

Family Influence on Business: Application of A Modified F-PEC Scale to Private Small Business In Vietnam

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Abstract

This paper uncovers dimensions of family influence on private small business in Vietnam. Although the F-PEC scale, which comprises three subscales for power, experience and culture dimensions of family influence, has been validated in the literature, application of the scale in an Asian context, like Vietnam, may face challenges due to context differences. The study modified the original scale based on qualitative findings from five interviews with entrepreneurs and comments on the scale from business scholars. Data from a survey of 143 entrepreneurs were used for EFA, resulting in four factors. And CFA proves fitness of the measurement model of the four-factor structure to the data, in which two dimensions regarding the cultural aspect were confirmed.

Keywords: Family business, small business, F-PEC scale.

1. Introduction

Family involvement in business has gained the increasing interest of scholars. Entrepreneurs would not be immune to Hoy and Sharma's argument that "(F)amily is the first social system that has a foundational life-long influence on an individual" (Hoy & Sharma, 2010, p. 43). Family and business could be viewed as intertwined and reciprocal systems ensuring family business sustainability, and family, therefore, could be viewed as a stakeholder of strategic management. The family influence on business has, therefore, been of research interest for the last two decades.

In the Western context, business scholars have developed the F-PEC scale as a measure of the multidimensional construct of family influence (Astrachan, Klein, & Smyrnios, 2002). And the F-PEC scale has been validated in the literature (Holt, Rutherford, & Kuratko, 2010; Klein, Astrachan, & Smyrnios, 2005). Nevertheless, application of the scale in an Asian context, like Vietnam, may face challenges due to differences in the pattern of the relationship between the family and the business.

The study is designed to uncover the dimensions of family influence on private small business in Vietnam. The country is dominated by a large number of small businesses and previous research suggests high involvement of the family in those businesses. In a qualitative inquiry into how the family could have influence on a business, individual interviews were conducted in order to judge the application of the F-PEC scale in the context of Vietnam. A quantitative analysis was then carried out

using data collected from a sample of 143 entrepreneurs, resulting in dimensions of the family influence in the context of Vietnam.

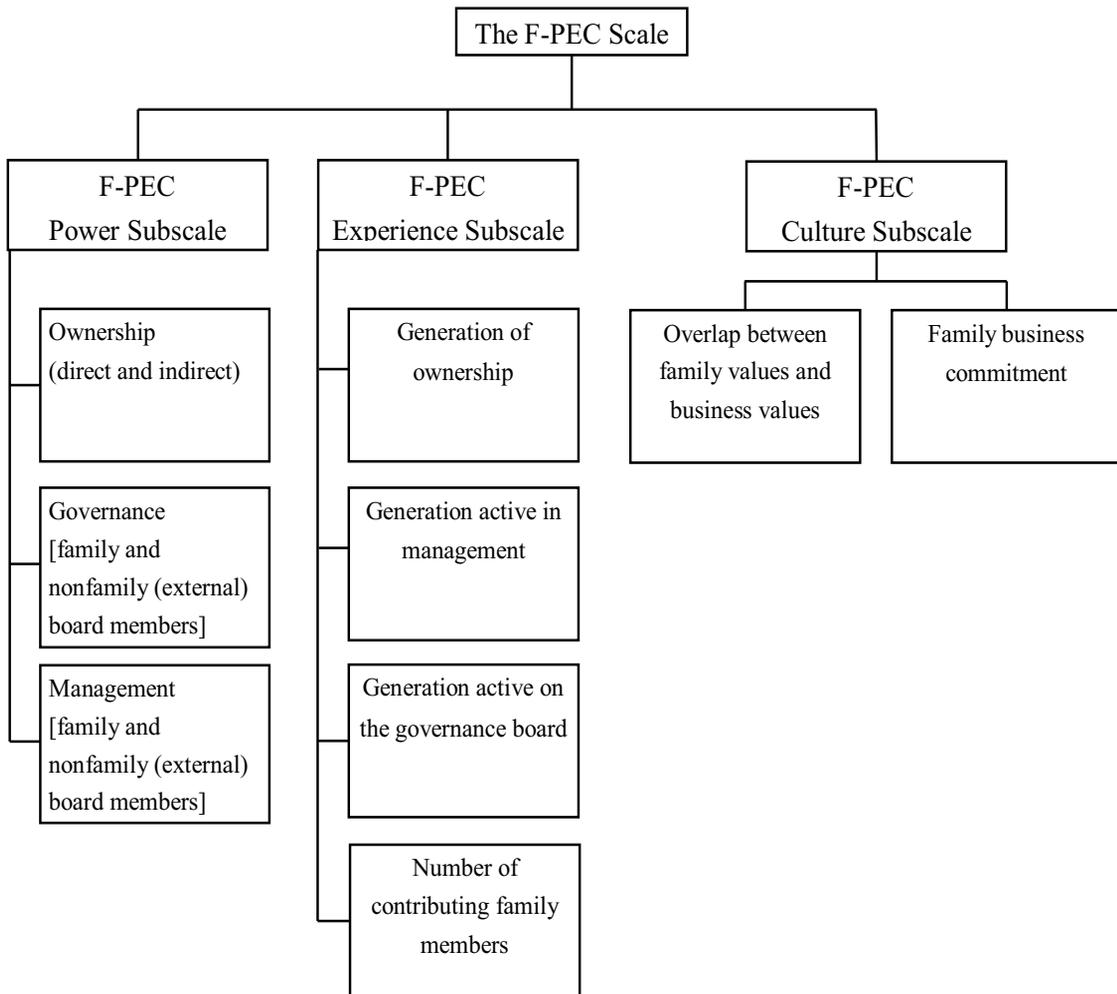
This paper starts with a literature review of the F-PEC scale. The private sector in Vietnam is briefed before presentation of the qualitative analysis of data from interviews and results from EFA and CFA. The paper concludes with a discussion on the findings of the study.

2. F-PEC scale of family influence

The F-PEC scale is proposed by Astrachan et al. (2002) for measuring family influence on the family firm. The authors adopt the resource-based view and the *components-of-involvement* as well as the *essence* approach to establish an overall measure of family influence as a multidimensional construct. The measure comprises three subscales for dimensions of family influence: (i) power subscale, (ii) experience subscale and (iii) culture subscale (see Figure 1 for the F-PEC scale).

The *power subscale* measures ownership, governance and management. The underlying precept of the subscale is that family can have influence on the firm through the family's ownership and through family representatives as members of the governance and management board. As succession is considered as a criterion of family business and as each succession can add valuable business experience to the family as well as the firm, the *experience subscale* measures the experience dimension of a family firm. The generation owning and managing the firm and the number of family members active in management and on the governance board are taken into account. The *culture subscale* is based on the argument that values do matter in the family firm. It is sug-

Figure 1: The F-PEC Scale



Source: Adapted from Astrachan et al. (2002, p. 52).

gested to measure the overlap of the family and the firm values as well as the family's commitment to the firm. (See Appendix for items of F-PEC subscales).

The F-PEC scale is tested in the empirical study of Klein et al. (2005). From the findings of EFA and CFA for data on respondents randomly collected from a sample of 1,166 com-

pany CEO's of the German Hoppenstedt databank, the authors comment that "the F-PEC scale is a reliable instrument, measuring the overall influence as well as the different types of family influence on business" (p. 333). So the scale "provides a means to explore all businesses along a continuum from intensive family involvement to no family at all" (p. 333).

As reviewed by Cliff and Jennings (2005), the work of Klein et al. (2005) makes a conceptual contribution in the “development of the *degree of family influence* construct” and an empirical contribution to “multidimensional and continuous operationalization of the construct” (p. 341). Chrisman, Chua, and Steier (2005) view that the F-PEC scale as operationalization of family influence, has “several advantages over most other methods that have been used to operationalize the family business construct” (p. 244).

The F-PEC scale is then further examined for validity and reliability in the empirical study of Holt et al. (2010). Their study replicates the study of Klein et al. (2005) and utilizes succession in testing convergent validity based on data from 831 family businesses. The findings do suggest the F-PEC scale as a valid and reliable scale for more finely classifying family firms. And the scale gauges intangible factors representing dimensions of family influence.

However, the F-PEC scale has been commented on by Cliff and Jennings (2005) for various methodological issues. Cliff and Jennings (2005) point out that the culture subscale has less face validity than the other two due to linguistic usage in 4 out of 12 subscale items. The authors’ suggestion is to drop these from the index and add items that could gauge the extent to which the business is operated as a means to achieve the vision of a better future for the family, as emphasized by Chua, Chrisman, and Sharma (1999).

Furthermore, the F-PEC scale has been developed in a Western context and, there may, therefore, be questions as to appropriateness of

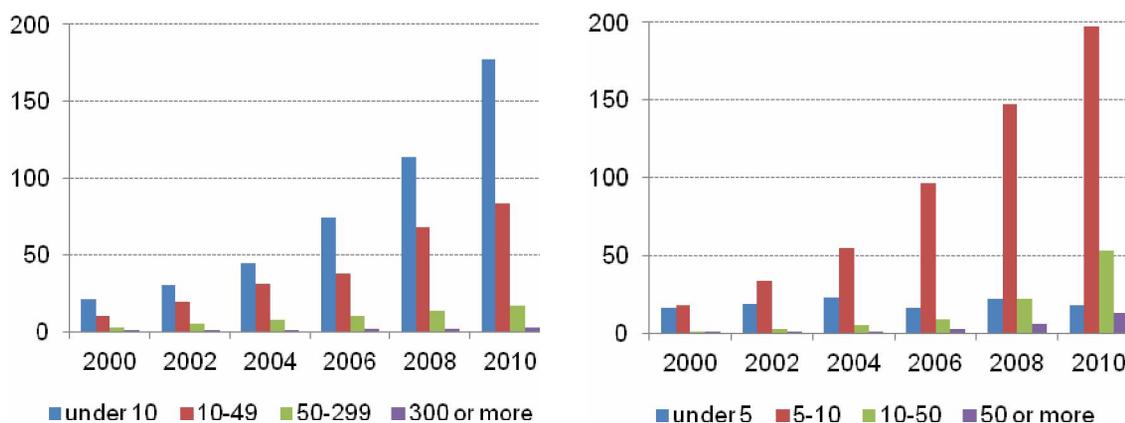
the scale in other settings. For example, in their thematic analysis of cultural variations in family businesses from Cultural-Sensitive Assessment Systems and Education Project, Gupta and Levenburg (2010) present various themes in which Confucian Asia is notable to family business researchers. For example, the boundaries between the family and the business are permeable as “(...) many family firms are operated in–or adjacent to–their residual dwelling” and “(E)very family member lends a hand in running the business, and within its confines, children and aging members are tended to” (Gupta & Levenburg, 2010, p. 158). Family firms are not likely to go beyond the family and home community to form new relationships for resources. These findings are in contrast with those for Anglo contexts which have been illustrated to have clear boundaries to regulate the relationship between the family and the business and for a tendency of being more business centric than family centric.

In conclusion, the F-PEC scale has been introduced and validated as a measure of family influence, helping business scholars gauge the influence as a spectrum instead of a dichotomous classification. Yet, the scale may need to be tested for other settings rather than one in which it is developed.

3. The private sector in Vietnam

The private sector in Vietnam has gained significant expansion for the last decade and has been vastly dominated by small businesses. General Statistics Office (2013) reveals that there were about 35 thousand private enterprises in 2000, accounting for 82% of the country’s total. That number grew to 280 thousand in 2010, accounting for over 96% of the

Figure 2: Number of domestic private businesses (in thousands)



a. by employment scale in persons

b. by registered investment in VND millions

Source: Compiled from data in General Statistics Office (2013).

country's businesses. It is notable that small businesses, either in terms of employment or registered capital, accounted for the largest proportion of the country's total number of business entities (see Figure 2).

Some main economic characteristics of the private sector in Vietnam are drawn from the 1990's surveys on non-state manufacturing enterprises, jointly conducted by the Asian Region Team for Employment Promotion of the International Labour Organisation, the Institute of Labour Studies and Social Affairs (Vietnam), and the Department of International Economics and Geography at Stockholm School of Economics. Ramamurthy (2001) finds from the surveys that the entrepreneurs founding a household or private enterprise heavily depend on capital of their own, and interest-free loans from their relatives and friends, and the capital from these sources makes up about 95 percent of

total investment for enterprise establishment. Ronnås (2001) also finds from the same surveys that the family is an important source of labour for household enterprises as "unpaid household members (...) made up one-third of the labour force of the household enterprises in the urban areas and over 60 per cent in the rural areas" (p. 145).

In an inquiry for understanding of entrepreneurship development in the country, Do, Quilty, Milner, and Longstaff (2008) show from their case studies a preliminary qualitative assessment that "Vietnamese tend to depend on their families far more than do Westerners" (p. 21) and "the most important context for Vietnamese (...) has been the family" (p. 47). The family is a source of finance and inheritance of traditional occupations for many entrepreneurs. Cultural inheritance of Confucianism in the family setting sets behavioural patterns of respect for entrepreneurs as

well as for family members.

The private sector in Vietnam, therefore, deserves an exploration into the family influence on the business. And the small businesses should be mainly of interest.

4. Research redesign

The study was designed to uncover the dimensions of family influence on business in Vietnam by applying a modified P-FEC scale for private small businesses. It was conducted in two stages. The first stage aimed to judge the F-PEC scale in the context of Vietnam by interviewing individuals as entrepreneurs in the private sector. In the second stage, the F-PEC scale was reviewed and modified, based on comments from the literature and remarks from the first stage. Data from a medium-size sample of private entrepreneurs were collected and subject to factor analysis in order to identify dimensions of family influence in Vietnam's context. Designs for qualitative and quantitative research are presented in detail below.

5. Likely family influence on business from interviews with entrepreneurs

5.1. Data collection and analysis

Individual face-to-face interviews with five entrepreneurs were conducted using semi-open questions for their perception of how their families relate to their businesses. The selected interviewees were at the age of 30s or 40s and acquainted with the researchers in the hope that they would be very much more likely to be open in the interview. And their firms were in popular businesses in Vietnam, namely farming, construction material production, industrial equipment production, securities

equipment installation. Four of them were registered as limited liability companies—the most prevalent private business categories in Vietnam (General Statistics Office, 2011, p. 191), leaving one as a joint stock company.

The interviewees were all well informed about purpose of the research and an interview was planned once the interviewee confirmed his or her participation. All interviews were carried out in an informal setting and each was attended only by an entrepreneur and the group of three researchers. In every interview, the entrepreneur was guided by semi-open questions which loosely follow three topics for the F-PEC scale suggested by Astrachan et al. (2002). The entrepreneur was encouraged to express his or her own experiences about the entrepreneur's family and business, including relationships within the family, history of the business, family resources available for the business, business experience accumulation, the family involvement in business decision making, and any kind of support the family can provide to the entrepreneur in business and daily life as well. All the interviewees' responses were only autographed by the interviewers. The analysis of the interview data was collectively conducted by the research group for conclusions on likely dimensions of family influence in the context of Vietnam.

5.2. Results

Brief description of the interviewees

The five entrepreneurs approached, named from *A* to *E*, were willing to be interviewed. A brief about them, their businesses and families is presented as follows.

Entrepreneur A is a 36 years old female,

studying a part-time bachelor program in business. She used to work for the local government yet quit in 2001 to jointly set up and own one third of a limited liability company in construction material production. Her company hires about 20 tenure employees and its revenue in 2011 was VND 80 billion. *A* is married with two children and living with her small family.

Entrepreneur B is a 30 years old male, a holder of a bachelor degree in accounting and a master degree in business. He is of the second generation on his family's farm, which was founded in 1997 by his parents and is registered as a limited liability company. His parents are no longer responsible for management, leaving him in charge of the business. The company employs 60 workers and its revenue in 2011 was VND 70 billion. *B* is married and living with his large family, including his parents and his wife.

Entrepreneur C is a 31 years old male, holding a bachelor degree in business. He had been a sales agent, and then founded a joint stock company producing industrial equipment. His company hires about ten tenure staff and its revenue in 2011 was VND 16 billion. He is married with a daughter and living with his small family.

Entrepreneur D is a 40 years old female, holder of a bachelor degree in business and accounting. She used to work for some private businesses, then jointly founded and owns half of a joint stock company in security equipment installation. The company employs about 20 tenure staff and in 2011 its revenue was VND 10 billion. *D* is married with two children and lives with her large family, including her par-

ents-in-law.

Entrepreneur E is a 31 years old male, holder of a bachelor in business, founder of a limited liability company in construction material production. The company hires about ten tenure employees and its revenue in 2011 reached about VND 17 billion. *E* is married with two sons and living with his small family.

In summary, all five interviewed entrepreneurs are in the management board of the family business and share ownership of their small businesses. They are all married and live with their small or large families. Their experiences in daily life and business can ensure a richness of information in their responses in the interviews.

Likely dimensions of the family influence on the business

An analysis of responses from the interviewees reveals that three dimensions, including power, experience and culture, of family influence may exist. On the power dimension, the family ownership generally has impact on how the business is managed. For the cases of *A*, *C*, *D* and *E*, they reported that contribution to their shares in the businesses was financed by their family savings. Importantly, although they can act independently from their family, the entrepreneurs are well aware of their responsibility for the investment for the sake of their families. Entrepreneur *A* commented in the interview, "My family is the most important. All investment was from our savings. I have to do business so as to ultimately ensure benefits for the family". Thus, their business decision-making is somewhat under the family influence. In the extreme case of *B*, the family own the business and the entrepre-

neur reported that “I always advise my parents”, though his parents are not present in the management; important business decisions were made by the entrepreneur with the consensus of his family members..

On the experience dimension of family influence, only entrepreneur *B* is of the second generation and he confirmed that “I inherited some experience from my parents”. He said that his parents “managed the farm by the rule of thumb” as they had worked in the public sector and had no experience in business. His parents were successful in setting up the organization and policies for their farm. *B* reported his continuation of the organization and policies with his innovations. Yet, *B* stressed that, “My innovations in management gained more importance than the ‘management by the rule of thumb’ adopted by my parents”. Obviously, he could exert the innovations and find them important to the business because he was trained in an undergraduate accounting program and postgraduate business program.

On the culture dimension of family influence, it seems that, for all interviewed entrepreneurs, there is a convergence of value sharing between the family and the business. *B*, who inherits his family business from his parents, said, “I was supported by my parents in choosing my career”. For entrepreneur *D*, she said that “I gained strong support, in terms of finance and encouragement, from my family”. *A* and *E* reported objections from some family members to their business establishment, yet the objections gradually disappeared as the businesses proved a success. *A* said that “My parents have already changed their thoughts

and express their support for my business”. *E* revealed that “Some of my brothers and sisters used to hold objections to my business; but they now agree with me about my decision to enter business”. These two entrepreneurs commented that the support from their family is mainly due to the family members’ expectation for the economic outcomes of the businesses.

Regarding the culture dimension, it should be noted that all five entrepreneurs confirmed their respect for their parents and followed the social norms of a traditional family. Yet, they reported that their business decision-making processes were independent from their parents; and their parents did not exert interference in their businesses. For example, entrepreneur *A* said, “My responsibility is to maintain my family’s traditional norms”, before confirming that “I made all my decisions in business with no interference from my husband, my parents and my parents-in-law”. Entrepreneur *B* also said “I must maintain regular visits to my parents as it is the responsibility of children”, and, “I consult with my parents, as a tradition, before making an important decision, but it is my responsibility to make the decision”.

In addition, the entrepreneurs reported a cohesion and support among their small and large families. That is, family members give a great deal of support to each other in daily life; the entrepreneur can, therefore, be freed from a great deal of responsibilities and devote more efforts to the business. *C*, *D* and *E* are good examples for the pattern. *C* married his wife in 2009, and then his wife continued living with her parents, and his daughter had been taken care of by his parents-in-law until his small

family united two years later. *D* said in the interview that “My parents and parents-in-law helped by picking my two children up from school, taking care of them at home, and preparing dinners for my small family”. *E* reported that “My mother, and my cousin as well, helped bring my son to daily childcare and picked him up to bring him home”. All interviewed entrepreneurs highly evaluated the support from their family members; all of them confirmed that they could not, without the support, have concentrated on their businesses.

In conclusion, all three dimensions of family influence on can be qualitatively traced in the interviews with the five entrepreneurs. The F-PEC scale as a developed measure of the family influence can, therefore, be applied for the context of the conducted interviews. Yet, the last remark of the above analysis should be taken into account in using the scale for small businesses in Vietnam.

6. Quantitative analysis of family influence on business

6.1. Sample and data collection

The study adopted the F-PEC scale suggested by Astrachan et al. (2002) as a measure of the family influence for private small businesses in Vietnam. A questionnaire in Vietnamese was developed for data collection. The scale, precisely the culture subscale, nevertheless, is modified based on comments of Cliff and Jennings (2005) and remarks from the qualitative analysis as follows:

- The first item, i.e. “your family has influence on your business”, is removed as it seems to be an indicator of the global family influ-

ence (Cliff & Jennings, 2005, p. 342).

- One item is added to reflect the cohesion and supports among the family members, including the entrepreneur, i.e. “Your family members share and support each other in daily life.”

The questionnaire was then developed in Vietnamese for a pilot survey. Five questionnaires were distributed to five entrepreneurs. These entrepreneurs returned the answered questionnaires and reported that they had had no problems in answering the questionnaire.

The questionnaire was then distributed to a sample of 195 entrepreneurs in Hanoi and nearby provinces. The sample was selected using the convenience method and every entrepreneur needed to satisfy the criterion for small business set for the research, i.e. the business hiring fewer than 200 and its total capital of under VND 20 million. Their responses were edited and a set of 143 possible responses was finalized for analysis. Such a sample size can be considered to have acceptable power (Loehlin, 2004, p. 73) for application of the analysis of interest.

6.2. Analytic procedure

The quantitative analysis is designed to explore dimensions of family influence and then confirm the existence of the identified dimensions based on survey data. The collected data were analyzed using SPSS 19 and AMOS 19. Data processing involved two steps: (i) exploratory factor analysis and (ii) confirmatory factor analysis. In the first step, number of factors was determined using principle component analysis with Varimax rota-

tion. Assessment of internal reliability of factors was then conducted with acceptance of Cronbach's alpha above 0.7. The second step was designed to confirm the theoretical multi-dimensional model with data, using fit indexes including ratio of Chi-square to its degree of freedom (χ^2/df), root mean square error of approximation (RMSEA), Tucker Lewis Index (TLI), and comparative fit index (CFI). The

discriminant validity of the factors is also tested.

6.3. Results

Exploratory factor analysis for data on 18 items reveals that 13 items were retained (see Table 1); other items were dropped due to their low loadings or high cross-factor loadings. The 13 retained items load into four factors explaining 72.713% of the variance. The first

Table 1: Dimensions of family influence from EFA

Subscale	Loading
Power (Cronbach's alpha = .804)	
- Percentage of family share ownership	.839
- Percentage of family in management	.854
- Percentage of family on the board	.837
Experience (Cronbach's alpha = .861)	
- Generation owns the company	.919
- Generation manages the company	.894
- Generation is active on the governance board	.841
Culture I (Cronbach's alpha = .749)	
- Your family members share similar values	.879
- Your family members share and support each other in daily life ^(*)	.850
Culture II (Cronbach's alpha = .856)	
- Family members are willing to put in a great deal of effort beyond that normally expected in order to help the family business be successful	.765
- Family members feel loyalty to the family business	.786
- Family members are proud to tell others that they are part of the family business	.797
- Family members agree with the family business goals, plans and policies	.776
- Family members really care about the fate of the family business	.820

(*): Added item.

Figure 3: The F-PEC Scale Measurement Model

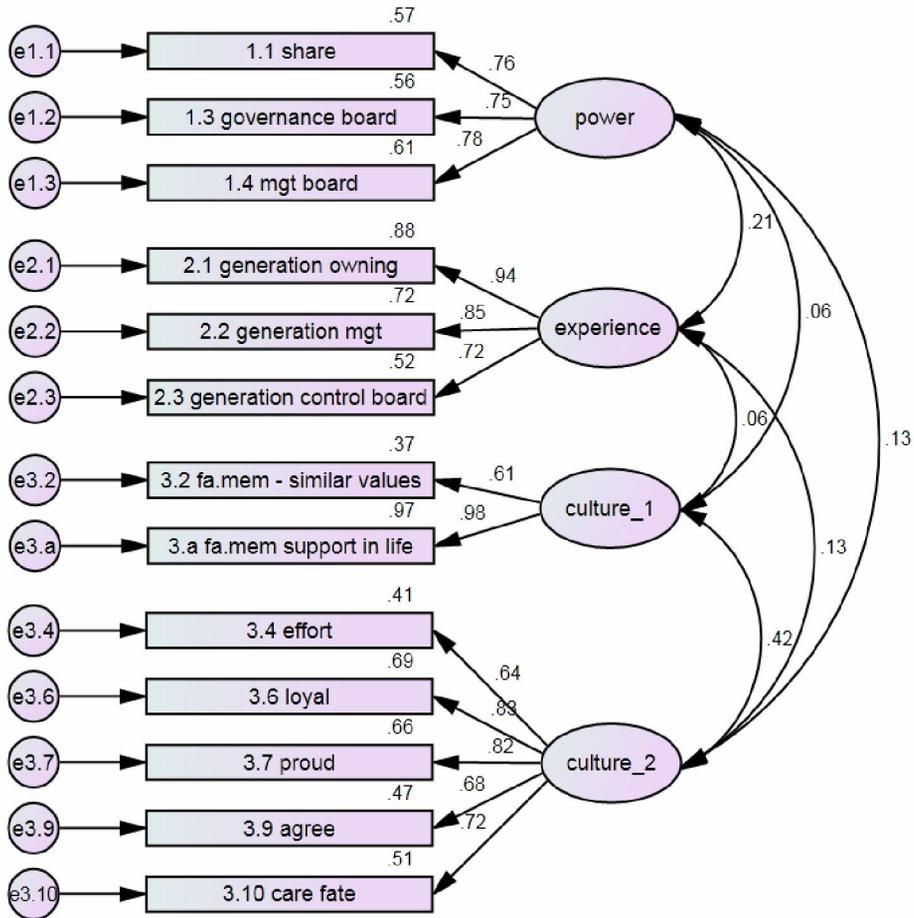


Table 2: Test for discriminant validity

		<i>r</i> estimate	SE	CR	P-value
experience	<--> power	.210	.082	9.595	.000
culture_1	<--> power	.058	.084	11.204	.000
power	<--> culture_2	.133	.083	10.387	.000
culture_1	<--> experience	.064	.084	11.137	.000
experience	<--> culture_2	.126	.084	10.462	.000
culture_1	<--> culture_2	.421	.076	7.580	.000

two factors, and their internal consistency, are Power (three items, $\alpha = .804$) and Experience (three items, $\alpha = .861$). The two others are identified as Culture I (two items, $\alpha = .749$), and Culture II (five items, $\alpha = .856$); it is noted that the items of these two factors have been theorized and previously found to load in one factor for culture dimension.

The four identified dimensions are hypothesized as a four-factor structure (see Figure 3) with associated inter-correlations between the latent variables. The hypothesis was tested by CFA using the maximum likelihood method. Fitting criteria include $\chi^2/df < 2$ (Loehlin, 2004), $RMSEA < .08$ (Browne, Cudeck, Bollen, & Long, 1993)¹, $TLI > 0.95$ and $CFI > .95$ (Schumacker & Lomax, 2004). The measurement model adequately fits the data as $\chi^2/df = 1.433$, $RMSEA = .055$, $TLI = .956$, and $CFI = .966$. The tests for discriminant validity of the latent variables are all significant at 0.05 (see Table 2). The four dimensions of the family influence could, therefore, be confirmed.

7. Discussion and implication for future research in Vietnam

The research has revealed that four dimensions of the family influence on the business could exist in the context of Vietnam. The first two dimensions, i.e. the power and experience dimensions, align with conclusions in Klein et al. (2005). Nevertheless, two dimensions regarding cultural issues have been identified, instead of one as theorized by Astrachan et al. (2002) and validated by Klein et al. (2005) and

Holt et al. (2010). It could be concluded from the wording of items in these dimensions (see Table 1) that the understanding and sharing between the family members and the entrepreneur should be treated differently from the actual involvement of the family members in the business. Explanation could be found from interviews with entrepreneurs. That is, all interviewees mentioned the cohesion and support among their family and highly appreciated such a pattern, which could significantly contribute to their daily lives and work. Yet, such a pattern does not necessarily associate with the family influence in the business, e.g. the entrepreneur lives with and has respects for his or her parent, but this might not relate to business decision making.

The research, therefore, suggests that Vietnam could be different from the Western context in which the F-PEC scale as a measure of family influence has been developed. Although it has been validated in the Western context, the F-PEC as a measure of family influence should be reconsidered before being applying to the context of Vietnam. Further research is suggested in exploring the relationship between the family and the business, especially with regard to cultural issues, in order to clarify an appropriate measure of the family influence on the business. Besides, the conducted research focused on private small businesses in Hanoi and nearby provinces; thus, medium and large-sized businesses and regional comparison could be of interest for further research.

If YES:

- (a) How many persons does it comprise? _____ members
(b) How many management board members are family? _____ family members
(c) How many nonfamily board members are chosen through them? _____ nonfamily members

Definitions

- The founding generation is viewed as the first generation.

Active family members involve those individuals who contribute substantially to the business. These family members might hold official positions in the business as share-holders, board members, or employees.

Part 2: The Experience Subscale

1. Which generation owns the company? _____ generation
2. Which generation(s) manage(s) the company? _____ generation
3. What generation is active on the governance board? _____ generation
4. How many family members participate actively in the business? _____ generation
5. How many family members do not participate actively in the business but are interested? _____ generation
6. How many family members are not (yet) interested at all? _____ generation

Part 3: The Culture Subscale

Please rate the extent to which:

1. Your family has influence on your business. *Not at all* *To a large extent*
1.....2.....3.....4.....5
2. Your family members share similar values. *Not at all* *To a large extent*
1.....2.....3.....4.....5
3. Your family and business share similar values. *Not at all* *To a large extent*
1.....2.....3.....4.....5

Please rate the extent to which you agree with the following statements:

4. Family members support the family business in discussions with friends, employees, and other family members. *Strongly disagree* *Strongly Agree*
1.....2.....3.....4.....5

5. Family members feel loyalty to the family business.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
6. Family members are proud to tell others that we are part of the family business.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
7. There is so much to be gained by participating with the family business on a long-term basis	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
8. Family members agree with the family business goals, plans, and policies.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
9. Family members really care about the fate of the family business.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
10. Deciding to be involved with the family business has a positive influence on my life.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
11. I understand and support my family's decisions regarding the future of the family business.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>
12. Family members are willing to put in a great deal of effort beyond that normally expected to help the family business be successful.	<i>Strongly disagree</i> 1.....2.....3.....4.....5	<i>Strongly Agree</i>

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Notes:

1. A value of RMSEA is about .05 or less would indicate a close fit of the model (Steiger, 1990); if it is about 0.08 or less it would indicate a reasonable error Browne et al. (1993).

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