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FAMILY INVOLVEMENT IN CHINESE AND GERMAN SMALL BUSINESSES

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The goal of this study was to examine cultural differences in the value of family involvement in German and Chinese small businesses due to their differences in collectivism/individualism. Our analyses, based on a sample of 562 Chinese and German owners, showed that family involvement — measured as the number of family members that work in the business — is higher in China than in Germany. Compared to German business owners, Chinese owners received most of their start-up capital from family members. Moreover, we were interested in whether family involvement is related to the business owner's ability to make use of start-up capital to turn it into business outcomes. Building on existing literature and based on the match hypothesis we hypothesized that the effects of family involvement on business outcomes depend on the cultural values underlying a business. Our analyses revealed that family involvement negatively affected relationships of start-up capital with business outcomes both in China and in Germany. Our study contributes by showing that a negative effect of family involvement on the ability to make use of start-up capital is not only evident in individualistic cultures such as Germany but does also apply to collectivistic Chinese businesses. Practically, owners in both cultures are suggested to develop strategies in order to prevent and overcome negative effects of family involvement on business outcomes. Our results suggest fruitful avenues for future research.

Keywords: Family involvement; collectivistic/individualistic culture; innovation; business success; small businesses.

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INTRODUCTION

In the present study, we utilize the concept of family involvement defined as the number of family members that actively work in and are integrated in the day-to-day operations of small businesses (Astrachan and Shanker, 2003).

There are two ways to think about involving family members in a firm: On the one hand, according to a resource-based approach (Habbershon *et al.*, 2003) family involvement can be a resource because of the strong emotional bonds and the trustful relationships between family members. On the other hand, family involvement can have negative effects for business outcomes due to additional demands by family members, dysfunctional conflicts, and a lack of professional knowledge (Nicholson, 2008; Schulze *et al.*, 2001). Previous research has revealed mixed results on whether family involvement functions as a resource or as a barrier for growth in small firms (Rutherford *et al.*, 2008; Zahra, 2005).

We first conducted a field study with Chinese and German small business owners to take a closer look at the role of family involvement in the business. Second, due to cultural distinctions between China and Germany in the dimension of collectivism/individualism we examined differences in the sources of gaining start-up capital to build up a venture. Third, we investigated whether family involvement is related to the ability to make use of start-up capital to turn it into innovation and business success. We expected that the effect of family involvement on business outcomes depends on the cultural values underlying a business.

THEORY AND HYPOTHESES

Differences between China and Germany in Culture and Family Involvement

Culture consists of shared practices and values (House and Javidan, 2004) and influences the functioning of families as social groups (Georgas, 1989; Katcicibasi, 1996). The most important cultural difference between China and Germany is the societal practice of collectivism (Gelfand *et al.*, 2004). Whereas collectivistic societies such as the one found in China emphasize group membership as the source of identity, individualistic cultures such as the one found in Germany regard individuals as independent. In individualistic cultures, ties between individuals are loose and good relations are based on common tasks or knowledge of task accomplishments (Hofstede, 2001; Triandis, 1995). In its investigation of 62 different societies, the well-known GLOBE study differentiated between two forms of collectivism: On the one hand, collectivism related to the family and the in-group (such as relatives and friends), measured as the degree of interdependence and loyalty to the family. On the other hand, institutional collectivism, which is defined as practices and values that reward collectivism at a societal level (Gelfand *et al.*, 2004). However, in the rankings provided by the GLOBE study, Germany and China are at the opposite ends on both dimensions and are thus fundamentally different in terms of both family and in-group collectivism. Germany is the 7th lowest country among 62 countries in family and in-group collectivism and the 8th lowest in institutional collectivism. In contrast, China is the 9th highest in family and in-group collectivism and the 7th highest in institutional collectivism (Gelfand *et al.*, 2004).

The family is a core social network composed of a group of people who share common attitudes, interests, or goals and, frequently, live together (Aldrich and Waldinger, 1990). Cultural norms influence the perception of who belongs to the family (Sundaramurthy and Kreiner, 2008). Societies with an individualistic background typically conceptualize a family as a nuclear network that includes parents and their offspring. In contrast, in the collectivistic tradition a much wider definition of the size of the family exists–the concept of the extended family. The extended family includes a number of more distant relatives functioning as a larger social unit (Chen, 1985). In China, the individual is perceived as being part of the larger family clan thus preferring a "We" identity rather than an "I" identity (Oyserman *et al.*, 2002). Due to the high value of in-group collectivism in China and the family as the core unit of social and economic life, there is a strong tendency in expressing pride and loyalty to family members. The significance of the family and family life is emphasized in family customs and celebrations (Lee and Mock, 2005).

In contrast to the Chinese collectivistic tradition, individualistic societies such as Germany emphasize autonomy and individual freedom. Individual goals and interests are more important than group goals and people prefer to act as individuals rather than as members of a social group (Hofstede, 2001; Oyserman *et al.*, 2002; Triandis, 1995).

Collectivistic versus individualistic practices also influence organizational behavior in Chinese and German firms (cf. Danes *et al.*, 2008; Gelfand *et al.*, 2004; Gollnick and Chinn, 1990). As the family is taken to be the natural category of cooperation in China compared to Germany, Chinese business owners fall back onto their families to get resources (such as start-up capital), and support. Moreover, there is also a sense of obligation to help family members in a collectivistic society (Triandis, 1995). Therefore, owners may feel obliged to employ family members. Since, there is no sophisticated welfare system in China that aids those who do not have work, the sense of obligation for employing family members is maybe even more pronounced than in Germany, where alternative means of living exist because of the extensive welfare system. Thus, we propose the following hypothesis:

H1: Family involvement (the number of family members working in the business), is higher in China than in Germany.

Collectivistic versus Individualistic Culture and Sources of Start-up Capital

In the first stage of business development one major goal of the entrepreneur is to collect resources to build up the venture (Baron, 2007; Brophy and Shulman, 1993). Financial capital is a particularly important resource because the capital base of a business can be used to invest for future growth and success. Raising capital involves many activities and poses many barriers (Hughes and Storey, 1994). Owners are often forced to use their personal savings to start their businesses. Additionally, businesses rely on capital from banks (Riding and Swift, 1990) or from family members and friends (Brophy and Shulman, 1993; Brüderl *et al.*, 1996).

Family involvement is related to the acquisition of start-up capital. Culturally, the concept of collectivism allows stronger reliance on family members for financial, emotional and direct support (Triandis, 1995). When a new business receives capital from the family, it is part of the equity equation that family members are in turn also employed by the business (Danes *et al.*, 2009; Gelfand *et al.*, 2004). Banks are less prepared in developing economies like China to provide start-up capital (Beck *et al.*, 2008; Brophy and Shulman, 1993). This may be due to the fact that developing countries are often institutionally not mature enough to provide land titles which can be used as collateral for banks. Further, banks may be more cautious to lend money to small businesses because of stronger economic fluctuations in developing countries (Benzing, 2005; Verheul and Thurik, 2001).

In Germany, business owners strongly rely on banks as sources of start-up capital (Wimmer, 2009). On the one hand, the banking system is well-developed and there are state programs for business funding that work via banks (Fiedler and Hellmann, 2001). On the other hand, German business owners are unlikely to rely on financial support from the extended family. There are fewer mutual obligations and responsibilities within family networks grounded in the individualistic culture (Triandis, 1995). This leads to the following hypothesis:

H2: In China, the most important source of start-up capital is the family. In Germany, the most important source of start-up capital is the banking system.

The Ability to Make Use of Financial Resources to Achieve Innovation and Business Success Is Moderated by Family Involvement

After having successfully started the business and having gained financial resources, business owners need to sustain advantage over their competitors in order to maintain their market position and to generate success and business growth (Baron, 2007; Porter, 1980). Therefore, owners need to create something new and avoid copying their competitor's ideas and products. In other words, in order to be successful they need to be innovative (Hamel and Prahalad, 1994).

West and Farr (1990) define innovation as the intentional introduction and application of new ideas, products, procedures, or processes that are designed to benefit the individual, the group, or the wider society in general. Innovations are positively related to business success (Bausch and Rosenbusch, 2005; Porter, 1980). Small and medium-sized businesses have some advantages over larger firms in the innovation process mainly due to their greater local market knowledge and their interactive management style (Rothwell and Dodgson, 1991).

Financial capital stimulates the introduction of new ideas and products in that it influences the feasibility of the innovation process and "often determines the survival of the innovating entity" (Brophy and Shulman, 1993, p.61). However, in general, financial resources are scarce in small businesses because financial support by family members, relatives and friends or by banks is limited. Therefore, it is central for business owners to make good use of the start-up capital to turn it into innovative products and services and produce business growth (Brüderl *et al.*, 1996). We argue that family involvement in the business is one criterion that influences how much the owner makes best use of existing resources and turns them into relevant outcomes. Specifically, we assert that the influence of family involvement on the relationship between start-up capital and innovation and success can be contradictory in nature (Chrisman *et al.*, 2004). We illustrate these divergent lines of argument below.

Reasons for Positive Effects of Family Involvement on the Use of Start-up capital and Influences on Business Success

Family involvement is an important resource for small businesses' success. This is due to the strong ties inherent in family systems, the shared family identity, and the resources such as financial and emotional support that are provided by family members (Chrisman *et al.*, 2004). Danes *et al.* (2009) define social, financial and human resources that are uncovered by the family as *family capital*. Also, according to social capital theory (Adler and Kwon, 2002; Hirsch and Levin, 1999) and the family systems therapy approach (Habbershon *et al.*, 2003; Kerr and Bowen, 1988) relationships in families are characterized by elements like tradition, trust, and loyalty. Tradition means sharing a common history, practices, and routines to connect family members to one another. Trust adds up to mutual support within the family, it is based on principles of fairness, and provides family members with a sense of security and protection. Loyalty relates to the sense of commitment and duty, family members are likely to experience (Hempel *et al.*, 2009; Lumpkin *et al.*, 2008).

Further, based on the strong ties and the cohesion inherent in the family, the family as a social group shares a common purpose and the aim and vision to perpetuate the business as an institution for family employment. Relationships among family employees may provide a high motivation to work for the good of the family and the business (Chrisman *et al.*, 2004). For instance, family members are often willing to work long hours, even without pay (Dyer, 2006; Fan, 2002), and they are more strongly committed to the economic well-being of the business than are external employees (Eddleston, 2008). Combined with the fact that social capital in the business is difficult for competitors to imitate, the involvement of family members can represent a resource and a unique advantage over non-family based businesses especially in times of hardship (Danes *et al.*, 2008; Dess and Shaw, 2001; Pearson *et al.*, 2008). Similarly, Sorenson and Bierman (2009) noted that social capital represents an important resource that best distinguishes family from nonfamily businesses.

Also, according to the argument of mutual trust and obligation, once business owners decide to employ family members, they assume responsibility for these employees, work for their benefit, and emphasize long-term security (Lumpkin *et al.*, 2008). Based on the perceived responsibility for the family, owners are likely to make sure that every effort is made to meet family members' requirements (Kets de Vries, 1993; Lumpkin *et al.*, 2008). Also, obtaining acceptance and praise as a consequence of entrepreneurial success enhances the entrepreneurs' prestige within the family (Habbershon and Williams, 1999; Schulze *et al.*, 2001).

Following these arguments, family involvement may have a general positive effect on how business owners use their start-up capital to enable business success and innovation.

Reasons for Negative Effects of Family Involvement on the Use of Start-up capital and Influences on Business Success

Although trust and loyalty in families are high, families are vulnerable to a unique range of risks and hazards (Pelled *et al.*, 1999; Schulze *et al.*, 2001). According to general systems theory (Bertalanffy, 1969), in a family, as a social system, individuals interact with one another and with the environment in a uniform manner through time even though the environment changes. If these uniform interactions are dysfunctional and do not match environmental demands, they can contribute to ongoing problems and conflicts within the social system (Bertalanffy, 1969). Thus, whereas families are based on stability and emotional bonds, businesses are changing, rational, and task-oriented systems (cf. McClendon *et al.*, 1991; Wimmer, 2009). Conflicts can occur when the business and the family differ in their objectives. Also, when family and business are closely intertwined, a lack of differentiation between the rationality of the business and the emotionality of the family is most likely. Then, intrafamily conflicts may easily spill over into the business and vice versa (McClendon *et al.*, 1991; Nicholson, 2008).

Further, despite the strong ties between family members, individuals pursue personal needs and goals that they define as important, and they are motivated to act in accordance with their own interests. Thus, the focus of reaching a common aim and working hard in order to maintain business growth can switch into egoistic thinking and acting of family members and thereby limiting the growth of the business (Schulze *et al.*, 2001). In line with these arguments, research has shown that businesses have to overcome challenges such as nepotism, and intergenerational conflicts through greater involvement of family members that negatively affect business success (e.g., Gomez-Mejia *et al.*, 2001; Schulze *et al.*, 2001).

Moreover, owners who rely on the trust and loyalty of the employed family members may run the risk of gaining too much power in attaining a patriarchal position that is not questioned or criticized. They might be likely to misuse capital for their personal short-term objectives instead of emphasizing economic long-term goals to develop their businesses (Schulze *et al.*, 2001). Due to the owners' high position, his prestige within the family, and the stable social order established in the business, family employees are unwilling to discipline and replace the owner even when his behavior turns out to be unacceptable (Gomez-Mejia *et al.*, 2001; Schulze *et al.*, 2001).

Furthermore, especially in terms of innovation and the introduction of innovative ideas, diversity is required (Cox and Blake, 1991; West and Anderson, 1996). Diversity in work teams supplies employees with many different experiences, perspectives, attitudes, and skills. Diverse teams–employees from different fields and cultures and with different job-related experiences–have been shown to be more productive than homogeneous teams (Zahra, 2005). In small businesses with high family involvement there is a lack of diversity in perspectives and attitudes due to the homogenous group of family employees. Hence, the chance to bring new ideas and experiences into the firm is rather low, thereby making innovative behavior less likely to occur (Zahra, 2005).

Following this argument, research suggests the importance of exposing a business system to external experiences and knowledge. Apart from focusing on family involvement as an important form of social capital, it is also crucial to emphasize human capital to build up new external connections that could lead to the recognition and exploitation of opportunities in the environment (Chrisman *et al.*, 2004; Danes *et al.*, 2008; Zahra, 2005). Human capital consists of the skills, abilities, and attitudes of those employed by the firm (Dyer, 2006). Recent literature emphasizes the importance of human resource practices such as recruiting and talent management of employees that in fact "fit" the organization (Cardon and Stevens, 2004; Kidwell and Fish, 2007). However, businesses that employ many family members will be seen as less attractive by highly talented employees because of lower career chances (Kets de Vries, 1993). Consequently, businesses that strongly rely on family employees and do not invest financial resources into attaining and recruiting external employees will have difficulties to attract competent staff in the long run.

Considering positive as well as potentially negative effects on family involvement, we assume that the direction of impact depends on the cultural background of the business. We propose that in the collectivistic tradition of China, family involvement should have a positive effect on how business owners use their start-up capital to enable innovation and success. This is in line with the match hypothesis (Rauch *et al.*, 2000; Tung *et al.*, 2007) which requires a good congruence between owners' behaviors and the cultural conditions they have to deal with. Family involvement matches the demands of collectivism in China. Once business owners decide to employ family members, they assume responsibility and emphasize long-term security as group interests and goals are emphasized (Lumpkin *et al.*, 2008). Also, involved family members who subscribe capital to build up and sustain the business support a value-adding business strategy (Lumpkin *et al.*, 2008). Consequently, arguing from a cultural point of view, high family involvement in the business might be the best way to adjust to economic pressures. This employment strategy fits in the cultural collectivistic background and is, therefore, likely to increase the innovative potential and economic success in China

For small businesses in the individualistic tradition of Germany, we argue that the negative effects of family involvement on the relationship between start-up capital and innovation and business success outweigh the potentially positive effects. Family involvement does not match the highly individualistic culture of Germany (Rauch *et al.*, 2000; Tung *et al.*, 2007). Small businesses that employ many family members might be seen as less attractive by highly talented external employees because of lower career chances (Kets de Vries, 1993). Consequently, businesses that strongly rely on family members in the management team might be more vulnerable to a lack of professionalism and dysfunctional behavior of family members. We propose the following hypotheses:

H3a: In Chinese small and medium-sized businesses, family involvement moderates the relationships between start-up capital and innovation as well as business success, such that in businesses with high family involvement (vs. low family involvement) the relationships will be positive.

H3b: In German small and medium-sized businesses, family involvement moderates the relationships between start-up capital and innovation as well as business success, such that in businesses with high family involvement (vs. low family involvement) the relationships will be negative.

METHOD

Data Collection and Participants

Data were collected as part of a larger project that assessed the psychological success factors of Chinese and German small businesses. In order to take part in the study, participants had to meet three criteria: First, the participants had to be the owners and active managers of their own business. Second, they had to have at least one employee. Third, their businesses had to belong to one of the four different industries: information technology, automobile, building/construction and gastronomy/hotel.

The German sample was selected from the province of Hesse in Western Germany and the Chinese owners came from the area of Hangzhou in the province of Zheijang. As a first strategy for acquisition of study participants, we used the yellow pages as well as lists provided by the German chamber of commerce and the Chinese local government. As a second strategy, we relied on personal contacts with business owners. Participation in the study was voluntary. All entrepreneurs received a written feedback report about the study outcomes.

Our initial sample consisted of 302 German (response rate: 43%) and 304 Chinese (response rate: 66%) business owners. We excluded 44 participants (25 from the Chinese and 19 from the German sample) due to outliers in the total number of employees working in the business and business sales. Thus, the analyses were based on a total of 562 participants (279 participants from China and 283 participants from Germany). Table 1 provides a description of the German and Chinese sample.

Missing values in several relevant study variables (such as the amount of start-up capital) appeared in the current study. We used pairwise deletion of missing data which resulted in different sample sizes for each analysis. In order to predict missing values based upon the participant's answers to relevant variables in the data set, we used regression analysis and for the German sample–but not for the Chinese sample- we found that the higher the start-up capital from banks, the higher the amount of missing values ($\beta = .24, p < .01; R^2 = .06$).

Table 1. Description of the German and the Chinese Sample.

Country	**Germany**	**China**	**Total**
Number of participants in the sample	283	279	562
Gender	18.2% female 81.8% male	11.8% female 88.2% male	15.0% female 85.0% male
Industry	37.7% building/ construction 15.9% automobile industry 22.8% gastronomy/ hotel industry 23.5% information technology	21.7% building/ construction 31.3% automobile industry 23.7% gastronomy/ hotel industry 23.4% information technology	29.7% building/ construction 23.6% automobile industry 23.3% gastronomy/ hotel industry 23.4% information technology
Number of employees	9.5 ($SD = 11$)	133 ($SD = 207$)	

Data collection was divided into two parts: The participants were interviewed once and completed a questionnaire afterwards. Interviewers were 20 Chinese and 20 German graduate and postgraduate students of psychology and management who had received a comprehensive interviewer training. Each interview was coded by two raters on the basis of an extensive coding scheme. Raters were two Chinese (in the Chinese sample) and two German (in the German sample) postgraduate students of psychology who had received a comprehensive rater training. As a measure of inter-rater reliability we used intraclass correlation coefficients (ICC; Fleiss and Shrout, 1978). The items and questions for the interview and the questionnaire were developed and composed by a team of Chinese and German scholars and we ensured that they were suitable for both Chinese and German business owners. We developed the scales in English and they were then translated into Chinese and German by competent bilinguals.

Measures of Variables

Number of Family Members was measured in the questionnaire by asking the business owners to write down the number of family members who actively worked in the business.

Number of Employees: In the interview, participants reported the total number of part-time and full-time employees working in their businesses the current year and for the last three years separately.

Family Involvement: We calculated a ratio and divided the reported number of family members actively working in the business (number of family members) by the overall number of employees in the business. This was done due to the fact that the effect of family involvement on outcome variables might differ depending on the overall size of the business.

Start-up Capital was assessed in the questionnaire as the amount of capital raised for starting the firm or for purchasing it. Participants were asked to refer to their books when writing down the amount of start-up capital.

Start-up Capital from Banks: Participants wrote down the percentage of start-up capital that they received from banks (in the form of a loan).

Start-up Capital from Family Members: Participants were asked for the percentage of start-up capital that was contributed by family members (in the form of a loan or in the form of pure capital).

Innovation was assessed in the interview by asking several questions about the introduction of new products/services, processes, and strategies during the last five years. The answers were coded by the two raters on a five-point scale ranging from (1) "*not at all innovative*" to (5) "*very innovative*". Intraclass correlation coefficients ranged from .84 to 1.0 in the Chinese sample and from .93 to 1.0 in the German sample. We calculated an overall index for innovation based on participants descriptions on the introduction of new products/services, processes, and strategies in the interview.

Business Success: *Sales*. In the interview, participants indicated their business sales during the last three years as numerical values. For the three numerical values inter-rater reliability was very high in both samples (intraclass correlation coefficient ICC = 1.0). Next, we combined the three numerical values into a single scale for overall business sales during the last three years by calculating their mean. Cronbach's alpha was .95 in the Chinese and .99 in the German sample. Due to the skewed distribution of sales, logarithmic transformations were used (Cohen *et al.*, 2003). Further, in order to avoid problems in the analysis due to different currencies in start-up capital and sales, the Chinese currency Yuan was converted into Euro (1 Euro = 10, 4 Yuan, updated January 1st, 2004 in the year of data collection).

Control Variables. We controlled for the year of business establishment and for the four types of industries (three dummy variables with information technology as the reference group). Since we used the ratio of the amount of family employees to the total number of employees, we also implicitly controlled for the number of employees. This was necessary as the total number of employees in Chinese businesses was higher than in German businesses, and we assumed the effect of family involvement (number of family members working in the business) to depend on the overall size of the business in terms of the total number of employees.

RESULTS

Descriptive statistics and intercorrelations among all study variables are provided in Table 1. The values above the diagonal refer to China, whereas the values below the diagonal refer to Germany. Table 2 shows negative correlations between family involvement and sales in both samples. Also, in the German sample family involvement correlated significantly negative with innovation. However, in contrast to the literature on innovation (Bausch and Rosenbusch, 2005; West and Anderson, 1996), there were no significant correlations between innovation and sales either in China or in

Table 2. Descriptive Statistics and Intercorrelations for the German Sample (Below the Diagonal) and the Chinese Sample (Above the Diagonal).

Variable	**Mean GER**	***SD* GER**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1. Family involvement	0.25	0.47	—	0.33^{**}	-0.20^{**}	-0.06	-0.30^{**}	03	-0.12^{*}	0.13^{*}	0.23^{**}	0.26^{**}	-0.19^{**}	-0.05
2. Number of family members	0.86	1.01	0.56^{**}	—	0.16^{*}	-0.01	0.10	0.64^{**}	0.04	-0.02	0.04	0.12	-0.03	-0.05
3. Number of employees	9.46	11.11	-0.28^{**}	0.06	—	0.16^{*}	0.50^{**}	29^{**}	0.10	0.13^{*}	-0.40^{**}	-0.15^{*}	0.28^{**}	-0.02
4. Innovation	2.01	0.83	-0.15^{*}	-0.12^{*}	0.11	—	0.10	0.10	0.04	0.02	-0.16^{*}	-0.03	0.17^{*}	-0.28^{**}
5. Sales log in €	5.62	0.61	-0.16^{*}	0.27^{**}	0.67^{**}	0.05	—	0.25^{**}	0.08	-0.05	-0.39^{**}	-0.46^{**}	0.24^{**}	0.24^{**}
6. Start-up capital in €	45124	80114	-0.07	0.09	0.20^{**}	0.03	0.22^{**}	—	0.17^{*}	-0.11	0.03	0.06	0.01	0.02
7. Start-up capital from banks in %	28.32	39.45	0.08	0.08	-0.02	-0.07	0.01	0.34^{**}	—	-0.18^{**}	-0.05	0.11	0.14^{*}	-0.03
8. Start-up capital from family members in %	20.06	35.83	0.07	0.03	0.03	-0.04	-0.01	-0.02	-0.25	—	-0.24^{**}	0.06	0.19^{**}	-0.15^{*}
9. Year of establishment	1984	28.46	0.04	-0.29^{**}	-0.22^{**}	0.17^{*}	-0.26^{**}	0.04	0.08	-0.18^{**}	—	-0.18^{**}	-0.43^{**}	-0.10
10. Industry: Gastronomy/ Hotel	0.24	0.43	0.06	0.19^{**}	0.01	-0.17^{*}	-0.12^{*}	0.32^{**}	0.30^{**}	0.02	-0.13^{*}	—	-0.13^{*}	-0.30^{**}

Table 2. (*Continued*)

Variable	**Mean GER**	***SD* GER**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
11. Industry : Automobile	0.16	0.37	0.10	0.12*	0.12*	−0.11	0.27**	0.01	0.18*	0.03	−0.07	−0.35**	—	−0.36**
12. Industry: Building/ Construction	0.36	0.48	−0.02	−0.16*	−0.12*	0.00	−0.00	−0.20**	−0.20**	0.04	−0.04	−0.42**	−0.33**	—
Mean CHN			0.12	4.57	133	2.39	4.88	16058	12.09	40.87	1997	0.25	0.33	0.21
SD CHN			0.27	17.27	207	0.69	0.75	52985	24.12	41.65	6.67	0.43	0.47	0.40

Note: Pairwise deletion; CHN = China; N =167-279; GER = Germany; $N = 150 - 283$ (N for correlations based on start-up capital from banks in % and start-up capital from family members in % = 94-168). $^{*}p < .05$; $^{**}p < .01$, two-tailed.

Germany. The mean and standard deviation in number of employees largely differed between China and Germany. Therefore, in our analyses we controlled for the total number of employees with our measure of family involvement.

Tests of Hypotheses

Hypothesis 1 postulates that the number of family members in the business is higher in China than in Germany. By comparing the number of family members working in the business, China scored significantly higher than Germany. On average, each Chinese business employed 4.57 ($SD = 17.27$) family members, whereas the number of family members in Germany was on average only 0.86 ($SD = 1.01$; Minimum: 0 and Maximum: 6 family members; 31.5% employed no family members at all). Thus, Hypothesis 1 was confirmed.

According to Hypothesis 2, in China the most important source of start-up capital is the family whereas in Germany the most important source of start-up capital is the bank. Table 2 shows that in China 40.9% ($SD = 41.7\%$) of start-up capital on average stemmed from family members versus only 12.1% ($SD = 24.1\%$) of start-up capital was obtained from banks. In Germany an average of 28.3% ($SD = 39.5\%$) originated from banks versus 20.1% ($SD = 35.8\%$) from family members. To test for differences in means between the two samples we used t-tests and found significant differences between China and Germany for percentage of capital from banks ($t(352) = -4.31; p < 0.01$) and for percentage of capital from family members ($t(354) = 5.15; p < 0.01$). Hence, Hypothesis 2 was supported.

To test interaction effects of start-up capital and family involvement on innovation and business success we used hierarchical moderated regression analyses presented in Table 3 (Aiken and West, 1991).

Table 3 shows that in the Chinese sample the interaction effect of start-up capital and family involvement on innovation was negative and significant ($\beta = -0.17, p < 0.05; \Delta R^2 = 0.03$) (Figure 1) whereas the interaction effect for business sales as dependent variable was insignificant ($\beta = -0.07; n.s$). Hence, Hypothesis 3a yielded partial support.

In the German sample, a significant negative interaction effect on business sales ($\beta = -0.20, p < 0.05; \Delta R^2 = 0.03$) was found (Figure 2) but there was no support for an interaction effect of start-up capital and family involvement on innovation ($\beta = -0.02; n.s$). Thus, Hypothesis 3b was partially supported.

Table 3. Interaction Effects of Start-Up Capital and Family Involvement on Innovation and Business Success Using Hierarchical Moderated Regression Analyses (Standardized Regression Coefficients).

Country	Germany						China					
Criterion	Innovation			Sales			Innovation			Sales		
Model	1	2	3	1	2	3	1	2	3	1	2	3
Industry: Gastronomy/ Hotel	−0.30**	−0.32**	−0.31**	−0.07	−0.14	−0.10	−0.08	−0.09	−0.09	−0.31**	−0.31**	−0.31**
Industry: Automobile	−0.24*	−0.23*	−0.23*	0.24**	0.25**	0.29**	−0.07	−0.08	−0.09	0.07*	0.03	0.02
Industry: Building/ Construction	−0.20	−0.19	−0.19	0.04	0.06	0.07	−0.34**	−0.36**	−0.36**	0.15	0.12	0.12
Year of establishment	0.11	0.11	0.12	−0.25*	−0.24*	−0.22*	−0.19*	−0.19*	−0.19*	−0.23**	−0.22**	−0.22**
Start-up capital in €		0.10	0.09		0.25**	0.17		0.13	0.20*		0.28**	0.31**
Family involvement		−0.11	−0.11		−0.14	−0.22**		−0.03	−0.04		−0.17*	−0.17*
Start-up capital in € x Family involvement			−0.02			−0.20*			−0.17*			−0.07
R^2	0.10	0.12	0.12	0.14	0.22	0.25	0.12	0.13	0.16	0.28	0.38	0.38
ΔR^2	0.10**	0.02	0.00	0.14**	0.08*	0.03*	0.12**	0.01	0.03*	−0.28**	0.10**	0.00

Note: $N = 372-535$; $^{*}p < .05$; $^{**}p < .01$, one-tailed. R^2 = Coefficient of determination; variance explained by predictors; ΔR^2 = change in R^2

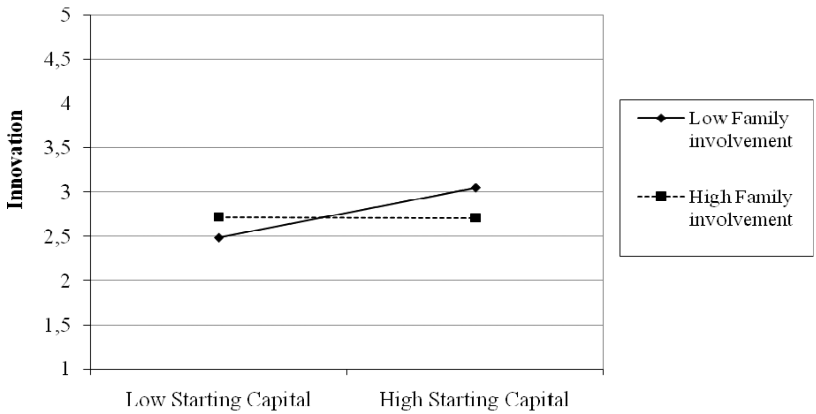

Figure 1. Family involvement as a moderator of the relationship between start-up capital and innovation in the Chinese sample.

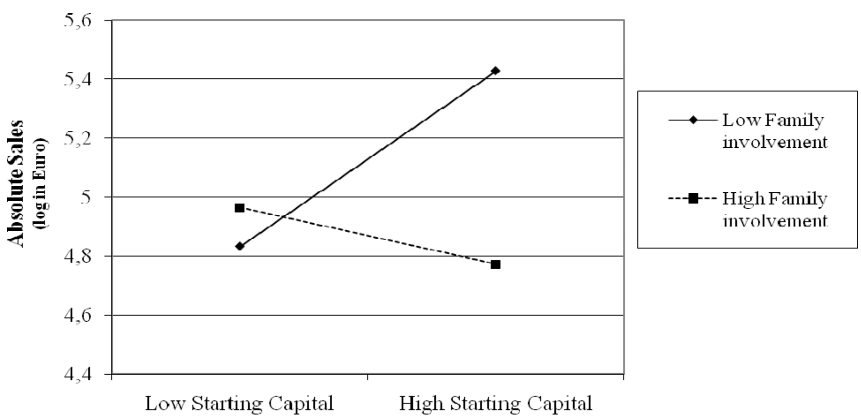

Figure 2. Family involvement as a moderator of the relationship between start-up capital and sales in the German sample.

DISCUSSION

Summary and Interpretations of Findings

The goal of this study was to examine the role of family involvement in Chinese and German small businesses that underlie different cultural norms and values. Specifically, the study intended to show that family involvement in the business is higher in collectivistic cultures such as China than in Germany. Also, there should be differences in the sources of gaining start-up between both cultures. Moreover, we investigated whether family involvement is related to the business owner's ability to make use of start-up capital to turn it into innovation and business success. Based on theory and previous research, we offered arguments supporting the fact that the influence of family involvement on the relationship between start-up capital and innovation and success can be contradictory in nature (Chrisman *et al.*, 2004). We examined whether the effects of family involvement on business outcomes depends on the cultural values underlying a business.

Our hypotheses received partial support. First, as expected, the number of family members involved in the business is higher in China than in Germany. Second, for Chinese owners, the most important source of capital for start-up a business is the family whereas German business owners draw most of their start-up capital from banks. Due to collectivistic values and practices, Chinese owners are more inclined to employ family members as main participants of the in-group (Lee and Mock, 2005; Tung *et al.*, 2007). This is in line with a study by Pistrui *et al.* (2001) which showed that almost 59% of the 55 Chinese businesses they studied had at least one family member employed full-time. In addition, Chinese owners can rely on the family in order to receive financial support which is based on mutual support for in-group members. Third, we investigated whether family involvement is related to the business owner's ability to make use of start-up capital to turn it into innovation and business success. As hypothesized, German owners fail to invest start-up capital in business sales when family involvement is high. One possible cause is that these business owners involving family members in the business are more safety-driven, risk-averse and conservative which limits business success (Shepherd and Zahra, 2003).

However, we found no interaction effect of start-up capital and family involvement on innovation as a dependent variable. Contrary to our hypothesis, our results confirmed that under high family involvement the relationship between start-up capital and innovation (but not sales) in the Chinese sample is negative.

The most surprising result in our study was that we found consistent negative effects of family involvement on the relationship between start-up capital and sales (for the German sample) and innovation (for the Chinese sample). This was not in line with our assumptions as, based on the cultural match hypothesis (Rauch *et al.*, 2000; Tung *et al.*, 2007), family involvement should match economic and social processes in China but not in a highly individualistic culture such as Germany. There are the following possible interpretations for this unexpected result. First, cross-cultural psychology suggests that in the course of increasing economic development, which has been the case in China for several years, societies become more individualistic (Ralston *et al.*, 2006). Also, according to Georgas (1989), Chinese tend to change to individualistic practices, values, and life styles due to increasing urbanization and industrialization. Therefore, one possible explanation for the similarities between Germany and China regarding the negative effects of family involvement is the cultural adjustment to Western individualistic values and the practices of Chinese businesses.

Second, the negative effects of family involvement on the ability to make use of start-up capital in both samples indicate that there seem to be certain factors that dampen the effects of family involvement on business outcomes (Nicholson, 2008; Schulze *et al.*, 2001). Small and medium-sized businesses with family members involved are vulnerable to certain interpersonal as well as inter role and intergenerational conflicts and hazards (Schulze *et al.*, 2001). We found that this is not only the case for individualistic countries but might also apply to collectivistic Chinese businesses even though they usually try to emphasize the values of trust and harmony (Hempel *et al.*, 2009).

Further, in collectivistic cultures such as China, the degree of trust and loyalty is limited. Trust mainly includes the extended family whereas out-group members are frequently mistrusted (Realo *et al.*, 2008; Tung *et al.*, 2007). However, previous research has shown that a narrow grasp of trust and a strong focus on the family at the ignorance of out-group members are a hindrance to business success especially in the global economy (cf. Tung *et al.*, 2007). Thus, based on our findings we recommend Chinese businesses to widely share favorable social values in order to achieve business success and implement a form of social trust that is expressed over and above the in-group (Realo *et al.*, 2008).

Limitations and Implications for Future Research

The present study has a number of limitations. First, while the measure of business success is well developed, the measure of family involvement needs to be improved. By dividing the number of family members actively working in the business by the overall number of employees we obtain a descriptive index that does not take into account the positions, tasks, and roles of family members within the business. One anonymous reviewer rightly suggested that we missed the collection of interview data in order to get an idea of the key roles played by family members in the business. For instance, Bertrand *et al.* (2008) showed that it is worth measuring the gender of family members involved in the business. The authors showed that, compared to daughters, the sons of a business owner play a prominent role in the involvement in the business. By using a specific measure of family involvement researchers will much more effectively provide insights into the relationships between staring capital, family involvement, innovation, and success.

Second, another limitation of this study is its cross-sectional design. Consequently, no conclusions can be drawn about the causality of family involvement, innovation, and business success.

Third, the means and standard deviations in the total number of employees differed between the two samples of Chinese and German businesses. We implicitly controlled for the total number of employees in our measure of family involvement. Nevertheless, it is important to acquire samples similar in business size from different countries in order to compare the effects of family involvement and make valid statements.

Fourth, in this study we solely focused on financial and economical indicators of business success. However, Habbershon and Williams (1999) argued that for small businesses where family members are involved performance is a multidimensional construct that is also composed of non-financial subjective components (Danes *et al.*, 2008; Wimmer, 2009). It would be fruitful for future research to investigate the effects of family involvement on a bundle of various business performance indicators in different cultures.

Overall, our study contributes by showing that a negative effect of family involvement on the ability to make use of start-up capital is not only evident in individualistic cultures such as Germany but does also apply to collectivistic Chinese businesses. This study offers some implications and avenues for future research. Most notably, we recommend future research to focus on how to avoid and overcome possible negative effects of family involvement on innovation and success of firms. Altogether, research reveals mixed results on whether family involvement in operations is mainly a source of strength or rather contributes to business failure (Zahra, 2005).

Yet, the relationship between family involvement, innovation, and business success is complex, more likely to be indirect and dependent on further conditions and variables (Rutherford *et al.*, 2008). Hence, it is worthwhile to study moderating and mediating variables in order to specify under what conditions family involvement has positive versus negative effects on innovation and success and the processes that mediate these relationships. Apart from studying similarities and differences in the cultural background of businesses, future research might focus on characteristics of the business owners that have proven to affect innovation and business outcomes. For example, previous research has shown that business owners who display transformational leadership qualities are more likely to obtain the commitment of family members and achieve higher levels of firm success in the long run (Eddleston, 2008).

There is a growing interest by researchers to examine the effects of family involvement on business outcomes but this effect is not fully understood (Rutherford *et al.*, 2008). This study refines our knowledge of family involvement in two culturally different countries, and we suggest that family involvement is a fruitful avenue for further study.

Practical Implications

Our study indicates that, despite the positive effects of family involvement on the business (Eddleston, 2008; Pearson *et al.*, 2008), owners involving family members in the business need to always be aware of possible problems and risks that can negatively affect business outcomes. In their sustainable family business theory, Danes *et al.* (2008) assume that the sustainability of a family business is a function of both business performance and family functionality. The present study is in line with previous research stating that that in order to sustain success, businesses need to mindfully integrate the knowledge both of resources and hazards that follow the involvement of family members in the business (Danes *et al.*, 2008; Nicholson, 2008).

Dependent on the cultural background of the firm, different approaches and implications might be relevant in order to strengthen the well-being of the business. For instance, in collectivistic cultures, where the family as the core social group is highly valued, for small family businesses' sustainability it might be relevant to establish networks outside the family and to heighten the awareness for external knowledge and influences (Kidwell and Fish, 2007). For small family businesses in individualistic cultures such as Germany, it might be more useful to strengthen the family bonds through rituals, customs or similar strategies.

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