International networking and knowledge acquisition of Chinese SMEs: The role of global mind-set and international entrepreneurial orientation

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Chinese small and medium-sized enterprises (SMEs) are increasing their international networking and knowledge acquisition activities. This paper attempts to explain this phenomenon by examining the joint influence of leader global mind-set and firms’ international entrepreneurial orientation on those two internationalisation activities. A conceptual model was developed and tested with data from a sample of 208 SMEs in China. The results indicate that both leader global mind-set and firm’s international entrepreneurial orientation have a direct impact on Chinese SMEs’ international networking and knowledge acquisition activities; in addition, leader global mind-set has an indirect effect through the mediation of firms’ international entrepreneurial orientation. The findings of this study provide important theoretical and practical implications.

Keywords: Global mind-set; international entrepreneurial orientation; social network; knowledge acquisition; Chinese SME.

1. Introduction

The rapid development of China’s small and medium-sized enterprises (SMEs) is one of the major drivers of the country’s dramatic economic growth in recent decades. As the world’s largest emerging economy, China has benefited from the rapid development of an internationally oriented growth for decades. Furthermore, the fast growth of its private sector has produced a large number of entrepreneurial owner-managers (Atherton and Newman 2017). Entrepreneurial activities in China are supported by an improved institutional environment for private ownership and the personal attributes of would-be entrepreneurs (Lu and Tao 2010). It has been suggested that China has entered the golden era of mass entrepreneurship development (He, Lu, and Qian 2018). Furthermore, the Chinese
Government has promoted the ‘Belt and Road Initiative’ to nurture a new wave of global economic growth, and Chinese SMEs are expected to be actively engaged in their business activities in countries across Asia and Europe (Atherton and Newman, 2017).

Entrepreneurship in China is embedded in the country’s unique social networks and institutional context (He, Lu, and Qian 2018). To develop internationally, SMEs use networks to access important social capital and to overcome resource/capability limitations and liabilities of smallness (Huggins and Johnston 2010; Leppäaho and Pajunen 2018). SMEs often lack manufacturing capabilities, marketing channels and are impeded by smaller scale of markets. Such weaknesses mean SMEs, particularly in emerging economies, need to create a collaboration network in order to innovate and develop (Colombo, Piva, and Rossi-Lamastra 2014). There has been a well-documented discussion about the Chinese version of networking, guanxi, which refers to the interpersonal relationship that is linked to social exchanges (Batjargal 2010). Established through social ties and networking, guanxi is an essential method used by Chinese SMEs to develop their global business, helping them to access resources and maintain growth momentum (Guo and Miller 2010).

Knowledge acquisition helps firms respond to an increasingly uncertain and changing market situation and aids international expansion (Martin and Javalgi 2016). Both internationalization process theory (Johanson and Vahlne 1977) and international new venture research (Oviatt and McDougall 1994) recognize the role of learning and knowledge accumulation in SMEs’ internationalization. Firms can formally collect foreign market information and proactively combine knowledge residing in people, firms or wider networks to build and update their knowledge (Casillas et al. 2009). However, despite the growing recognition of the significance of Chinese SMEs’ internationalisation in the literature (Tang 2011; Zhang et al. 2016), there is little research into the factors that drive Chinese SMEs’ international networking and knowledge acquisition activities.
For a firm to succeed in international venturing, both leaders’ global mind-set and firm-level international entrepreneurial orientation are important. Global mind-set refers to a business leader’s competence and mentality that can handle the cognitive complexity combined with a certain holistic view of the world, characterized by openness and collaboration with multiple cultures and realities (Levy et al. 2007). A global mind-set is particularly relevant for SMEs, as their leaders’ cognition and mentality about the domestic versus foreign markets will have a significant impact on the firm’s strategies in an international environment (Weaver et al. 2002). A firm is considered to be entrepreneurially orientated if it has the disposition like that of an entrepreneur (Miller 2011). Firm international entrepreneurial orientation enables the discovery and exploitation of business opportunities in foreign markets (Etemad 2015; Martin and Javalgi 2016), and their future development (Oviatt and McDougall 2005; Wang, Chung, and Lim 2015). Constrained by limited resources, the internationalisation for SMEs is both complex and costly, involving both new product lines and new geographic markets (Wang, Chung, and Lim 2015). Only those SMEs with high international entrepreneurial orientation are likely to succeed by diversifying their activities, expanding into an uncertain international market, and improving international performance (Brouthers, Nakos, and Dimitratos 2015; Jantunen et al. 2005; Knight 2000).

Previous studies have examined the link between individual and firm-level global mind-set (Andresen and Bergdolt 2017) and the influence of individual leadership on the development of firm-level international entrepreneurial orientation (e.g. Ling et al. 2008; Jung, Wu, and Chow 2008; Engelen et al. 2015; Simsek, Heavey, and Veiga 2010). However, little attention has been paid to examining the linkage between leader global mind-set and firm entrepreneurial orientation. Following the upper echelons view of the firm that the characteristics of a leader directly influence the firm’s business orientation (Hambrick and
Mason 1984), we argue that investigating the linkage would provide a better understanding of the factors and the mechanism influencing Chinese SMEs’ internationalisation behaviours.

This study therefore attempts to examine the joint influence of leader global mind-set and firm international entrepreneurial orientation on driving Chinese SMEs’ internationalisation activities. Specifically, the study aims to address the following questions: Does firm international entrepreneurial orientation drive Chinese SMEs’ international networking and knowledge acquisition activities? How does individual SME leaders’ global mind-set influence firm-level entrepreneurial orientation? How do leaders’ global mind-set and firm international entrepreneurial orientation jointly influence Chinese SMEs’ international networking and knowledge acquisition activities? To address these questions, we develop and test a conceptual model with several hypotheses using data collected from a sample of 208 Chinese SMEs that are actively involved with international business.

The findings of this study contribute to the entrepreneurship literature in three ways. First, the study contributes to our understanding of the two prominent activities of Chinese SMEs' internationalisation, i.e. networking and knowledge acquisition, by focusing on two major explanatory factors: leader global mind-set and firm entrepreneurial orientation. The results show that both factors show a significant and positive impact on Chinese SMEs’ internationalisation activities. Second, the study uncovers the mechanism of the joint effect of leader global mind-set and firm international entrepreneurial orientation above and beyond their individual effects: leader global mind-set has an indirect effect on the firm’s internationalisation activities through the mediation of firm entrepreneurial orientation. Third, the study results further reveal that SME leader’s global mind-set influences firm-level entrepreneurial orientation. This finding expands the stream of research into the role of business leaders in shaping organisation-wide entrepreneurial orientation, behaviours and
subsequent firm performance (Engelen et al. 2015; Simsek, Heavey, and Veiga 2010; Miller and Le Breton–Miller 2011).

2. Literature review and hypotheses

2.1. International networking and knowledge acquisition activities

International networking helps build inter-firm relationships, so that organizations can create and exploit social capital and access external resources (Barney 1991; Peng and Luo 2000; Danso et al. 2016). These resources can help SMEs to identify and exploit new opportunities. Moreover, network relationships are also conduits of valuable information that can inform decision-making, reduce uncertainty, and reduce risk and fuel success. Furthermore, smaller firms are often attracted to collaborative scale opportunities (Bergman 2009).

International knowledge acquisition plays a key part in firm internationalization (Stoian, Dimitratos, and Plakoyiannaki 2018; Gulanowski, Papadopoulos, and Plante 2018). Internationalising firms need to access new knowledge to succeed (Fernhaber, McDougall-Covin, and Shepherd 2009). Entrepreneurs can effectively obtain foreign market knowledge by actively pursuing entrepreneurial opportunities abroad (Zhou 2007). People’s informal networks are important conduits of local market knowledge during early internationalization (Harris and Wheeler 2005). Moreover, such networked learning enhances a firm’s’ ability to manage future relationships (Johanson and Vahlne 2003). The learning from firms’ diverse, international market experiences also helps them build new business networks (Blomstermo et al. 2004).

2.2. Global mind-set

There is no agreed definition of a global mind-set in the literature (Andresen and Bergdolt 2017). A global mind-set can be studied at an individual level or firm level. At the individual
level, Levy et al. (2007) suggest an integrative definition that addresses both strategic and cultural realities: a global mind-set is a cognitive structure that is characterised by openness to multiple strategic and cultural realities on both home market and abroad, and a cognitive ability to mediate and integrate across different environments. A global mind-set enables one to gain insights into the local market needs and build cognitive bridges between these needs and the firms’ own global experiences and capabilities (Gupta and Govindarajan 2002).

At the firm level, Paul (2000) suggests that a global mind-set is about how the firm sees the world, which reflects the structural characteristics of the firm, the individual mind-set of the leaders, administrative heritage and industry forces. In other words, firm-level global mind-set is seen as a function of the interaction of individual mind-set and other factors of, and surrounding, the firm. Begley and Boyd (2003) emphasise that firm-level global mind-set is demonstrated through individual managers’ and employees’ global mind-sets. It is evident that individual global mind-sets have a positive effect on a firm-level global mind-set. However, it is less clear whether individual global mind-sets influence firm-level entrepreneurial orientation, an essential characteristic for SMEs to succeed in a foreign market where there are different consumer needs, competition, economic and technological conditions (Knight 2000). This paper investigates individual, rather than firm level, global mind-sets to address calls for enhancing our understanding of the role of managers’ cognitive attributes within organizations (Felício, Caldeirinha, and Ribeiro-Navarrete 2015). Also, SME managers tend to have high control and decision making power owing partially to enhanced likelihood of an ownership stake in the firm and the informal management style of smaller companies (Willard, Krueger, and Feeser 1992; Mintzberg 1989; Matzler et al. 2008). These features could intensify the role of individual managerial characteristics in informing SMEs’ business orientation.
2.3. *International entrepreneurial orientation*

International entrepreneurial orientation characterises a firm’s opportunity-seeking behaviour in the international markets. Boso, Oghazi, and Hultman (2017) define international entrepreneurial orientation as “the processes that firms use to exploit entrepreneurial opportunities to create new products and services abroad” (p.6). They consider international entrepreneurial orientation as a strategic posture of a firm in the international markets (Boso, Oghazi, and Hultman 2017). The construct has been operationalised as either a single or multi-dimensional construct in the previous studies (Covin and Lumpkin 2011). For example, McDougall and Oviatt (2000) define the construct specifically as “a combination of innovative, proactive, and risk-seeking behaviour that crosses national borders” (p.903). International innovativeness refers to a tendency to introduce new product or service into foreign markets (Boso, Oghazi, and Hultman 2017). International proactiveness refers to a tendency to identify and exploit market opportunities ahead of competitors in foreign markets (Boso, Oghazi, and Hultman 2017). International risk-taking is an inclination to take risks and bold actions in uncertain environments within foreign markets (Covin and Miller 2014). This multi-dimensional definition has been adopted to examine Chinese SMEs’ internationalisation in previous work (e.g. Zhang et al. 2016). In this study, we conceptualise international entrepreneurial orientation as a second-order, composite construct that incorporates the three sub-dimensions of innovativeness, proactiveness and risk taking across national borders (Miller 1983).

In contrast to the individual-level definition of global mind-set, international entrepreneurial orientation is often studied at the firm level rather than referring to an entrepreneur who takes risks, is innovative, and is quick to spot and take an opportunity (Randerson 2016; Covin and Lumpkin 2011). An international entrepreneurial orientation enables a firm to take a posture like an entrepreneur toward opportunities in the market
(Lumpkin and Dess 1996). An international entrepreneurial orientation helps SMEs adapt to the changing international context (Swoboda and Olejnik 2016). They need to acquire key resources to develop a sustainable competitive advantage. In this respect, international entrepreneurial orientation can be regarded as a critical resource for SMEs to nurture innovation, production and market management (Rangone 1999).

2.4. Hypotheses

There is a growing interest in identifying the factors that foster firm-level entrepreneurial orientation, given its importance for a firm’s performance in a competitive environment (Cao, Simsek, and Jansen 2015). The key determinants revealed are associated with the characteristics of the leader (Ling et al. 2008; Simsek, Heavey, and Veiga 2010), the firm context (Covin, Green, and Slevin 2006), and the industry lifecycle and business environment (Lumpkin and Dess 2001). A particular stream of research focuses on the individual characteristics of the leaders in shaping firm-level entrepreneurial orientation, such as their personality, leadership style, and social ties and others (Cao, Simsek, and Jansen 2015). The upper echelons view of the firm argues that leaders’ interpretation of the business environment and strategic decision about innovation, market expansion are influenced by their personal experience and background, as such the characteristics of leaders directly impact firm orientation and subsequent performance (Hambrick and Mason 1984). Consistent with this perspective, studies show that leadership could have an impact on several firm-level outcomes (Ling et al. 2008). Specifically, they show that a transformational leader will influence the different facets of the firm’s entrepreneurial orientation, such as organizational innovation (Jung, Wu, and Chow 2008), top management teams’ risk propensity and consequently corporate entrepreneurship (Ling et al. 2008).
The mind-set of the leaders of an SME directly influences their decision-making approach, the business process and practices of the firm. Individuals with a global mind-set have a strong interest in developing international business (Felício, Caldeirinha, and Rodrigues 2012). Levy et al. (2007) argue that global mind-set is necessary although not sufficient for firms to become effective in global expansion. Moreover, Gaffney et al. (2014) indicate that a leader’s global mind-set drives firm-level strategic orientation and subsequently leads to accelerated internationalisation. Individuals with a global mind-set are open to diversified cultures and markets in the global environment (Rogers and Blonski 2010) and are able to formulate and implement strategies to take opportunities available in an international arena (Levy et al. 2007). This existing research highlights a global mind-set can help exploit international opportunities that are central to an international entrepreneurial orientation (Boso, Oghazi, and Hultman 2017). Thus, we propose:

**H1:** Leaders’ global mind-set has a positive effect on a firm’s international entrepreneurial orientation.

Leaders with a global mind-set are curious about foreign cultures and committed to foreign markets, they are keen to learn both the foreign cultures and the operation of the foreign market environment and other institutions (Gupta and Govindarajan 2002). Furthermore, as argued in the upper echelons view of the firm (Hambrick and Mason 1984), a leader’s global mind-set will influence the firm’s actions, and we may conceptualise these actions to include firm’s venturing behaviours in foreign markets. Networks are important sources of resources and knowledge for SMEs as their experience, knowledge and resource limitations place them at a disadvantage to large firms whilst internationalizing (Bell, Murray, and Madden 1992; Etemad 1999). Therefore, their managers’ interest and willingness to socialise and engage with foreign cultures can be a key ingredient of internationalization success. Felício, Caldeirinha, and Rodrigues (2012) suggest that global
mind-set is one of the key determinants of internationalisation behaviours. Specifically, global mind-set was positively associated with networking events that facilitated knowledge and resource acquisition and helped establish and maintained relationships with customers and suppliers (Felício, Caldeirinha, and Rodrigues 2012). Therefore, we propose the following:

H2a: Leader global mind-set has a positive effect on international networking activities.

H2b: Leader global mind-set has a positive effect on international knowledge acquisition activities.

To develop international business, entrepreneurs need to discover, evaluate and exploit new cross-border opportunities. SMEs need to weight the potential short-term financial loss and long-term gain (Wang, Chung, and Lim 2015). Compared with larger firms, SMEs often confront more difficulties in obtaining the resources needed to develop international markets (Fernhaber, Gilbert, and McDougall 2014). Entrepreneurially orientated firms can leverage marketing strategies and respond to complicated cross-country environments, as well as apply innovative strategies in response to overseas demands (Knight 2000). International entrepreneurial orientation helps the firm to develop key capabilities (Lee, Lee, and Pennings 2001) for better utilizing internal and external resources for overseas expansion (Wiklund and Shepherd 2003).

The attention-based view of the firm argues that firm behaviours are dependent on the decision makers' attention, and the firm's norms and rules (Ocasio 1997). Following the logic of the attention-based view, we argue that a firm with international entrepreneurial orientation has the norm or rule to seek opportunities proactively. When faced with unfamiliar foreign market environments, the entrepreneurially orientated firm has the propensity to focus their attention on identifying new business partners, and acquire new
knowledge. Previous studies have shown that international entrepreneurial orientation is associated with different resource seeking behaviours.

For example, Sapienza, De Clercq, and Sandberg (2005) found that international entrepreneurial orientation has a positive influence on firms' domestic and international learning activities. Similarly, Keh, Nguyen, and Ng (2007) show that international entrepreneurial orientation positively affects firms’ market information acquisition and utilization. Given international entrepreneurial orientation facilitates international learning activities and information acquisition and utilization, the same mechanism may also lead firms to establish business relationships that permit access to further resources and knowledge crucial for internationalization (Lavie 2006; Lee et al. 2012). Neergaard (2005) outlines networking activity as a crucial source of resources and as such will likely attract the attention of SMEs high in international entrepreneurial orientation as they seek to offset their knowledge and resource deficits (Bell, Murray, and Madden 1992; Etemad 1999).

In summary, the prior section has outlined how international entrepreneurial orientation is associated with international learning activities, market information acquisition and international networking activities. Given these complementary findings, it is reasonable to assume entrepreneurial orientation has a positive effect on both international networking activities and international knowledge acquisition activities. Thus we propose:

H3a: Firm’s international entrepreneurial orientation has a positive effect on international networking activities.

H3b: Firm’s international entrepreneurial orientation has a positive effect on international knowledge acquisition activities.

Combining Hypothesis 1, which states that leaders’ global mind-set has a positive effect on a firm’s entrepreneurial orientation, with Hypothesis 3, which further posits that firm international entrepreneurial orientation has a positive effect on: a) international
networking activities and b) international knowledge acquisition activities, we can postulate that there is a potential mediation effect of firm international entrepreneurial orientation (Baron and Kenny 1986):

H4a: The effect of leader global mind-set on international networking activities is partially mediated through firm’s international entrepreneurial orientation.

H4b: The effect of leader global mind-set on international knowledge acquisition activities is partially mediated through firm’s international entrepreneurial orientation.

A research model of this study has been developed to reflect the above hypotheses (Figure 1).

3. Research method

The empirical data for this study were collected through a questionnaire survey, which was first developed in English, then translated into Chinese by a bilingual scholar of business studies, and translated back into English by another bilingual scholar in the same subject area. Minor adjustments were made following the discussion of the two scholars and the authors.

3.1. Sample and data collection

We developed an online questionnaire hosted by ‘Sojump.com’ (a large scale commercial survey website in China, similar to Survey Monkey) to collect empirical data and test our hypotheses. The target population for this study consisted of owners or key leaders of Chinese SMEs (Fabian and Molina 2009; Zhang et al. 2016). We approached a nation-wide SME trade association (with approx. 2000 members) and secured its collaboration in recruiting survey participants. The SME trade association sent out invitations to its member organizations via a social network application, specifically WeChat’s group function. The use
of social media WeChat is justified because it has been widely used by Chinese SME owners/managers to communicate with each other, exchange commercial information, and build social networks. Furthermore, compared with the traditional tools such as postal or drop-and-collect surveys, social media is a highly efficient and effective means to reach and engage with potential research participants. Following the definition of SME by the European Union (European Commission Small Business, 2009), to be included in the study, the respondent’s company should have fewer than 250 employees (Brouthers, Nakos, and Dimitratos 2015). The use of the European definition facilitates comparison with previous studies. Although a Chinese definition of SME (maximum 2000 employees) (Zhang, Ma, and Wang 2012) would seem more logical, it would be difficult to compare across international studies. SMEs by European definition are a subset of those by a Chinese one; hence the sample in our study is still SMEs by Chinese definition, although they are much smaller in size.

The survey started from 26 February and lasted until 07 March 2017. We received 208 valid responses. Because participant invitation was through social media, the exact response rate is unknown; however, given that the population of the trade association was around 2000 members, the minimal response rate was about 10.4%, assuming that all of the members had received the survey invitation message. There is a likelihood of non-response bias in a survey. To test the bias, we compared early responses with late ones (Armstrong and Overton 1977). A t-test of the two groups’ mean responses showed no significant differences between early and late responses, thus non-response bias is not a concern, and the sample was deemed as representative of the target population.

3.2. Construct measures

The construct measures in the questionnaire were based on sources from the extant literature.
Global mind-set was measured by 3 items selected from the behavioural dimension of individual global mind-set in Felício, Caldeirinha, and Ribeiro-Navarrete (2015): see the world as single, vast market (glob1); internationalisation as a means to achieve growth objectives (glob2); and lead the firm into the international market (glob3).

For entrepreneurial orientation, we followed Zhang et al. (2016) and adopted the commonly used nine items developed by Covin and Slevin (1989) and Zahra and Garvis (2000a) to measure a firm’s innovativeness (3 items), proactiveness (3 items) and risk-taking (3 items). The three items measuring innovativeness were: changes in product lines (inn1); new products (inn2); and new processes (inn3). The three items measuring proactiveness were about: engagement with competitors proactively (pro1), innovation introduction when engaging with competitors (pro2); and long-term goals and strategies (pro3). The three items measuring risk-taking were: a proclivity for high-risk projects (risk1); reward calculated risks (risk2), and taking bold actions (risk3).

The measures of international networking activities were adapted from Felício, Caldeirinha, and Ribeiro-Navarrete (2015) and Bai, Holmström Lind, and Johanson (2016): explore foreign market resources (network1); engage in social interactions with foreign clients (network2); and create/maintain relationship with foreign business partners (network3). The measures of international knowledge acquisition activities were adapted from Bai, Holmström Lind, and Johanson (2016): participate in activities to acquire foreign marketing knowledge (know1); foreign business opportunities and ideas (know2); and foreign new technological ideas (know3).

In addition to the construct measures, the questionnaire also requests participating firms’ demographic variables, annual sales, geographic coverage of business activities, and the major mode of international business involved.
4. Results

4.1. Sample profile

Within the sample, the average number of countries that each sample SME has a business relationship with is 5.14, the average staff number is 123, and the average sale is 142 million Chinese Yuan. Other company demographic variables are listed in Table 1. The age of the sample companies is mostly between 6-15 years, while the majority of them are in the electronics and textile industries. The most common type of international involvement is export (74%).

---- Insert Table 1 about here ----

4.2. Measurement model results

We use Partial Least Squares Structural Equation Modelling (PLS-SEM) to test our model. International entrepreneurial orientation as a second-order reflective construct, with the first-order features being innovation (0.850), proactiveness (0.843), risk-taking (0.729), and the loadings were well above the recommended threshold of 0.7.

Table 2 shows the average variance extracted (AVE), composite reliability (CR) and Cronbach's Alpha for each first-order construct. According to Hair, Ringle, and Sarstedt (2011), Cronbach's Alpha is not a suitable criterion in PLS-SEM. Therefore we focused on assessing the values of AVE and CR. The recommended level of AVE is 0.5 and the recommended level of CR is 0.7 (Hair, Ringle, and Sarstedt 2011). The results as shown in Table 2 meet the requirements because they are all above the 0.5 and 0.7 thresholds respectively. Thus the convergent validity of the measures was verified.

---- Insert Table 2 about here ----

To test discriminant validity, one needs to examine cross-loadings and compare the square roots of the AVE (Hair, Ringle, and Sarstedt 2011) and the correlations between latent
variables (Fornell and Larcker 1981). As shown in Table 3, each indicator loads higher on its respective construct than on others. Table 4 shows that the square roots of the AVEs exceed the correlations between every pair of latent variables. Thus, discriminant validity can be confirmed.

--- Insert Table 3 about here ----

--- Insert Table 4 about here ----

To reduce common method variance, we followed Podsakoff et al.'s (2003) guidelines, by first using proximal separation of the items that measure different constructs and then employing a statistical procedure to test the potential of common method bias. A commonly used method in PLS-SEM is the full collinearity assessment approach proposed by Kock (2015). The results of the test (Table 5) show that none of our inter-construct variance inflation factors (VIFs) is greater than 3.3, the threshold level for a model to be considered as contaminated by common method bias (Kock 2015), indicating that common method bias is not an issue of concern in our model.

--- Insert Table 5 about here ----

4.3. Structural model results

Figure 2 presents the structural model results, which indicate that the aggregate path coefficients are statistically significant. R² values for networking, knowledge acquisition activities and international entrepreneurial orientation were 57.1%, 51.6% and 34% respectively, indicating adequate explanatory power (Hair, Ringle, and Sarstedt 2011).

The results indicate that there was a positive relationship between global mind-set and international entrepreneurial orientation (β=0.583, t=13.667), supporting H1.

--- Insert Figure 2 about here ----
Hypotheses 2a and H2b state that global mind-set has a positive effect on international networking (H2a) and knowledge acquisition activities (H2b). This set of hypotheses received statistical support: $\beta$s=0.446 (H2a) and 0.406 (H2b) respectively (ps<0.001).

Hypotheses 3a and 3b state that there is a positive effect of international entrepreneurial orientation on international networking (H3a) and knowledge acquisition activities (H3b). This set of hypotheses received statistical support too: $\beta$s=0.369 (H3a) and 0.406 (H3b) respectively, (ps<0.001).

To test the mediation hypotheses of H4a and H4b, we ran two sets of mediation analysis using the bootstrapping procedure with 1000 resamples. The results indicate that international entrepreneurship orientation mediates the relationships between global mind-set and international networking (indirect effect=0.215, t-value=5.054, 95% confidence interval = [0.133, 0.302]) and knowledge acquisition activities (indirect effect=0.237, t-value=4.515, 95% confidence interval = [0.147, 0.348]). Given that there are significant direct effects of global mind-set on international networking and knowledge acquisition activities, the mediation effects are considered as partial. Thus, H4a and H4b were supported. The results of all the hypotheses testing are summarised in Table 6.

5. Discussion

International networking activities for Chinese SMEs, most frequently shown as guanxi in the Chinese culture, can provide alternative access to resources (Peng and Luo 2000).

International business knowledge acquisition helps the Chinese SMEs’ entrepreneurial venturing at the international stage (Alvarez and Busenitz 2001). This study examines two important antecedents of such behaviours by considering both the direct effect and the joint influence of leader global mind-set and the firm’s international entrepreneurial orientation.
The empirical results show that a) leaders’ global mind-set directly influences firm-level international entrepreneurial orientation and international networking and knowledge acquisition activities; b) firm-level international entrepreneurial orientation drives Chinese SMEs’ international networking and knowledge acquisition activities; c) leaders’ global mind-set has an indirect effect on Chinese SMEs’ international networking and knowledge acquisition activities through the mediation of firm entrepreneurial orientation. The empirical results have both theoretical and practical implications.

5.1. Theoretical implications

This study contributes to the literature on firms’ international expansion behaviours, specifically the social capital creation and knowledge acquisition behaviours (e.g. Felício, Caldeirinha, and Rodrigues 2012; Swoboda and Olejnik 2016; Levy et al. 2007; García-Villaverde, Parra-Requena, and Molina-Morales 2018). Our findings show that Chinese SMEs’ engagement with international networking and international knowledge acquisition activities is driven by the two major factors: leader global mind-set and firm international entrepreneurial orientation. The significant effect of leader global mind-set is consistent with expectations derived from the upper-echelon view of the firm (Hambrick and Mason 1984), while that of international entrepreneurial orientation provides evidence to support the attention-based view of the firm (Ocasio 1997) in that Chinese SMEs with international entrepreneurial orientation tend to focus their attention on building international business networks and acquiring new knowledge. Moreover, according to resource-based view (Barney 1991), both leaders’ global mind-set and firm-level international entrepreneurial orientation are intangible resources, which facilitate the firm and its employees to participate in networking and knowledge acquisition activities so as to deal with the complex environments and cultural diversity overseas (Levy et al. 2007). The findings are particularly
useful because, despite the rapid growth in recent years, most Chinese SMEs are still in the early stage of development and are constrained by limited resources with regard to international market knowledge and social capital development (Atherton and Newman 2017).

This study provides greater insights and sophistication than what was reported in the previous studies, which implied simple, direct effects of global mind-set (Felício, Caldeirinha, and Rodrigues 2012; Gaffney et al. 2014) and international entrepreneurial orientation (Zhang, Ma, and Wang 2012) on international networking and knowledge acquisition activities. Our study reveals that, in addition to its direct effect, leader global mind-set has indirect effects on international networking and knowledge acquisition activities through the mediation of firm-level international entrepreneurial orientation. The additional mediating role of international entrepreneurial orientation implies that for SMEs, being entrepreneurially orientated is central to transferring the leader’s global mind-set at the firm level in driving both social capital and knowledge resources creating activities. In other words, international entrepreneurial orientation is likely to augment the leader’s efforts in creating international social networks and accumulating market knowledge.

The study’s results extend the upper echelons perspective of the firm (Hambrick and Mason 1984) by investigating the role of SME leaders’ global mind-set and firm-level international entrepreneurial orientation in influencing Chinese SMEs’ internationalisation activities. The empirical evidence of this study shows that SME leaders’ global mind-set influences firm-level entrepreneurial orientation. To the best of our knowledge, this is among the first studies that test the linkage between leader global mind-set and firm entrepreneurial orientation. This finding further enriches the literature on the role of business leaders in shaping organisation-wide entrepreneurial behaviours (Engelen et al. 2015; Simsek, Heavey, and Veiga 2010; Miller and Le Breton–Miller 2011).
5.2. Managerial implications

The findings suggest that in the sampled Chinese SMEs, global mind-set and international entrepreneurial orientation have a direct impact on the firm's international venturing behaviours, especially their engagement with the networking and knowledge acquisition activities. A policy implication is that although the Chinese government has attempted to promote the development of SMEs, more could be done to support them in developing global mind-set, and international entrepreneurial orientation, including innovation, pro-activeness and risk-taking, which are critical for SMEs to venture into foreign markets. The cultivation of global mind-set depends on the level of curiosity about and commitment to foreign markets, comprehension of existing mind-set, diversity orientation, and readiness to learn (Gupta and Govindarajan 2002). Governments should promote more opportunities for SME leaders to engage in international networking and knowledge acquisition activities. Public sector organizations can be excellent relationship brokers and channels into foreign markets given their superior network and resource position. Particular opportunities for SMEs to pursue, and for policymakers to facilitate, are matchmaking services for foreign firms and SMEs, and participation in bilateral trade missions and exhibitions. Additionally, firms can develop their network by reaching out to international business associations and trade offices.

The findings of this study indicate that global mind-set and international entrepreneurial orientation are two key drivers for international networking and learning activities, in addition to market opportunities and ultimately firm performance, as reported in the literature (e.g. Wang, Chung, and Lim 2015; Saeed, Yousafzai, and Engelen 2014; Peng and Luo 2000; Zahra and Garvis 2000b; Lumpkin and Dess 2001; Danso et al. 2016). SME leaders should train themselves to be global minded, by examining their own cultural values, world view, and compare with those in other country markets. They should also invest in developing an
international entrepreneurial orientation at the firm level. SMEs should be proactive in international networking and acquiring knowledge in international markets. SMEs with international entrepreneurial orientation could first evaluate their own network capabilities and, if necessary, implement development programmes and training to cultivate this skill internally. Moreover, resource limited SMEs may benefit from focusing their efforts on those few crucial partners who can provide the best business opportunities and capabilities. This approach is particularly effective when rapid internationalization is required (Casillas and Moreno-Menéndez 2014). SMEs could pursue international partnerships with firms possessing complementary capabilities to help establish mutual benefit, these can make strategic alliances easier to form and enhance performance (Rothaermel 2001).

Chinese entrepreneurs naturally tend to put guanxi and building a network of relationships as a priority in their daily business practices, but it is useful for entrepreneurs to engage with international knowledge acquisition activities in addition to international networking activities. Nevertheless, it should be noted that the two activities are not mutually exclusive, and entrepreneurs could use their international networks for the purpose of knowledge acquisition. Collaborating with major, well-connected organizations is particularly helpful here given their large networks enable SMEs to access more geographically distant and diverse knowledge. Additionally, formal contracts can be used to help structure knowledge sharing, codify prior experience, coordinate exchanges and formalize specifications. SMEs can significantly enhance knowledge absorption by utilising both relational and contractual mechanisms.

5.3. Limitations and further research

The study is constrained by several limitations. First, the data used for the study were collected from the same source at one point in time; as such the correlations between variables could be inflated. Our sample is limited to a pool of 2,000 Chinese SMEs in a
nation-wide trade association. Therefore, caution should be taken when interpreting the results. Second, when sampling participating firms, we followed the European Union’s definition for SME (maximum of 250 employees) that helps cross-research context comparison; future research could adopt a definition that is widely accepted in China to examine Chinese SMEs. Third, our conceptual model is limited to the four constructs investigated, future research could examine other factors that may drive SME internationalisation activities, such as different leadership style and firm-level characteristics. Future studies could test the consequences of firms’ social networks and knowledge acquisition on firm performance variables such as product innovation, sales growth and profitability.

6. Conclusion

The current paper advances the international entrepreneurship research by conceptualizing the effect of leader global mind-set and firm international entrepreneurial orientation on the internationalisation activities of Chinese SMEs, acknowledging the unique Chinese culture in understanding firms’ global expansion. It responds to the calls for more studies of entrepreneurship in China (e.g. Batjargal 2010; Dimitratos et al. 2016; Lu and Tao 2010; Su, Zhai, and Landström 2015; Zhang, Ma, and Wang 2012; Zhang et al. 2016), with special focus on the country-specific variables and the contextual nature of China’s emerging economy (Zhang et al. 2016). Our study suggests that global mind-set and international entrepreneurial orientation are essential in driving Chinese SMEs’ international knowledge and social capital acquisition activities, and SME leaders may need to develop a global mind-set and foster an international entrepreneurial orientation in their organization to strategically guide their internationalisation activities.
Disclosure statement

No potential conflict of interest was reported by the authors.

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Ed Cottam (to be created)

References


Randerson, K. 2016. "Entrepreneurial Orientation: do we actually know as much as we think we do?" *Entrepreneurship & Regional Development* 28 (7-8):580-600.


Table 1. Company profile (n=208)

<table>
<thead>
<tr>
<th>Company age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>28</td>
<td>13.5</td>
</tr>
<tr>
<td>6-10 years</td>
<td>67</td>
<td>32.2</td>
</tr>
<tr>
<td>11-15 years</td>
<td>76</td>
<td>36.5</td>
</tr>
<tr>
<td>16-20 years</td>
<td>22</td>
<td>10.6</td>
</tr>
<tr>
<td>20 and above</td>
<td>15</td>
<td>7.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile and garment</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>Chemical, rubber and plastic products</td>
<td>37</td>
<td>17.8</td>
</tr>
<tr>
<td>Metal and machinery</td>
<td>37</td>
<td>17.8</td>
</tr>
<tr>
<td>Electronic, optical, electrical products</td>
<td>73</td>
<td>35.1</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>5.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export</td>
<td>154</td>
<td>74</td>
</tr>
<tr>
<td>Strategic alliance</td>
<td>29</td>
<td>13.9</td>
</tr>
<tr>
<td>Joint venture</td>
<td>18</td>
<td>8.7</td>
</tr>
<tr>
<td>Direct investment/Subsidiary</td>
<td>7</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Table 2. Convergent validity

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global mind-set</td>
<td>0.640</td>
<td>0.842</td>
<td>0.718</td>
</tr>
<tr>
<td>Innovation</td>
<td>0.575</td>
<td>0.802</td>
<td>0.629</td>
</tr>
<tr>
<td>Pro-activeness</td>
<td>0.517</td>
<td>0.762</td>
<td>0.533</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>0.681</td>
<td>0.865</td>
<td>0.767</td>
</tr>
<tr>
<td>Networking activities</td>
<td>0.562</td>
<td>0.794</td>
<td>0.614</td>
</tr>
<tr>
<td>Knowledge acquisition activities</td>
<td>0.616</td>
<td>0.828</td>
<td>0.688</td>
</tr>
</tbody>
</table>

Note: AVE= average variance extracted.
### Table 3. Cross-loadings

<table>
<thead>
<tr>
<th></th>
<th>Global mind-set</th>
<th>Innovation</th>
<th>Knowledge acquisition</th>
<th>networking</th>
<th>Pro-activeness</th>
<th>Risk-taking</th>
</tr>
</thead>
<tbody>
<tr>
<td>glob1</td>
<td><strong>0.791</strong></td>
<td>0.528</td>
<td>0.473</td>
<td>0.548</td>
<td>0.454</td>
<td>0.090</td>
</tr>
<tr>
<td>glob2</td>
<td><strong>0.779</strong></td>
<td>0.469</td>
<td>0.556</td>
<td>0.532</td>
<td>0.487</td>
<td>0.147</td>
</tr>
<tr>
<td>glob3</td>
<td><strong>0.828</strong></td>
<td>0.454</td>
<td>0.491</td>
<td>0.554</td>
<td>0.517</td>
<td>0.150</td>
</tr>
<tr>
<td>inn1</td>
<td>0.56</td>
<td><strong>0.801</strong></td>
<td>0.437</td>
<td>0.487</td>
<td>0.516</td>
<td>0.275</td>
</tr>
<tr>
<td>inn2</td>
<td>0.452</td>
<td><strong>0.746</strong></td>
<td>0.411</td>
<td>0.437</td>
<td>0.473</td>
<td>0.323</td>
</tr>
<tr>
<td>inn3</td>
<td>0.354</td>
<td><strong>0.725</strong></td>
<td>0.324</td>
<td>0.486</td>
<td>0.404</td>
<td>0.316</td>
</tr>
<tr>
<td>know1</td>
<td>0.408</td>
<td>0.393</td>
<td><strong>0.773</strong></td>
<td>0.415</td>
<td>0.467</td>
<td>0.306</td>
</tr>
<tr>
<td>know2</td>
<td>0.501</td>
<td>0.379</td>
<td><strong>0.816</strong></td>
<td>0.548</td>
<td>0.545</td>
<td>0.332</td>
</tr>
<tr>
<td>know3</td>
<td>0.574</td>
<td>0.443</td>
<td><strong>0.764</strong></td>
<td>0.580</td>
<td>0.422</td>
<td>0.241</td>
</tr>
<tr>
<td>network1</td>
<td>0.579</td>
<td>0.574</td>
<td>0.549</td>
<td><strong>0.779</strong></td>
<td>0.513</td>
<td>0.348</td>
</tr>
<tr>
<td>network2</td>
<td>0.504</td>
<td>0.382</td>
<td>0.490</td>
<td><strong>0.733</strong></td>
<td>0.407</td>
<td>0.182</td>
</tr>
<tr>
<td>network3</td>
<td>0.436</td>
<td>0.416</td>
<td>0.438</td>
<td><strong>0.736</strong></td>
<td>0.313</td>
<td>0.292</td>
</tr>
<tr>
<td>pro1</td>
<td>0.353</td>
<td>0.356</td>
<td>0.315</td>
<td>0.346</td>
<td><strong>0.683</strong></td>
<td>0.367</td>
</tr>
<tr>
<td>pro2</td>
<td>0.521</td>
<td>0.515</td>
<td>0.537</td>
<td>0.455</td>
<td><strong>0.755</strong></td>
<td>0.270</td>
</tr>
<tr>
<td>pro3</td>
<td>0.430</td>
<td>0.447</td>
<td>0.453</td>
<td>0.398</td>
<td><strong>0.718</strong></td>
<td>0.282</td>
</tr>
<tr>
<td>risk1</td>
<td>-0.024</td>
<td>0.259</td>
<td>0.175</td>
<td>0.222</td>
<td>0.219</td>
<td><strong>0.772</strong></td>
</tr>
<tr>
<td>risk2</td>
<td>0.206</td>
<td>0.411</td>
<td>0.384</td>
<td>0.404</td>
<td>0.450</td>
<td><strong>0.885</strong></td>
</tr>
<tr>
<td>risk3</td>
<td>0.184</td>
<td>0.302</td>
<td>0.333</td>
<td>0.266</td>
<td>0.345</td>
<td><strong>0.816</strong></td>
</tr>
</tbody>
</table>

### Table 4. Correlations and the square root of AVEs

<table>
<thead>
<tr>
<th></th>
<th>Global mind-set</th>
<th>Innovation</th>
<th>Knowledge acquisition</th>
<th>Pro-activeness</th>
<th>Risk-taking</th>
<th>Networking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global mind-set</td>
<td><strong>0.800</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>0.605</td>
<td><strong>0.758</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td>0.635</td>
<td>0.517</td>
<td><strong>0.785</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pro-activeness</td>
<td>0.608</td>
<td>0.614</td>
<td>0.610</td>
<td><strong>0.719</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>0.162</td>
<td>0.401</td>
<td>0.372</td>
<td>0.423</td>
<td><strong>0.825</strong></td>
<td></td>
</tr>
<tr>
<td>Networking</td>
<td>0.681</td>
<td>0.620</td>
<td>0.661</td>
<td>0.558</td>
<td>0.371</td>
<td><strong>0.750</strong></td>
</tr>
</tbody>
</table>

*Note: Boldface numbers on the diagonal are the square root of the average variance extracted.*
Table 5. Common method variance test: Inter-construct variance inflation factors

<table>
<thead>
<tr>
<th></th>
<th>International entrepreneurial orientation</th>
<th>Global mind-set</th>
<th>Knowledge acquisition</th>
<th>Networking</th>
</tr>
</thead>
<tbody>
<tr>
<td>International entrepreneurial orientation</td>
<td>--</td>
<td>1.914</td>
<td>1.776</td>
<td>1.747</td>
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<tr>
<td>Global mind-set</td>
<td>2.092</td>
<td>--</td>
<td>1.973</td>
<td>1.835</td>
</tr>
<tr>
<td>Knowledge acquisition</td>
<td>1.955</td>
<td>2.033</td>
<td>--</td>
<td>2.009</td>
</tr>
<tr>
<td>Networking</td>
<td>2.227</td>
<td>2.132</td>
<td>2.249</td>
<td>--</td>
</tr>
</tbody>
</table>

Table 6. Results of hypothesis testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Global mind-set → International entrepreneurial orientation</td>
<td>Yes</td>
</tr>
<tr>
<td>H2a Global mind-set → International networking activities</td>
<td>Yes</td>
</tr>
<tr>
<td>H2b Global mind-set → International knowledge acquisition activities</td>
<td>Yes</td>
</tr>
<tr>
<td>H3a International entrepreneurial orientation → International networking activities</td>
<td>Yes</td>
</tr>
<tr>
<td>H3b Entrepreneurial orientation → International knowledge acquisition activities</td>
<td>Yes</td>
</tr>
<tr>
<td>H4a Global mind-set → International entrepreneurial orientation → International networking activities</td>
<td>Yes</td>
</tr>
<tr>
<td>H4b Global mind-set → International entrepreneurial orientation → International knowledge acquisition activities</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Figure 1. Research model

Control variables:
- Company age
- Sales
- International involvement
- Staff number

H1
H2a
H2b
H3a
H3b
H4a
H4b

International entrepreneurial orientation

Global mind-set

Innovation

Proactiveness

Risk-taking

International networking activities

International knowledge acquisition activities
Figure 2. Structural model results