



Leveraging networks, capabilities and opportunities for international success: A study on returnee entrepreneurial ventures



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ABSTRACT

By integrating social capital theory with a capability-based view on performance, this paper aims to examine the extent to which returnee entrepreneurial ventures (REVs) gain international performance advantages from the founding entrepreneurs' experience with international networks. Using data on 200 Chinese REVs, the paper proposes and tests a structural model with a focus on the link between individual entrepreneurs and the subsequent development of firm capabilities. The results provide evidence that it is important that the returnee entrepreneurs have an international social network for the REV to develop an international network capability, which, in turn, mediates the effects on opportunity knowledge and the international performance of the REVs. The findings highlight the concurrent effect of the role of entrepreneurs and organizational learning in internationalization, and they provide an understanding as to the importance of the returnee-specific advantages for the international performance of these firms.

1. Introduction

Increasing globalization has strengthened the cross-border mobility of entrepreneurship (Wright, 2011), giving rise to a new phenomenon, returnee entrepreneurship. It is distinctive because the founders, namely *returnee entrepreneurs*, have received education or professional training abroad and bring knowledge and ideas back to their native countries (Drori, Honig, & Wright, 2009; Li, Zhang, Li, Zhou, & Zhang, 2012). Returnee entrepreneurs are often scientists, engineers, professionals and students who either have business experience or have studied abroad for years, and who have then returned to their home countries to start up a new venture (Dai & Liu, 2009; Filatotchev, Liu, Buck, & Wright, 2009). The businesses founded by returnee entrepreneurs in their home countries, accordingly, are called *returnee entrepreneurial ventures* (REVs).

During their time abroad, returnee entrepreneurs develop social and business networks through which they access diverse sources of knowledge (Prashantham & Dhanaraj, 2010; Pruthi, 2014). Indeed, it has been proposed that a main advantage of returnee ventures relates to their international relationships, which enable them to bring important innovative practices home that can help them exploit new opportunities and enhance future domestic performance (Wang, 2015). However, due

to a dominant focus on returnee firms' home-country performance (especially in relation to indigenous companies and their knowledge spill-over effects) (e.g. Dai & Liu, 2009; Liu, Lu, Filatotchev, Buck, & Wright, 2010), there is still a lack of evidence explaining the extent to which REVs gain international performance advantages from the founding entrepreneurs' experience with international networks. An often-neglected point is that REVs tend to internationalize shortly after inception (Filatotchev et al., 2009), and there are many new international ventures among these firms. In accordance with Oviatt and McDougall (1994, 2005), who highlight the individual experiences of the entrepreneurs, we assume that REVs are new and opportunity-seeking, and are driven by the founding entrepreneurs to pursue proactive strategies in their international efforts.

Despite the important role of individual entrepreneurs in international new ventures, recent theoretical advancement indicates that such a leading role may depreciate when individual entrepreneurs reach their limitations (Cumming, Sapienza, Siegel, & Wright, 2009). Nevertheless, the transfer of individual entrepreneurs' international experience into organizational knowledge may lead to a generation of capabilities (Casillas, Moreno, Acedo, Gallego, & Ramos, 2009), which becomes increasingly important in the course of internationalization (Weerawardena, Mort, Liesch, & Knight, 2007). This is because the

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subsequent development of capabilities enables new ventures to continuously revise or create knowledge (cf. Eisenhardt & Martin, 2000; Havnes & Senneseth, 2001; Zhou, Barnes & Lu, 2010). Knowledge, especially regarding identification and exploitation of opportunities, is a driving factor in firm internationalization (Johanson & Vahlne, 2009; McDougall, 1994, 2005;), leading to international performance.

Although it has been conceptually proposed, few studies have examined the suggested link between individual entrepreneurs and the subsequent development of firm capabilities, and their joint effects on the internationalization of new ventures. In an attempt to bridge this gap and to explain the international performance of REVs, this study develops a composite model to investigate the mediating effect of the international network capabilities of REVs that links the influence of social capital (in terms of returnee entrepreneurs' international social networks) on the acquisition of knowledge of REVs in terms of opportunities and subsequent international performance. The rationale for developing the model is based on the notion that the performance of REVs is often related to specific advantages such as access to international networks and the ability to leverage those advantages to develop opportunities. In order to expand and perform internationally, REVs need to know how to manage opportunity development, but as the entrepreneurs may exploit their social networks and their firms tend to conduct their business in networks, having the capability to act in a network is crucial.

By drawing on social capital theory and a capability-based view on international performance as a theoretical basis to build our arguments, and by using a sample of 200 internationalized REVs, this paper demonstrates the extent to which REVs can leverage *returnee-specific advantages* to improve international performance. The contribution of this paper is twofold: To the best of our knowledge, no previous study seems to have focused on how social capital (Nahapiet & Ghoshal, 1998), in terms of international network relationships *per se*, as well as the ability to develop an international network capability, may influence the international performance of REVs. By doing so, our study highlights the joint effect of the role of entrepreneurs and learning (Cumming et al., 2009) and provides an understanding of the importance of the returnee-specific advantages for the international performance of these firms. In addition, this study responds to the call to consider and discuss both social networks and business networks concurrently (Slotte-Kock & Coviello, 2010), and combines them with the international performance of firms. Thereby, we add insights into research on the international performance of emerging market new ventures in general (Yamakawa, Khavul, Peng, & Deeds, 2013), and REVs in particular.

The second contribution relates to the concept of 'opportunity' (Alvarez & Barney, 2007; Zahra, 2008) and the way in which knowledge about how to handle opportunities is necessary for a high level of international performance to be achieved (cf. Vasilchenko & Morrish, 2011). We suggest that this knowledge of opportunities derives from the international network (Andersson, Holm, & Johanson, 2006; Johanson & Vahlne, 2009) and is influenced by the capability to act in these networks. This study can, therefore, answer the question as to whether or not REVs are capable of actually converting such opportunity knowledge into international performance.

We have organized the remainder of the paper as follows: in the next section, we discuss the theoretical framework and present the hypotheses. In the subsequent section, we explain the data collection process, the sample and the operationalization of the theoretical constructs. After that we present the results, followed by a final section that provides a concluding discussion, including implications of the study and suggestions for future research.

2. Theoretical framework

2.1. Returnee entrepreneurship and returnee entrepreneurial ventures

The globalization of markets and the opening of economies have

created new opportunities for firms in these markets, e.g. emerging market firms. When their home market is opened, local firms face increased competition, which more or less forces many of them to seek opportunities in the international markets. The ability to exploit such opportunities is circumscribed by the degree to which a firm's capabilities align with those needed abroad (Madhok, 1996). In comparison with firms from developed markets, emerging market firms are from 'institutionally protected' markets and therefore lack the necessary international experience and resources possessed by established firms in developed countries (Vernon-Wortzel & Wortzel, 1988). In other words, many emerging market firms need to learn how to operate abroad and how to develop the capabilities to do so.

REVs are a distinctive form of small entrepreneurial emerging market firm. In line with international entrepreneurship literature (Oviatt & McDougall, 1994), the international experience of returnee entrepreneurs is the defining feature of REVs (Jones, Coviello & Tang, 2011), and returnee entrepreneurs are characterized by being empowered with an international mindset and an international network of social and business relationships (Liu et al., 2010; Wright, Liu, Buck, & Filatotchev, 2008). As such, REVs often show rapid internationalization (Filatotchev et al., 2009), whereby they develop new products that target global markets. In other words, they share the characteristics of international new ventures, in terms of being proactive and opportunity-seeking (Oviatt & McDougall, 1994), and of having gained 'international' knowledge prior to internationalization (Madsen & Servais, 1997).

In general, two specific features of the REV emerge. First, REVs have gained 'international' knowledge and capabilities before the inception of the firm (Hewerdine & Welch, 2013). Therefore, the internationalization and emergence of the firm are often parallel processes. Second, their young age gives them an advantage: they have not built up rigid structures and routines in the home market. Rather, the routines and organization are adjusted for internationalization directly from inception (Autio, Sapienza, & Almeida, 2000; Zahra, 2005). Early and rapid internationalization, on the other hand, often increases the likelihood of failure as a result of liabilities of newness (Mudambi & Zahra, 2007; Sapienza, Autio, George, & Zahra, 2006), and consequently REVs need to develop knowledge and capabilities to overcome such liabilities. One such capability is the accumulated and dispersed set of relationships, which can be used to mobilize resources and knowledge (Liu et al., 2010).

2.2. The notion of social capital among entrepreneurial ventures

Social capital theory emphasizes human relations, in particular social relations, with a focus on interpersonal relations and the resources embedded in them. Although there is discussion about a precise definition of social capital, for the purposes of this paper, social capital is viewed as "the sum of actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit [. . .] it comprises both the network and the assets that may be mobilized through the network" (Nahapiet & Ghoshal, 1998, p. 243). Social capital can take the form of networks containing both relational and structural resources attained by individuals and firms through a network (Adler & Kwon, 2002). It is viewed as an intangible resource that is difficult to replicate, thus providing firms with a significant advantage (Peng & Luo, 2000). Social capital provides networks that facilitate the identification, collection and allocation of scarce resources (Greene & Brown, 1997). In particular, social capital provides access to information and resources not available internally (Davidsson & Honig, 2003; Peng & Zhou, 2005), and thus has been considered particularly important to entrepreneurial firms. Social capital may also assist with the exploitation of opportunities by providing and diffusing critical information and other essential resources. Therefore, social capital theory provides an important theoretical foundation for understanding the impact of the special

character of REV's that is likely to enhance their international performance.

2.3. Social capital and network capabilities

Recently, there have been some advances in our understanding of the link between international entrepreneurship, internationalization and the development of capabilities (cf. Knight & Cavusgil, 2004). The capability view has evolved from the resource-based view (Barney, 1991; Wernerfelt, 1984), where a firm's competitive advantage derives from the bundle of intangible resources at the firm's disposal. Firms that are able to integrate, build and reconfigure internal and external competencies are better at addressing a rapidly changing environment (Teece et al., 1997). Although Knight and Cavusgil (2004) adopt a capability-based view to explain the international success of entrepreneurial firms, they give scant attention to specific network activities (Sullivan Mort & Weerawardena, 2006). Firms in general and small entrepreneurial firms in particular not only need to reconfigure existing resources and knowledge, but also need to generate new knowledge from external sources in order to enhance their performance (Schultz, 2001).

As REV's are less able to compete if they rely solely on their 'stock' of resources, they can instead rely on the capabilities gained in their network for the reconfiguration of externally gained knowledge (cf. Teece et al., 1997). A network capability has been referred to as the capacity or competence of a firm to embed, develop and utilize a variety of relationships within its network (cf. Jarillo, 1989; Ritter & Gemünden, 2003; Peng & Zhou, 2005), leading to procurement of external resources. Such a capability enables a firm to gain access to resources not otherwise under its control (Zhao & Aram, 1995). Several studies emphasize the importance of networks for learning (Coviello, 2006; Coviello & Munro, 1997; Hara & Kanai, 1994; Zhou et al., 2010). For instance, Madsen and Servais (1997) argue that networks developed by entrepreneurs prior to start-up, as well as the relationships subsequently formed, influence performance. Although research on the usefulness of network capabilities is fragmented (cf. Anand & Khanna, 2000; Ritter & Gemünden, 2003; Sullivan Mort & Weerawardena, 2006; Walter, Auer, & Ritter, 2006; Watson, 2007; Zhou et al., 2010), it stresses the importance of an 'international' network capability (Levin & Barnard, 2013; Zhou et al., 2010) for relationships to develop in international networks.

2.4. Social capital and entrepreneurial opportunities

Opportunities play a central role in the entrepreneurship literature and have been referred to as favorable circumstances leading to entrepreneurial action (e.g. Eckhardt & Shane, 2003; Aldrich & Cliff, 2003; Shane & Venkatraman, 2000). The concept can be found in early entrepreneurship research. For instance, Schumpeter (1934) viewed opportunities as central to new resource combinations, taking the form not only of products or services, but also of discovery of new methods of production, new ways to organize a market, or new raw materials. But Kirzner (1997) pointed out that neither market demand nor resources exist in a final form, but must be invented. Regardless of the perspectives, opportunities involve diverse processes for creating value. Hence, discovery theory and creation theory are considered to be two alternative theories of entrepreneurial opportunities and have received much attention in entrepreneurship literature (Gaglio & Katz, 2001; Baker & Nelson, 2005; Sarasvathy, Kumar, York, & Bhagavatula, 2013).

An opportunity is a new way of using resources that is more efficient or profitable or that produces more value than existing methods (Ardichvili, Cardozo, & Ray, 2003). Similarly, Eckhardt and Shane (2003) define opportunities as new situations, exchanges or combinations that transform existing ends and/or means. A new method means that an opportunity has a high degree of novelty or originality (Casson,

1982; Choi & Shepherd, 2004). Recently, scholars have argued that individuals do not necessarily search for opportunities but rather often recognize the value of information or knowledge that they happen to have or receive (Ardichvili et al., 2003). This is in line with scholars who argue against the view that opportunities are not just 'out there' to be found (Ramoglou & Tsang, 2016) and propose that opportunities are actively created through subjective processes. Opportunities require some kind of knowledge, which is imperfectly distributed among firms (Hayek, 1945) and is not given to anyone completely. Opportunity is thus a contextual, subjective and perceptual concept rather than an objective that is accessible to any firm. Literature usually identifies two main types of opportunities (Andersson et al., 2006; Eckhardt & Shane, 2003; Mainela, Puhakka, & Servais, 2014), where the first type is business opportunities and the second type is technological or innovation-related opportunities.

Prominent factors that play an important role for opportunities include varying degrees of alertness (Gaglio & Katz, 2001), and human and social capital (Detienne & Chandler, 2007). Some research emphasizes the entrepreneurs' social networks (Arenius & Clercq, 2005), which relates to the knowledge gained through the networks and opportunities that require knowledge and resources, which can be attained by using the social capital (Ardichvili et al., 2003; Shane & Venkatraman, 2000; Alvarez & Busenitz, 2001; Baron, 2006). Social capital is a powerful tool for entrepreneurs who are well positioned to develop opportunities, and it permits the exchange of resources and information useful in the creation of new business (Davidsson & Honig, 2003).

3. Hypotheses development

3.1. International social network and opportunity knowledge: the mediating role of network capability

Social capital may facilitate access to new information, which is a critical component of opportunities (Shane & Venkatraman, 2000), as people who are part of a network of social and professional contacts are likely to be exposed to ideas and opportunities whose origins and sources reside in various parts of the network. Being embedded in social networks enables entrepreneurs to acquire new information, ideas and knowledge, which helps them establish credibility and gives them access to critical resources, including tacit knowledge and technology, which is new and non-commoditized (cf. Levin & Barnard, 2013).

Returnee entrepreneurs, with their international social networks, are generally disposed to receiving new information and, consequently, to developing opportunities (Arenius & Clercq, 2005), which may contribute to an increase in knowledge about the process of identifying traces of a potential opportunity and transforming them into new business and increased value in international markets. Rather than being limited to a small set of individuals, returnee entrepreneurs could acquire the knowledge they need by taking advantage of their wider social network, in which their direct social ties are embedded. In this way, social networks give access to knowledge about opportunities either through knowing people directly or through international associations.

Meanwhile, by making use of the international social networks of their founders, REV's may be able to develop network capabilities. A network capability is a kind of competence to perform activities in a network setting (Ritter & Gemünden, 2003), the development of which requires some social qualifications (Helfert, 1998), including communicative skills, conflict management skills, and cooperative skills, among others. The accumulation of these skills preferably happens by way of interpersonal interactions (Ritter & Gemünden, 2003).

According to literature on small entrepreneurial firms, the characteristics and motivations of founding entrepreneurs strongly influence the characteristics and behavior of their firms (e.g. Acedo & Galan,

2011). In other words, returnee entrepreneurs, with their international social capital, play a leadership role that may influence and improve the network capabilities of REVs over time. In particular, returnee founders disseminate the experience and competences of social networks within firms by developing pertinent management routines and practices. The dissemination and application of such routines and practices by other employees/managers through the transformation of experience and competence of returnee entrepreneurs into knowledge at the level of the firm may lead to the development of a set of network capabilities (Knight & Cavusgil, 2004). It is likely that the firm has not developed routines and practices, while existing experience of the returnee entrepreneur in international social networks can be a springboard that is routinized within the firm, enhancing network capability development. Moreover, according to the theory of the learning advantage of newness (e.g. Autio et al., 2000; Sapienza et al., 2006), less developed routines and practices would less hinder the transformation of international experience into the firms' practices, and promote the development of network capability, which is the case at the beginning of a rapid internationalization (Sapienza et al., 2006).

A firm with well-developed network capabilities is likely to pursue opportunities in a different way than firms without these capabilities; thus, in line with Johanson and Vahlne (2009) and Sarasvathy et al. (2013), we contend that the development of network capabilities can be seen as a unique firm-specific advantage that in turn influences its knowledge about opportunity development. An REV is a composite of the returnee entrepreneur and other employees/managers. Despite the important role of the entrepreneur in leading the venture, the expertise and absorptive capacity of the returnees will eventually reach their limits as the firm grows. In parallel with the development of the firm in size and business scope, there would be an increasing number of employees involved in firm operations. The development of network capabilities implies building routines and structures that enable other employees to learn and understand what types of knowledge are needed for the REV to grow (Autio et al., 2000).

Moreover, international network capability denotes acting in international networks, which implies obtaining experiential knowledge that is precise and up-to-date (Yeoh, 2000; Zahra, Ireland, & Hitt, 2000). Hence, the ability of REVs to gain opportunity knowledge that is not under their control through their networks in a cost-effective way influences how they develop new opportunities (Zhao & Aram, 1995). These opportunities are mediated through the interactions in the network (Hohenthal, Johanson, & Johanson, 2014; Johanson & Vahlne, 2009), which are accompanied by the development of mutual trust between the interacting counterparts (Granovetter, 1985; Uzzi, 1997). The prevailing trust makes it likely that the knowledge exchanged is perceived to be of a high quality and to be valid and rich in detail. In such relationships, the counterparts are less reluctant to share sensitive information and are more open to learning from each other. This means that once the REV embeds itself in international networks and starts using its capability to develop and coordinate activities between relationships in the network, it identifies and assimilates knowledge about new technologies and business ideas from the networks (Levin & Barnard, 2013). In these interactive processes, opportunities arise more or less automatically (Hohenthal et al., 2014) as the firm learns about what it needs to know about opportunities (Hadley & Wilson, 2003; Sharma & Blomstermo, 2003).

In short, exposure to social networks facilitates the development of a differentiated set of functional network skills and competencies that help a firm develop opportunities (De Clercq, Sapienza, Yavuz, & Zhou, 2012; Zahra et al., 2000), and access to varied knowledge from multiple networks can generate business ideas and innovations (March, 1991). Therefore, we postulate that:

H1. In the international operations of REVs, network capability mediates the positive relationship between international social networks of returnee entrepreneurs and opportunity knowledge.

3.2. International social networks and international performance: the mediating role of network capability

Although there are a number of important determinants for the success of a venture, research has only recently begun to highlight the potential significance of entrepreneurs' social capital. A wealth of literature supports the link between the variety of entrepreneurs' social capital and firm performance in general (Stam, Arzlanian & Elfring, 2014) and international performance in particular (Coviello, 2006; Coviello & Munro, 1997; Oviatt & McDougall, 1994; Zhou et al., 2010). An entrepreneurial firm's international performance has been defined as the extent to which the venture is internationalized in terms of international sales intensity (Zhou et al., 2010).

For REVs, the social capital of their founders can provide economies of scale without producing the diseconomies caused by large size (Aldrich & Zimmer, 1986). Due to these existing personal relationships, REVs at the initial stage benefit not only from richer information provision but also from cooperative relationships, through which the returnee venture will obtain appropriate external resources at a relatively low cost. Because the search for and use of strategically important knowledge and resources have significant arrangement and monitoring costs, the social capital may provide an efficient means through which the returnee venture can address knowledge and resource constraints (Bourdieu, 1986), thus importantly influencing the performance of ventures.

As noted earlier, returnee entrepreneurs' international social capital may also create value by endowing returnee ventures with a privileged development of network capabilities. An international network capability is the ability to embed, develop and utilize a variety of relationships with different players in the international market, which may be developed and cumulated based on returnee entrepreneurs' social network activities. Using its network capability, a firm can proactively develop ties beyond returnee entrepreneurs' individual social capital, which correspondingly extends the range of opportunity-seeking (Coviello, 2006) and problem-solving. This, for instance, relates to developmental benefits because they increase learning and the ability to adapt to the changing economic environment.

In particular, a network capability draws an REV close to its international business connections and, thereby, to its technology, products and processes. In this way, the returnee venture can identify the needs and behavior of its customers, suppliers and competitors at an early stage, and can quickly observe new needs and changes in the market (cf. Fang, Palmatier & Evans, 2008; Noordhoff, Kyriakopoulos, Moorman, Pauwels, & Dellaert, 2011). Cooperation in relationships entails openness and transparency between the parties, both of which are conducive to learning within a network. In addition, its international network capability makes it likely that the REV already has a well-established distribution system, which can be quickly and efficiently mobilized and used to reach the customers and users of the new product.

Besides, the proactive network activities represent a venture's long-term international relationship commitment, which gives the venture a position in international markets. With the aid of this inside position, the returnee venture enhances its international sales by having access to sales opportunities otherwise unobservable or unreachable by an outsider. At the same time, the inside position increases the legitimacy and trustworthiness of the returnee venture, which reduces the uncertainty perceived by both the entering firm and the local firm. Consequently, REVs with a high level of network capability become less dependent on the domestic market and are more likely to achieve a high level of international performance (Zhou et al., 2010).

In short, although the returnee entrepreneurs' international social network may have a direct effect on the international performance of returnee ventures by making the actual and potential resources accessible, it is beneficial towards the development of the international network capability of returnee ventures, which in turn enhances the

international performance of ventures. Based on the above reasoning, we hypothesize:

H2. In the international operations of REVs, network capability mediates the positive relationship between the international social network of returnee entrepreneurs and their international performance

3.3. Opportunity knowledge and international performance

Opportunity drives business expansion and growth, and as most REVs internationalize by selling to foreign markets, the most relevant aspect of their international performance is export. Therefore, opportunity knowledge that is about how to grow internationally is likely to have a positive impact on performance. In the context of international networks, opportunity knowledge emerges as a result of cooperation in relationships, the process of which entails an openness and transparency between the counterparts that are conducive to learning (Fang et al., 2008; Noordhoff et al., 2011). Accordingly, the opportunity knowledge gained in the network is rich in detail, reliable and trustworthy, which gives the firm the cognitive preparedness to reflect upon, assess and evaluate both the progress that has been made (Johanson & Vahlne, 2009) and also the setbacks and backlashes that occur when the firm attempts to enhance its international sales. We contend that such knowledge is instrumental for performance as it has partly to do with how firms extend their business networks and add new relationships with customers, while partly reflecting the expansion of existing structures by strengthening and deepening already established relationships by way of the development of new technology and products.

First, the firm identifies and learns about the needs and behavior of its customers, suppliers and competitors, both at an early stage and in detail. In this way, the firm can learn how to quickly observe changes in the market. This leads the firm to foresee potentials for business growth. For example, the REV normally involves its counterparts in product development, interacts with key partners and conducts joint R&D work. It promotes the firm’s awareness and understanding of pertinent technological know-how that is applied in R&D activities and thereby helps the firm to facilitate the development of new products that will cater to the updated needs of customers.

Second, the opportunity knowledge accumulated in international networks also includes the development of future users. Specifically, opportunity knowledge facilitates an understanding of new information

and potential market changes (cf. Wu & Wu, 2014), which enhances the firm’s ability to detect the needs of remote customers. In other words, an understanding of opportunity development leads the firm to invest in activities that have a positive influence on new market development. Thus, the opportunity knowledge signals a link between the recognition and exploitation of opportunities, which makes sales activities in the market more efficient and effective, and contributes positively to, for example, the international sales growth of the firm.

More importantly, REVs are new ventures that have not built up rigid structures and routines; they enjoy the learning advantage of newness that leads to quick and efficient learning. We can therefore expect them to quickly accumulate knowledge about how to create and integrate opportunities in foreign markets. The background of REVs is developed in international markets, which makes it likely that they will see growth opportunities abroad and consequently pay more attention to developing opportunities internationally. The international learning benefits the routines and organizational building adapted for early internationalization and opportunity development, thus leading to enhanced sales in international markets. Consequently, based on the above reasoning, we hypothesize:

H3. In the international operations of REVs, opportunity knowledge is positively related to international performance.

4. Method

With the LISREL technique (Jöreskog & Sörbom, 1993), we tested the proposed model based on a survey conducted in China from 2013 to January 2014. The structural equation modeling with LISREL was performed in two steps. The first was to run a measurement model test that secured construct validity as well as discriminant validity. The second step was to test the hypothesized relationships (see Fig. 1). On this basis, we present the resulting structural model. The significance of the resulting model is evaluated and used for possible verification of the relationships between the three constructs, thereby testing the hypotheses.

4.1. Sample selection and data collection

China is the most active country in terms of sending students abroad and has favorable governmental policies toward returnees (Wang &

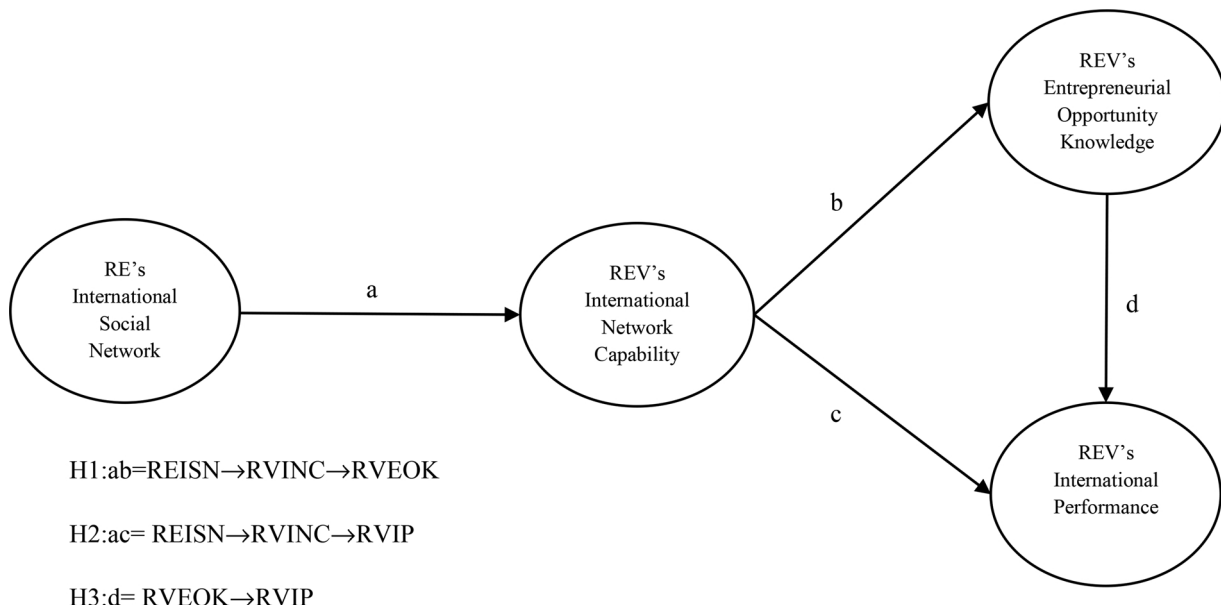


Fig. 1. The hypothesized structural model.

Miao, 2013), thus making it a suitable research setting and meaning it has been widely used in previous returnee studies. In contrast to previous studies that focused on an entrepreneurial business park (Zhongguancun) in one city (Beijing), we conducted a field study in an entire economic region, the Pearl River Delta Economic Zone (PRDE). This economic zone, with a population of 56 million and a GDP per capita of USD 17,260 in 2015, is one of the most developed regions in China and one of the top three destinations that attract returnee entrepreneurs (Wang & Miao, 2013). Returnee entrepreneurs in six cities, namely Shenzhen, Guangzhou, Dongguan, Zhuhai, Zhongshan and Foshan, which form the PRDE, are our survey targets.

We initially designed the questionnaire in English, and two researchers reviewed the English draft for minor modifications. Then, the questionnaire was translated into Chinese, and two native Chinese scholars conducted a back-translation and checked the language. After making some small changes, we conducted a pre-test of the questionnaire in China with four returnee entrepreneurs. This was helpful for further polishing potentially ambiguous questions and items.

We developed the sampling frame in two steps. First, we contacted the Administrative Committee of the returnee entrepreneurial business park in each city, asking for a list of returnee firms. We cross-checked the lists we received with lists gathered from the Internet. For Zhuhai, Dongguan, Zhongshan and Foshan, which are relatively small cities, the lists obtained from both sources were highly consistent, while for the large cities of Guangzhou and Shenzhen, there were additional returnee firms spread around the city. Therefore, we completed the latter two lists with business ventures outside the business parks. As a result, the initial list of returnee entrepreneur firms consisted of 1915 companies distributed as follows: Shenzhen (738), Guangzhou (726), Dongguan (220), Zhuhai (111), Zhongshan (25) and Foshan (95).

In a second stage, we contacted all 1915 returnee entrepreneur ventures, explained the purpose of the study and excluded those not qualified based on three sampling criteria. First, with a confirmatory purpose, we ensured that the venture had in fact been established by the returnee(s). Second, we made certain that the venture had been operating for over two years and that the returnee(s) remained actively in charge of the venture's business operations. Finally, we selected ventures that had some type of international operations in order to limit the possibility that there were ventures with only marginal domestic activity. Based on these efforts, we determined a sampling framework of 836 internationalized returnee entrepreneur ventures. Respondents from these ventures were then invited to be involved in the study.

We took several measures in order to ensure high rates of survey completion and quality. We created a survey team consisting of one of the authors and five experienced enumerators. The researcher and enumerators had a two-hour training seminar in order to ensure that the enumerators understood the questionnaire question by question. After the training, the enumerators visited each firm in person, explained the purpose of the study and interviewed the entrepreneurs. A referral letter from a cooperating Chinese university was used to show our legitimacy for administering the survey in China. The respondents were returnee entrepreneurs who had founded the companies and who remained in charge of business operations. After two rounds of repeated visits (some returnee founders were out of their offices on the first visit), we obtained 201 usable responses, with a response rate of 24%.

The sample, according to the Chinese definition of an SME, is composed mainly of small firms (165 or 82%), with a lesser number of micro (16), medium (19) and large (1) firms. To maintain relative uniformity in terms of firm size, we excluded the only large firm. Hence, for the 200 REVs used in the analyses, their founders spent an average of 7.82 years abroad. The mean number of employees is 37.35, with a mean turnover of RMB 24.46 million. Although these firms are relatively young, with an average age of 4.4 years, they started international operations early and, on average, have 5.6 foreign markets. REVs are found within different industries, but they occur mostly within high-technology industries. The sample in this study is distributed over

seven industries, five manufacturing industries (chemicals, pharmaceutical products, electronics, electrical equipment, and machinery and equipment) and two service industries (computer programming and information services). According to the Chinese high-tech industry classification, all seven of these are considered high-tech industries.

We also checked for response bias and could not find any significant differences between the respondents and non-respondents in terms of firm age and size. To test for the possible common method bias problem, we randomly selected 30 returnee entrepreneur firms among the response samples and requested that an alternative senior executive at each firm complete the survey. Through a comparison of these surveys with the original survey responses by the returnee, the results suggest that the responses of the two executives from the same company are highly consistent (Pearson correlation = 0.80). In the post-survey stage, we called back 55 original respondents to check their response accuracy, and the results showed high consistency between the telephone interview reports and the survey answers. We also conducted a Harman's single-factor test to check biases not minimized by the research design. The confirmatory factor analysis showed that the single-factor model fit the data poorly (Chi-square = 192.03; $df = 27$; CFI = 0.85; GFI = 0.82; NFI = 0.83; NNFI = 0.80; RMSEA = 0.175). In addition, following a single-method-factor approach (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we performed another confirmatory factor analysis (CFA), where all manifest indicators load on both a latent CMV factor and its respective theoretical constructs. The results showed that the loadings of all items were still significant after the inclusion of the CMV factor. Drawing on these test results, we may conclude that the common method bias issue is not serious in this study.

4.2. Constructs and measurements

We collected the data by using a standardized questionnaire with a seven-point Likert scale administered through face-to-face interviews with returnee entrepreneurs of the company (e.g., the founders of the returnee venture). An advantage of this approach is that it allows the interviewers to clarify questions if necessary as well as detect inconsistencies in the respondents' answers. This method offered the advantage of providing more specific details concerning each of the constructs below; an explanation of social network and business network relationships, for example, could be provided on the spot. Moreover, this approach allows for high-quality data by minimizing the missing data for individual questions and ensuring that the objectives of the questions are met (cf. Fowler, 1993). One clear disadvantage of this approach, however, is that we only have information from key respondents at the returnee firms.

The *International Social Network* of Returnee Entrepreneurs (REISN) is generated and accumulated through their daily social interactions in host countries (Roberts, 2012). For example, interactions with supervisors and colleagues are typical social activities that give rise to social relationships with people in host countries. In addition, returnees can take part in other social activities such as attending conferences and socializing with peers in professional associations. The more broadly and deeply a returnee engages in social activities, the greater the extent to which that returnee is integrated in that foreign social network and is able to exploit it. Accordingly, we adapted a three-item, seven-point Likert scale measure developed by Dai and Liu (2009), and asked returnee entrepreneurs to assess the extent to which they had developed and utilized social networks when they were abroad. The specific questions are about the extent to which returnee entrepreneurs (1) have network ties maintained with people in foreign countries; (2) have membership in different associations abroad; and (3) exploit networks established abroad.

The *International network capability* construct (RVINC) is based on the notion of network capabilities as discussed in terms of the development and utilization of relationships and networks of both a social and business character. Based on similar measurements (cf. Peng & Luo,

2000; Zhou et al., 2010), we chose to develop a three-item, seven-point Likert scale construct to assess the extent to which the respondent firms had developed and utilized new relationships, cooperative relationships and social interactions abroad. As such, in order to capture the three components of the concept of network capability, the managers were asked about the extent to which the firm (1) has established new relationships in international markets; (2) is dependent on social relationships/interactions with business partners in international markets; and (3) has developed cooperative relationships in international markets.

The knowledge that REVs have of entrepreneurial opportunities in this study is labeled *Entrepreneurial opportunity knowledge* (RVEOK). We thereby draw on the recent entrepreneurial opportunity research and the notion held by many scholars that individuals do not always search for opportunities, but rather they recognize the value of the information and knowledge that they have and receive (Ardichvili et al., 2003). Hence, this construct captures the perceived recognition of the firm's knowledge of possible entrepreneurial opportunities. We divided the construct into one business component and one technological component, and used a two-indicator seven-point Likert-based construct capturing these two knowledge components of entrepreneurial opportunities. Accordingly, we asked for the respondents' perceptions of how important it was for the firm to have knowledge about (1) new technological opportunities and ideas, and knowledge about (2) business opportunities and business ideas (from 1 = not at all important to 7 = very important). We view these components as experience-based, in terms of knowledge about new technological ideas and business opportunity.

The construct *International performance* (RVIP) was developed with regard to the suggestion that international sales as a percentage of total sales is well suited to capturing the level of a firm's internationalization (e.g. Bai, Johanson & Martín Martín, 2017) and to reflecting the effectiveness of a firm's international activities (Yeoh, 2000). Following this established approach to assessing the international performance of SMEs, we use the ratio of international sales to total sales as the indicator for a firm's international performance (Zhou, Wu, & Luo). This single-item indicator provides objective, concrete information on how much the firm has achieved in its international activities (Sapienza et al., 2006; Zhou et al., 2010), and the indicator has acceptable psychometric properties that allow it to consider the concreteness and complexity of the construct in research on SMEs (Fuchs & Diamantopoulos, 2009).

We also added three control variables: *firm age*, *firm size*, *R&D investment*. Firm age and size are important indicators that differentiate the business activities and performance of entrepreneurial firms (Autio et al., 2000). We measured firm age by subtracting the founding year of firms from 2013. Firm size is calculated as being the number of employees at the end of 2013. R&D is the main business activities of entrepreneurial firms at their early stage. Investment in R&D could enhance new product development of firms, giving rise to new sales opportunities; however, the cost of R&D could damage the international market commitment of firms if the R&D activities involve a large amount of effort. Therefore, we measured the R&D investment as the R&D budget in relation to total sales in 2012.

5. Results

We present the means, standard deviations, and correlations between variables in our model in Table 1. We first conducted a confirmatory factor analysis to assess the convergent and discriminant validity (Jöreskog & Sörbom, 1993). Table 2 lists the measurement items of the construct scales, the standardized coefficient loadings, the construct CRs, and the AVEs for each construct. First, all indicators have significant loadings (t -values ranging from 9.65 to 16.10), and in all cases except one (membership of different associations abroad) the items' reliability is over the suggested 0.70 cut-off value. Because the

loading value of this item is marginally lower than 0.70 (.68) and the construct reliability and average variance extracted (AVE) are satisfactory, we decided to keep this indicator in the model. Second, the constructs present high construct reliability, where the reliability of the constructs operationalized with multi-item indicators ranges from 0.77 to 0.91 (Werts, Linn RI, & Jöreskog, 1974). Third, the AVE values are over the threshold point of 0.50 for convergent validity (Fornell & Larcker, 1981), and it is larger than the squared multiple correlation coefficients of all pairs of constructs, which satisfies the criterion of discriminant validity (Fornell & Larcker, 1981). Finally, but importantly, the model obtained a good measurement fit (Chi-square = 29.12; df = 22; CFI = 0.99; GFI = 0.97; RMSEA = 0.040) (Bentler, 1990; Jöreskog & Sörbom, 1993).

As a second step, we tested the mediating and causal relationships in the structural model according to the hypotheses. For the hypotheses of H1 and H2 that focus on the mediating effect of international network capability, we followed the LISREL-specific suggestions offered by, for example, Hayes (2009), Lau and Cheung (2012), and Preacher and Hayes (2008) to test mediation effects in LISREL, and applied the bootstrapping procedure to examine the indirect effects (Cheung, 2009; Lau & Cheung, 2012). We first calculated the proposed model with multiple paths (see Fig. 1). Based on the coefficients of the direct paths (a, b, c), we calculated the product of the direct paths that form the indirect paths between REISN and RVEOK, and between REISN and RVIP (including ab and ac) (Taylor, Mackinnon, & Tein, 2008). Then we assessed the significance of indirect effects with percentile bootstrap (Cheung, 2009), which gave rise to a 95% confidence interval (CI) for ab and ac respectively. If the interval for an indirect effect does not include zero, it receives support that the indirect effect is significantly different from zero with 95% confidence.

For the hypothesis of H3 that examines the direct relationship between RVEOK and RVIP, we assessed the coefficient of the direct path (d) that is immediately derived from the calculation of the proposed model (see Fig. 1). Table 3 summarizes the results. It shows that the model supports both the hypotheses of H1 and H2, but rejected H3 (also see Fig. 2). Thus, RVINC mediates the influence of REISN on RVEOK (H1) ($0.1471 < ab < 0.8107$), as well as the impact of REISN on REIP (H2) ($0.0234 < ac < 0.3450$), while RVEOK is not associated with RVIP (H3) ($\gamma = -0.06$). In addition, no control variables are significant. From Table 4, we can also see that the goodness-of-fit indices show a good model fit (Chi-square = 29.22; df = 23; CFI = 0.99; GFI = 0.97; RMSEA = 0.037). Therefore, we conclude that the structural equation modeling analysis generally supports our hypothesized model. We discuss these findings in the following section.

6. Discussion

To deepen our understanding about the extent to which REVs capitalize on the international presence of returnee entrepreneurs, we examined the impact of the social network of returnee entrepreneurs on international network capabilities and opportunity knowledge, and the subsequent shaping of the international performance. The hypothesized model received partial support, except H3, which gives rise to several interesting observations and some suggestions for future research.

The results support the idea that there is a connection between the social networks of returnee entrepreneurs and their capability to act in international business networks, which adds insights into the role of networks on the performance of international efforts of REVs. More specifically, seminal literature on internationalization has emphasized the effect of business network relationships (e.g. Vahlne, 1977, 2009;). Later on, the role of social networks gained more weight (e.g. Ellis, 2001, 2011; Zhou, Wu, & Luo), especially considering the international entrepreneurship approach where there has been an emphasis on the individual experiences of the entrepreneurs (McDougall, 1994, 2005;).

With a few exceptions (e.g. Björkman & Kock, 1995), however, there is a lack in the number of studies that consider both social network ties

Table 1
Discriminant validity^a; correlations^b and square root of the average variances extracted (AVE) (N = 200).

Construct	Mean	s.d.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) RE's International Social Network (REISN)	5.17	1.20	0.73						
(2) REV's International Network Capability (RVINC)	4.79	1.50	0.55**	0.88					
(3) REV's Entrepreneurial Opportunity Knowledge (RVEOK)	5.68	1.27	0.26**	0.46**	0.84				
(4) REV's International Performance (RVIP)	23.93	23.56	0.10	0.21**	0.06	1.00			
(5) Firm Age	4.41	3.17	0.003	0.01	-0.03	0.17*	1.00		
(6) Firm Size	37.35	38.62	0.05	0.08	-0.02	0.20**	0.45**	1.00	
(7) R&D Investment	0.58	0.39	0.04	-0.01	0.03	-0.04	-0.08	-0.08	1.00

^a Diagonal values in bold are the square roots of the variance shared between the reflective constructs and their measures. For discriminant validity to be established, the diagonal elements must be greater than the off-diagonal elements in the corresponding rows and columns.

^b *p < .05; **p < .00 (level of confidence, two-tailed tests).

and business network relationships concurrently (Slotte-Kock & Coviello, 2010). Social interactions have been identified as one dimension of business network relationships (Uzzi, 1997), and it is reasonable to assume that entrepreneurs (returnee entrepreneurs in particular) may take advantage of their international social networks to penetrate foreign business networks (Björkman & Kock, 1995). Hence, the present study responds to the call for investigations into the connection between social networks and business networks and between the entrepreneur and the firm (Zhou, Wu, & Luo). It reveals the facilitating role of the returnee entrepreneur's social network for international network capability. Our main contribution is therefore that we uncover the connection between the international social networks of returnee entrepreneurs and the capability of returnee ventures to act in international business networks, as well as their effects on the initial international expansion of these firms. This may have important implications not only for returnee ventures but also for general new international ventures.

6.1. Conceptual implications

This study has two key implications for theory: the first captures the critical role of network capability, and the second relates to the non-significant importance of opportunity knowledge.

6.1.1. The mediating role of network capabilities

The international social network of returnee entrepreneurs neither directly influences the development of knowledge of opportunities among the returnee ventures, nor directly influences the international performance of REV's. Rather, the network capability of REV's mediates the influence of international social networks on opportunity knowledge and on the international performance of returnee ventures. The findings relate to the discussion in international entrepreneurship literature regarding the role of the entrepreneur and organizational

learning (Cumming et al., 2009), and demonstrate that REV's that develop network capability are better able to acquire new knowledge and realize higher international performance.

Thus, the results show that the social network of returnee entrepreneurs does not directly influence the development of knowledge of opportunities. Rather, the network capability of REV's mediates the influence of international social networks on opportunity knowledge. In other words, this paper shows that it is not the prior selection of network partners that provides the insight into how to create opportunities and achieve high performance. Instead, it is the interaction within the network and the knowledge on how to act and interact in the network that provides this insight. The critical knowledge does not reach the REV as transferable pieces of information, flowing freely within the network. The critical knowledge is experiential and tacit by nature, and is transformed into and routinized as capabilities. Consequently, it is the cooperation and interaction with specific actors rather than information flow that influence performance. The main advantage of having social relations or of holding a position in the network is that the firm acts together with the actors in the network.

In other words, network capability adds value to the international social networks. It reflects the capacity to transform the entrepreneur's social network into knowledge about how to identify and act upon both technological and business opportunities in foreign markets. This implies the importance of both social aspects and business aspects of networks for a firms' growth and expansion. This highlights the fact that the embeddedness of the firm's business relationships in the founding entrepreneurs' social networks is critical for the identification of new opportunities. Also, this gives evidence for a link between network capabilities and opportunity knowledge, which empirically confirms the idea of Alvarez and Barney (2007) that opportunities are developed in a context-specific and collective process.

What is also interesting is that it is the REV's capability to act in business network that mediates the relationships between one specific

Table 2
Operationalization of the construct.

Construct/Items	Standardized loadings	Composite reliability	Average Variance Extracted (AVE)
RE's International Social Network		0.77	0.53
Returnee entrepreneur has network ties maintained with people in foreign countries	0.77		
Returnee entrepreneur has membership in different associations abroad	0.68		
Returnee entrepreneur has networks established abroad	0.72		
RV's International Network Capability		0.91	0.77
Our firm has established new relationships	0.91		
Our top managers have social interactions with clients	0.88		
Our firm has developed cooperative relationships with business partners	0.84		
RV's Entrepreneurial Opportunity Knowledge		0.83	0.71
Our firm has knowledge about business opportunities and ideas	0.87		
Our firm has knowledge about new technological ideas	0.81		
RV's International Performance	1.00	1.00	1.00
Firm Age	1.00	1.00	1.00
Firm Size	1.00	1.00	1.00
R&D Investment	1.00	1.00	1.00

Table 3
Model's paths, significances and results.

Path	Point estimate	Percentile bootstrap 95% confidence interval ¹		Results
		Lower	Upper	
H1 ab = REISN → RVINC → RVEOK	0.3564	0.1471	0.8107	Supported
H2 ac = REISN → RVINC → RVIP	0.165	0.0234	0.3450	Supported

Path	Standardized Estimate	t-value	Results
H3 d = RVEOK → RVIP	-0.06	-0.64	Rejected

n.s. = not significant; * p < 0.05; ** p < 0.01; *** p < 0.001.
¹ The number of bootstrap samples is 1000.

person's network of social relations with opportunity knowledge and international performance. This implies that either the entrepreneur is one of only a few people working in the REV or that the social network of the entrepreneur can be transformed into capabilities that are distributed in the firm, among the other employees, and subsequently used when doing business with customers and suppliers. The transformation and distribution of the network capability highlight the importance of being able to lead by example and to transfer the advantages of having a social network for the firm. This transformation mechanism from a single entrepreneur's social network to the firm's business network is something we know little about, but it seems that it is a critical process for REV's as well as for other small and medium-sized firms beginning to operate internationally soon after inception.

6.1.2. The missing link between opportunity knowledge and international performance

Meanwhile, the unconfirmed hypothesis, H3, gives rise to an unexpected finding. Concerning the unrelated relationship between the knowledge of REV's in terms of opportunities and international performance, it suggests that the internationally gained knowledge about business and technological opportunities does not benefit the performance of returnee ventures in terms of sales in foreign markets. This is surprising, as the common assumption of international entrepreneurship contends that opportunity seeking, rather than uncertainty reduction, has emerged over the last decades as the key driving factors for the international activities of entrepreneurial firms (McDougall, 1994, 2005;). We argue that there might be several reasons why we did not

Table 4
Evaluation of the proposed model with goodness-of-fit measures.

Goodness-of-fit Measure	Fit guideline	Calculation of Measure	Acceptability
Normed Chi-square	1.0–2.0	Chi-square/df = 1.27	Acceptable
Comparative fit index (CFI)	≥ 0.90	CFI = 0.99	Acceptable
Goodness-of-fit index (GFI)	≥ 0.90	GFI = 0.97	Acceptable
Normed fit index (NFI)	≥ 0.90	NFI = 0.98	Acceptable
Non-normed fit index (NNFI)	≥ 0.90	NNFI = 0.99	Acceptable
RMSEA	≤ 0.08	RMSEA = 0.037	Acceptable

find any support for the link between opportunity knowledge and performance.

The first possible answer could be that while we focus on identifying opportunity, it is only when the firm has acted upon and conducted a long-term exploitation that one can see any positive influence on performance, which underlines the importance of treating opportunity as a development and a process containing several sequences or phases. It could even be the case that identifying opportunities would lead to costs if they are not exploited, and thus would have a negative influence on performance. This reasoning is in line with the ongoing debate over the concept of opportunities, where the actual outcome, which in this case is international performance, does not come to be fully realized before there is an actual actualization and exploitation of the opportunity (cf. Ramoglou & Tsang, 2016).

A second explanation could have its roots in the fact that we view

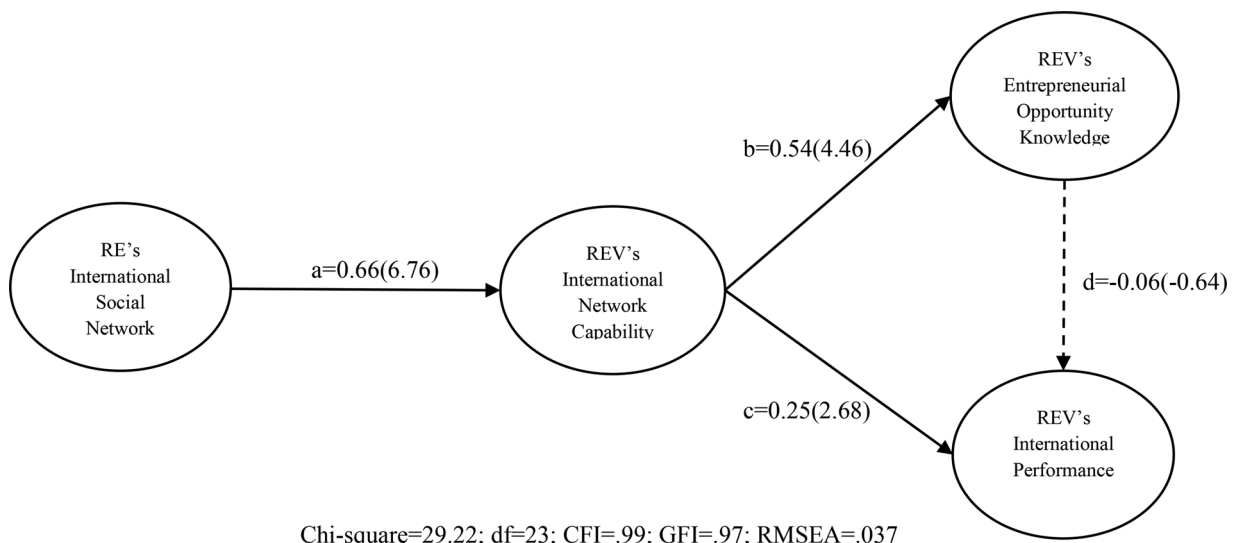


Fig. 2. Results for the structural model.

opportunity knowledge as a general competence that is internationally valid and implicitly transferable between various foreign markets. A network approach towards performance implies that business is not only local but also network-specific. Knowledge about how to do business emerges in specific relationships and networks, and can mainly be used in this context. Applying the knowledge in other contexts, markets, or networks can have a destructive impact on international performance.

6.2. Limitations

Inevitably, the study has some limitations, and these can be addressed in future studies. First, our sample contains only REVVs that have active international operations. The inclusion of non-internationalized REVVs not only would reduce potential sampling bias but would also allow the study to make a comparison between internationalized and non-internationalized REVVs and thus lead to a more explicit understanding of the connection between the nature of network capabilities, opportunity development and subsequent performance advantages or disadvantages.

Second, regarding the small sample size, there are few reliable publicly available and objective data or archive documents on these firms. This study is based solely on primary survey data. Future studies could apply other methods, such as case studies, in order to provide a more comprehensive picture. Particularly, longitudinal studies could be applied to uncover the dynamic nature of network activities and their impact on REV performance.

Third, future research may extend the present study to other contexts where the phenomenon of returnee entrepreneurs is prominent. For instance, India is an emerging context that has been investigated frequently, although the phenomenon of REVVs is also becoming evident in other developing countries and emerging markets. The inclusion of diverse research contexts would benefit the generalization of REV studies.

6.3. Future research

This study sheds light on a critical question in research on international new ventures, namely, the connection of entrepreneurs' informal social networks and business network relationships, as well as their performance implications for small, new and young international ventures. The results demonstrate that international network capability derived from the international social networks of returnee entrepreneurs plays a key role in the acquisition of opportunity knowledge and in the strengthening of international performance. Opportunity knowledge does not have a clear and unambiguous impact on the international performance of REVVs. We therefore need more studies on the extent to which the opportunity knowledge can be exploited and actualized in the context of international networks.

Furthermore, this study builds on the idea that it is the capability to act in international networks that provides knowledge about opportunity development, but it would also be interesting to study the position of the REV in the network, looking at, for instance, the degree of centrality or insidership (Coviello, 2006; Johanson & Vahlne, 2009) and the way in which that relates to the firm's acquisition of knowledge about different types of opportunity development. We contend that knowledge of certain characteristics of the opportunity – novelty, value and serendipity – is likely to be of importance for performance.

Knowledge about how to develop novel opportunities is likely to positively contribute to the firm's performance, and consequently we advance the concept of novelty as the first opportunity characteristic. Novelty (from the firm's perspective) represents what is original, unique and pioneering about the opportunity in comparison to other developed opportunities. As novelty is subjective, an opportunity can be characterized as being novel for one firm, while other firms might view it as familiar. Knowing how to handle what is unfamiliar may have an

impact on performance, especially in dynamic markets. In addition, opportunity implies transforming the existing ends and/or means (Eckhardt & Shane, 2003), which tends to result in profits and increased value. Knowledge about how to identify and exploit a high-value opportunity and dismiss a low-value opportunity seems to be critical for performance, and thus we view value as being the second interesting characteristic, but it can only be determined by the firm, which will eventually reap the benefits of the opportunity.

Thus, there seems to be a theoretical link between network position and the degree of serendipity of the opportunity (Dew, 2009). In the literature, opportunities are often the result of unplanned actions, improvisation and surprise (e.g. Moorman & Miner, 1996). As a consequence, we suggest that by having knowledge about how to go from identification to exploitation of serendipitous opportunities remains to be empirically tested. Combining various degrees of value, novelty and serendipity with different types of opportunity – business or technology – may imply different degrees of mobility of the firm's network capability and subsequently the various combinations may affect performance in various ways. This is also a promising field of research, especially in dynamic emerging markets.

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