chinese participants commented that it takes time to finish the questionnaire. However, no invalid questionnaires were found in the sample.

Interviews

Face-to-face interviews allowed ample opportunity for the participants to elaborate on their responses to items included in the questionnaire, and their perspectives on their *guanxi* bases. The interviews were recorded and ranged between 35 and 60 minutes, with the majority taking about 45 minutes. The face-to-face interviews were conducted at various sites chosen by the interviewees: offices, meeting rooms, coffee bars and similar in mainland China.

The interviews were based on semi-structured questions concerning open questions on 1) the individual work history and life story of the participant, 2) the composition and structure of the social network of the interviewed women managers, as well as 3) their experiences of using them. Questions concerning the use of social networks were about them seeking either advice, information, influence, or help in a crisis situation, and socializing outside work. The language used in the interviews was Chinese (or Mandarin), but many of the interviewees also used some English. This way of gathering data gave the researcher the opportunity to observe the facial expressions and body language of the interviewees, which on some occasions helped in

interpreting the factors that emerged in the statistical analysis. The interview recordings were transcribed in detail after the event. Based on the fieldwork, the transcription of the Chinese participants' interviews from Chinese to English was done using English language experts (They were all unaware of the purpose of the research).

Definition of guanxi associates

Data concerning guanxi associates was constructed using both the results from the interviews and from the questionnaire. We divided the associates into 10 categories: classmates, supervisors, colleagues, subordinates, male family members (father, brother or uncle), female family members (mother, sister or aunt), husband, friends, family friends and relatives. Because the roles of supervisors, colleagues, and subordinates are different in different network contents, summarizing them as coworkers is too simplified. Family members were categorized as male family members and female family members so that we can investigate if there is a gender effect related to guanxi content areas. 'Husband' was excluded from family members so that the role of marriage for these women's networks can be viewed separately. From the interviews, we found that a classmate is defined as a member studying together with the ego at a school, college or adult learning institution (e.g. training program; this is why some of the classmates are younger than the participants). Friend is defined as someone "with whom one has a bond of mutual affection, typically one exclusive of sexual or family relations" (cf. Oxford English Dictionary on line, https://en.oxforddictionaries.com/definition/friend, accessed 18 April 2018), joined to another in mutual benevolence and intimacy. Family friends refer to the friends of the participant's family. Relatives are those who are connected with the participants by indirect blood or affinity ties. From the interviews, we found that the participants' definition of relative is different from that of the above, in which the brothers and sisters of the participants' fathers are considered family members. To some degree, this reflects the patriarchal (gendered) nature of traditional Chinese culture.

For each associate identified, the participant was asked about the associate's demographic and work characteristics, including age, gender, education, marital status and occupation. Based on the study design, the maximum number of associates in a participant's network was limited to 25.

However, because an associate can be named in several networks, the actual number of associates in a participant's list is less than 25.

Findings

Questionnaire: The characteristics of the associates are presented in **Table 1**. A total of 190 associates were identified through an average network size of about 9 individuals. This is less than the average of 14 individuals in Chow and Ng's study (2004). We excluded the occupation of the associates from the analysis as this is fragmented. However, it is interesting that some of the participants' husbands also hold a position in the IT field or related fields. The profile of the associates indicates: (1) the number of male associates is almost the same as that of female associates, (2) the majority of the associates are between 31–40 and over 45-year-old, showing that the associates are mostly in the same age group as the participants or older, and (3) the majority of the associates are married and hold university degrees. The study findings are presented now based on the questionnaire and the interview data.

Table 2 shows the characteristics of the *guanxi* bases regarding network content. We used a *Chisquare* analysis to examine the frequency of interaction between the actors. Based on the above literature review, we assume that the more frequent the interaction between the participant and her associates, the more important her associates are in her *guanxi* network. For the 10 categories of *guanxi* bases, the largest is classmate, followed by supervisor, colleague, friend, female family member, male family member, subordinate, husband, family friend and relative. Statistical analysis indicates that the role of classmate is significant for socializing (p<.05), while supervisor is significant for influence (p<.01), and female family members for crisis (p<.01) situations.

INSERT TABLE 2 ABOUT HERE

The characteristics of the associates regarding network content areas are in **Table 3**, which highlights some interesting figures. (1) For the five network content areas, males are the majority in the 'influence' network (71.6%). (2) The majority of associates in 'influence' and in 'crisis' are over 45 years old, which implies the Confucian tradition of 'respect for elders'. Older

individuals, by virtue of their rich experience and wisdom (intellectual capital vs. tacit knowledge), are to be trusted and listened to. (3) Associates who are over 45 years old are important for the participants regarding the five network content areas except for 'socialize'. (4) The majority of associates in "socialize" are in the same age range as the participants.

INSERT TABLE 3 ABOUT HERE

Table 4 is about the characteristics of *guanxi* bases regarding demography, where we can see: (1) The majority of 'classmates' are 30 or less than 30 years old while they cover five age periods. As stated above, this implies most of the classmates are from the same training (education) program, where the participants are receiving on-job training, indicating that the lifelong learning idea has been launched in China, especially in the IT industry. (2) The majority of the 'supervisors' are more than 45 years old and are male, indicating the patriarchal and hierarchical managerial model even in a new industry like IT. (3) The majority of the 'subordinates' are younger than the participants and are male. (4) The majority of the 'family members' are over 45 years old, indicating the result of the Family-Planning Policy and the core family structure in China. (5) The characteristics for 'husbands' show some tendency towards marriage in China: Couples being similar in education level and age or husbands being older and holding higher education degrees than their wives. These are 'matched' marriages in China, with a similar nature as 'dual-career couples' (Känsälä *et al.*, 2014) in western studies. (6) The majority of 'friends' are around 31–35 years old and are female.

Overall, the findings document a certain *guanxi* profile for Chinese women managers, with the following characteristics: (1) there is a significant effect of female-to-male dyads concerning power- and work-related *guanxi* bases, such as 'influence', (2) there is a significant effect of female-to-female dyads concerning questions of 'private life' and 'crisis', and 3) women IT managers have a relatively limited *guanxi* base, and 4) *guanxi* networks for women managers in China are gender segregated.

INSERT TABLE 4 ABOUT HERE

Interview data analysis: The meaning of the interviews was to facilitate triangulation between the findings and therefore increase the depth of insight and reliability of the study. It also had some independent role in promoting issues related to *guanxi* quality (Zhai *et al.*, 2013) that both reinforced and complemented the findings presented earlier. Mostly, the interviews dealt with professional networks, their meaning, composition and critical issues accompanying them.

The interviews indicated that the women managers viewed gender in the network as being an important issue that they had to reflect upon and make decisions about in their daily work. They were able to discuss the separate significance of female and male participants in their networks as well. They often emphasized that it was easy to communicate with the female members of their organization, even if there were few of them in management positions. and often their number was told to be scarce when it comes to management positions. It looked as if this "network gender sensitivity" was one tool for their work, which means that whether the network was built up with mostly women or men was important to them. They often saw their female superiors and colleagues even as a kind of role model and a source of learning and professional development. The interviewed women also said that they were careful not to develop segregated female networks without male participants, and to exhibit capacity that is not-related to their gender. This can be interpreted at least in two ways: 1) Having mostly female participants in their network was probably seen as unreliable at the organization, and 2) The strategic potential for their career advancement and profession was at higher levels of hierarchy, where more male partners were employed. The socializing aspect of friendships was also emphasized in relation to female partners at the organization, regardless of their position, rather than with male colleagues.

[&]quot;I have been working with my female colleagues and subordinates. But I try not to specifically network with them because I need to show them my ability as a leader."

[&]quot;There are very few women in my company. I network with women more for friendship (expressive) than professional purposes."

[&]quot;I found it very helpful to network with female managers (at the same level as me or higher) because I can learn a lot of management techniques from them (women as role model)."

The women managers were also conscious of the strategic meaning of their network partners, be they male or female. As was expressed in one of the interviews: "I do network strategically. For example, in order to finish the current project, I develop the network contacts I need. After that, I don't even talk to them". Developing trusted professional relationships with colleagues and being able to show loyalty and reciprocity on a long-term basis was also seen as important. The search for a kind of professional guanxi can be seen in one quote: "In China we say, 'who you know (guanxi) is more important than what you know (knowledge)'. I try to develop long-term relationships with some people with potential (usually men). Networking strategies are crucial. You need to show your loyalty and friendship instead of your need for help. It's always good to be nice to people around you, as these people may helpful in the future. It can be too late to network the associate only because you need him/her." As the participants reported in the questionnaire (Table 4), supervisors were a significant source of help in the network, when they wanted to influence the outcome of an important decision at work. The demography of the associates also shows that these supervisors were mostly male (Table 4).

The female sex was sometimes seen as a barrier to networking in a male-dominated environment with typical patriarchal traditions and habits when seeking career advancement without a supporting network. "You know, I am the only woman manager in my organization. It's really hard for me to network with those male managers because I am not good at drinking (alcohol) and playing cards or majiang (which are common hobbies for Chinese men, especially in business). Therefore, I need to work hard and do my best."

Some new network practices like social interaction technologies (SIT) was seen as a possible virtual tool to create and enlarge one's network base. "SIT is a useful tool for me to know people and stay in touch. It enlarges my network." This is probably more neutral in terms of gender and is outside of actual work relations.

Discussion

The relatively limited size of women's guanxi networks

The analysis identified the limited size of the participants' *guanxi* bases. This is in line with relational theories that imply that women have a greater need for interpersonal connectedness (Felsman and Blustein, 1999), and women are traditionally viewed to be proficient at communication (Fountain, 2000). The findings show that the average network size of these women IT managers is about 9 individuals, compared with 14 individuals in the study by Chow and Ng (2004), in which the majority of the participants were male. Our participants' networks were also missing the same clubs and neighbors from their *guanxi* bases. One possible explanation for this is that increasing modernization, urbanization and individualization, together with the fierce pace of life, keep people busy at work and women are more self-protective.

Another explanation is the 'Boys' Network'. Historically, networks and networking are connected to how men like to do things together. This could also be seen from the interviews. Men's networks are visible, and there are business clubs that don't allow women to join. The notion of a "new girls network" is indeed a rather new expression compared to the "old boys network" and this is especially true at professional levels with career orientations. Research has pointed out that women have been excluded from many of the formal and informal networks, both as members of organizations and as managers (Kanter, 1977; Handley, 1994). In China, especially in the business world, women are marginalized from men's networks. According to the interviews, we discovered that there are very few clubs especially for women IT managers. Joining a club and becoming a club member was not common for the participants. This reflects a phenomenon in emerging societies like China (Luo, 2007).

One possible reason is that these participants are relatively highly ranked, which may make them unwilling to develop *guanxi* relationships because of the requests that may come from such relationships, or maybe they prefer to network with people of similar status or higher (Chow and Ng, 2004; Yang, 1994). Given the fact of the relatively high status of the participants, and that there are fewer higher-status individuals around, it follows that the size of the networks of these women IT managers will be smaller. Network optimization (number of close *guanxi* network connections), and not only its absolute size, is important as well.

However, the limited size of their *guanxi* bases has been a hurdle for women's career development. Research has shown that women in male dominated organizations, and minorities who have more demographically diverse networks, generally experience greater levels of career success (Ibarra, 1995). Scholars researching mentoring also support the idea that mentoring via an informal network is more effective and successful than by a formal mentoring program (Kaplan and Niederman, 2006; Ragins and Cotton, 1999).

Women's gendered guanxi networks

The data on the characteristics of associates regarding network content areas and demographic variables show the effect of female-to-male dyads, especially regarding the power and work-related network content 'influence'. There are several possible explanations for this. Firstly, as Ibarra (1993) suggests, a common strategy women like to use is to develop a functionally differentiated network, which includes a homophilous (i.e. tendency of individuals to associate with others of the same kind) circle relationships that provide expressive benefits as well as alternative channels for instrumental benefits; for example, information, advice and influence (this is supported by our interviews, see Table 5). Secondly, research in early childhood socialization processes shows that females are better at acknowledging and understanding the feelings of others (Gilligan, 1982), while males tend to be more competitive and challenging (Tannen, 1992). Furthermore, traditional Chinese culture is patriarchal and hierarchical, and managers are mostly men and subordinates take responsibility for their supervisors' routines. As the majority of the participants reported, they always sought help from their male supervisors when they wanted to influence the outcome of an important decision at work.

INSERT TABLE 5 ABOUT HERE

Examining the age of the associates, there is an asymmetrical effect between the younger and the older. Older associates are the majority in the *guanxi* bases and address almost all the *guanxi* content areas except 'socialize', while the younger address only 'advice' and 'socialize'. The participants network more with older associates than with younger ones, especially in regard to 'influence' and 'crisis' network content areas. Based on the hierarchical nature of Chinese society, in which the person higher up the hierarchy is the decision-maker and has more social

capital (Chow and Ng, 2004), it is argued that the choice of whether to network with a younger associate depends on the participant. However, it depends on the associate when it comes to networking with the older. This contact is not within the control of the participants. Even if this is the case, some participants reported that they still tried to network with their supervisors, who were usually older men.

Women's relatively narrow scope for informal networking and strategies

Table 4 shows that the first three large *guanxi* bases are respectively co-workers, classmates and family members. This indicates that the networks of women IT managers are mainly work-related (or professional) networks, although life and family ties are also important to them. Co-workers, especially supervisors, are the most important *guanxi* base for these women managers concerning career and work. Classmates are also a very important *guanxi* base for the participants. As one interviewee reported, "Classmates are important to me because by interacting with my classmates, it's quite possible for me to get access to their networks". The role of classmates is in life and career networks. The age of classmates shows that most of them are younger than the participants, indicating the tendency of on the job training and life-long learning in the IT industry, and supporting the research finding that women are more likely than men to try to learn more and to want to get more education as a career tactic (Granrose, 2007).

The results indicate that the majority of *guanxi* ties that impact upon career ("influence" ties) are with older men, and these network ties are smaller than those of men's as shown by Chow and Ng (2004). This implies a relatively narrow scope for women's informal networking, painting a "glass cliff" scenario (Ryan and Haslam, 2007). In practice, women respond to male-dominated organizational cultures through a variety of approaches, including the development of female associations or networks (Mills and Murgatroyd, 1991). Within the IT discipline, women have taken advantage of information communication technologies and SIT to develop associations and support networks to reach beyond organizational boundaries and create associations in "cyberspace" (see Lahey, 2002; The Free Library, 2004). These female-centered formal and informal networks are aimed at encouraging and promoting IT as a profession for women and developing effective networking and mentoring relationships for women across industries and IT

interests (Ahuja, 2002). However, some scholars (e.g. Kaplan and Niederman, 2006) warn that organizations should be careful about the obvious matching of women with women concerning the mentoring program. Kaplan and Niederman (2006) argue that selecting women as mentors is perfectly okay as long as the potential mentor has a diverse/powerful social network, otherwise, all else being equal, a potential female protégé could arguably benefit more by being paired up with a male mentor, as this would address important cross-gender networking concerns.

Managing a differentiated social structure is not only time consuming but also may be stressful because moving too close to either circle can lead to guilt, feelings of alienation, and the loss of resources or support from the other group. Ibarra (1993) also suggests the alternatives – to seek to maximize either instrumental or expressive benefits rather than both. These strategies have been used by our participants (see Table 5). The disadvantage of both alternatives is the deficient access to either instrumental or expressive resources; however, this is easier to manage than the functionally differentiated alternative. Furthermore, Suseno (2007) suggests that female professionals should consider the extent to which they are embedded in a closed network of strong ties, make sure they are aware of the extent to which their networks can reach other contacts outside their primary social circle, and need to know whether their contacts are motivated and willing to share relevant information. Networks are, according to her, a benefit in building one's reputation and career.

Conclusion

When Western models of HRM get more foot-space in Chinese management practices (Cooke, 2009), that may foster advanced formal issues like equality and protection against discrimination. The influence of Asian cultures and religious traditions has often been used to explain the underutilization and under-representation of Asian women in management. Predicted by Cooke (2009), higher educational levels, falling fertility rates and sectoral changes have contributed to women's increasing participation in the labor force and the number of Asian women managers and executives. However, they meet the cultural expectations and social network requirements that change slowly and that make simplified western practices difficult to apply in worklife.

This study contributes to the extensive research on social networking practices among women managers in China, often described in terms of *guanxi* (e.g. Chen and Chen, 2004), and accumulates knowledge on women's experience in this sex-atypical and non-traditional job. Even if working life is becoming more and more global, the local and culture-based nature of networking remains. Ultimately, women who live in China and build their managerial careers face the pressure of an old Chinese family-centered culture and new modern management requirements, and their situations are attracting attention. Managerial candidates meet two kinds of challenges: having good social support from the informal network like family ties and gender-crossing networks in their daily work. Progressing and staying in the managerial career means successfully coping with work challenges and avoiding the glass cliff phenomenon. Self-image building and self-respect are needed in this process, when the woman manager candidate is constructing an identity at work towards the identity needed by the manager and leader.

The *guanxi* networks are relevant for women manager candidates many ways. The findings support Ibarra's (1993) suggestion that a common strategy for women is to develop a functionally differentiated network for work and private. Our findings also support Ryan and Haslam's (2007) study on the "glass cliff", indicating that the limited size of women's *guanxi* networks and gendered *guanxi* result in a relatively narrow scope for informal networking, which recent research shows to be crucial to women's career progression (Ragins, 1989; Kaplan and Niederman, 2006). Women's networks with professional aims might support career-oriented women balancing their gendered networks in the Chinese culture, where women are often valued by their domestic value (Granrose, 2007). Despite the participants being in a gendered (maledominated) IT industry, our findings suggest that they reconstruct their career, work and life as well as renew their practices and reconstruct their networks in order to adapt themselves to managerial careers.

In addition, we emphasize the meaning of identity work for the women career candidates in building up successful career. Reciprocal connections at the career path with men (who are usually working upper at the hierarchy) need gender sensitiveness and reflection from their part. Entry and staying at the core networks of the organization is of importance to women management candidates. Women managers are important role models for younger female

candidates and informal organizations may be extremely helpful for them. Finally, we suggest that while China has multiple cultural connotations in different parts of the country (Berik *et al.*, 2007), its areas also share differing standpoints regarding culture that have not been recognized from the point of networks and *guanxi*.

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Table 1. Characteristics of the participants and their associates: %

		Participants	Associates	
		(n=21)	(n=190)	
Femal	le	100	46.4	
	≤30	23.8	21.6	
	31-35	28.6	23.2	
Age	36-40	33.3	22.1	
	41-45	14.3	10.0	
	45+		23.2	
Marri	ed	52.4 ^A	72.1	
University degree		90.5	69.5	
(Master and above)		(33.4)	(24.2)	

^A29% of the participants were married with one child.

Table 2. Characteristics of *Guanxi* bases regarding network content areas: results of x^2 analysis n(%)

Guanxi bases		s Associates e for info ¹	Associates for influ ²	Associates in crisis	Associates fo socialization	$\mathbf{r}x^2$
<u></u>						12.260*
Classmates	20(23.8)	11(16.2)	10(13.5)	14(17.7)	27(34.6)	12.268*
Supervisors	9(10.7)	17(25.0)	24(32.4)	6(7.6)	8(10.3)	17.719**
Colleagues	9(10.7)	14(20.6)	13(17.6)	6(7.6)	7(9.0)	5.184
Subordinates	2(2.4)	5(7.4)	2(2.7)	1(1.3)	1(1.3)	4.909
Male famil	y _{7(8.3)}	C(0, 0)	5(6,0)	12(16.5)	(7.7)	5.560
members	7(8.3)	6(8.8)	5(6.8)	13(16.5)	6(7.7)	5.568
Female famil	y _{10(11.9)}	2(2.0)	2(4.1)	14(17 7)	4(5.1)	16040**
members	10(11.9)	2(2.9)	3(4.1)	14 (17.7)	4(5.1)	16.242**
Husbands	11(13.1)	3(4.4)	5(6.8)	11(13.9)	5(6.4)	8.000
Friends	9(10.7)	4(5.9)	7(9.5)	9(11.4)	16(20.5)	8.667
Family friends	4(4.8)	3(4.4)	2(2.7)	3(3.8)	2(2.6)	1.000
Relatives	3(3.6)	3(4.4)	3(4.1)	2(2.5)	2(2.6)	0.462

¹ info=information; ² influ=influence; *p<.05; ** p<.01

Table 3. Characteristics of the associates regarding network content areas: n(%)

		Associates	forAssociates for	orAssociates fo	orAssociates	inAssociates	for
		advice (n=8	4) info ¹ (n=68)	influ ² (n=74)	crisis (n=79)	'socialize'	
						(n=78)	
Female		38(45.2)	32(47.1)	21(28.4)	34(43)	37(47.4)	
	≤30	16(19.0)	13(19.1)	10(13.5)	13(16.5)	17(21.8)	
	31-35	22(26.2)	17(25.0)	15(20.3)	22(27.8)	20(25.6)	
age	36-40	17(20.2)	18(26.5)	13(17.6)	14(17.7)	19(24.4)	
	41-45	9(10.7)	3(4.4)	8(10.8)	6(7.6)	7(9.0)	
	45+	20(23.8)	17(25.0)	28(37.8)	24(30.4)	15(19.2)	
Married		64(76.2)	51(75.0)	60(81.1)	62(78.5)	53(68.0)	
Bachelo	r Degree	42(50.0)	23(33.8)	33(44.6)	35(44.3)	32(41.0)	
Master and PhD		20(23.8)	21(30.8)	20(27.1)	15(19.0)	18(23.0)	

¹info=information; ²influ=influence

Table 4. Characteristics of *Guanx*i bases regarding demography: n(%)

Guanxi base	es Age					Sex	Education		Marriage status	
	<u>≤</u> 30	31-35	36-40	41-45	45+	Female	Bachelor	MD	&Single	Married
								Ph.D		
Classmates	26(52	7(14)	11(22)	5(10)	1(2)	29(58)	32(64)	11(22)	27(54)	23(46)
Supervisors	1(3.6)	5(17.9)	7(25)	1(3.6)	14(50)	6(21.4)	12(42.9)	10(36.7)	3(10.7)	25(89.3)
Colleagues	3(11.5	5) 9(34.6)	10(38.5)	3(11.5)	1(3.8)	17(65.4)	19(73.1)	7(26.9)	3(11.5)	23(88.5)
Subordinates	s 5(45.5	5) 2(18.2)	3(27.3)	1(9.1)		3(27.3)	7(63.6)	3(27.3)	5(45.5)	6(54.5)
Male	family0	0	1(7.1)	2(14.3)	11(78.6)	0	3(21.4)	0	0	14(100)
members										
Female	family0	3(17.6)	3(17.6)	1(5.9)	10(58.8)	17(100)	5(29.4)	0	1(5.9)	16(94.1)
members										
Husbands	2(18.2	2) 4(36.4)	2(18.2)	3(27.3)		0	6(54.5)	4(36.4)	0	11(100)
Friends	2(9.1)	10(45.5)	2(9.1)	2(9.1)	6(27.3)	14(63.6)	7(31.8)	8(36.4)	12(54.5)	10(45.5)
Family frien	ds 0	2(33.3)	2(33.3)	1(16.7)	1(16.7)	4(66.7)	0	0	0	6(100)
Relative	2(40.0)) 2(40.0)	1(20.0)	0	0	1(20.0)	4(80.0)	1(20.0)	2(40.0)	3(60.0)

Table 5. Quotes from interviews on women managers' *guanxi* networks Women's Views on Networking with Other Women

"I have been working with my female colleagues and subordinates. But I try not to specifically network with them because I need to show them my ability as a leader." "There are very few women in my company. I network with women more for friendship (expressive) than professional purpose."

"I found it very helpful to network with female managers (same level as or higher than me), because I can learn a lot of techniques for management from them (women as role model)."

Network (guanxi) Strategies: How Women Network

"In China we say 'who you know (*guanxi*) is more important than what you know (knowledge)'. I try to develop long-term relationships with some potential persons (usually are men). Networking strategies are crucial. You need to show your loyalty and friendship instead of your need for help. It's always good to be nice to people around you, as these people may be your help in the near future. It can be too late to network the associate only when you just need him/her."

"I do network strategically. For example, in order to finish the current project, I develop the needed network contacts. After that, I even don't talk to them."

"You know I am the only woman manager in my organization. It's really hard for me to network with those men managers because I am not good at drinking (alcohol) and playing cards or majiang (which are common hobby of Chinese men, especially in business field). Therefore I need to work hard and do my best for performance." "SIT is useful tool for me to know people and stay in touch. It enlarges my network."