Relationships between Entrepreneurial Orientation and Firm Performance: The Role of Family Involvement amongst Small Firms in Vietnam

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Abstract

This thesis broadly investigates entrepreneurship and its intersections with other related research fields, principally family business and organisational behaviour, using multiple studies with different respondent groups in the context of Vietnam. The thesis follows a PhD by publication approach by presenting four studies that examine different sets of relationships among the research variables and presents each of these as a separate paper.

Studies 1 and 2 use resource-based theory to test the influence of entrepreneurial orientation and family involvement (i.e., involvement of the owner-manager’s family in the firm in terms of the family’s power, experience, and culture) on firm-level performance. Using a firm-level dataset of 170 Vietnamese small firms, the research confirms the direct effect of entrepreneurial orientation and the moderating effect of family culture, based on results from two hierarchical moderated regression models for firm outcomes (Study 1) and the owner-manager’s goal attainment (Study 2).

Study 3 employs social contagion theory and crossover theory to test the crossover from the owner-manager to his/her employees under the involvement of the owner-manager’s family. Results from a multilevel analysis using a dataset of 67 small firm owner-managers and 343 employees confirm that the owner-manager’s entrepreneurial risk-taking has a detrimental effect on both employee job satisfaction and organisational commitment. Study 3 also found the power dimension of family involvement reduces the negative effect of the entrepreneurial risk-taking as the family pursues socio-economic wealth preservation.
Finally, Study 4 explores the notion of becoming an entrepreneur and tests whether the employee’s turnover intentions, under the proximal withdrawal states approach, contribute to development of their entrepreneurial intentions. Results from a structural equation modelling analysis use a dataset of 147 employees to confirm that turnover intentions are positively related to entrepreneurial intentions, but this effect is fully mediated by personal attitudes towards being an entrepreneur.

Overall, this thesis contributes to the literature of entrepreneurship and its intersections with family business and organisational behaviour. Based on the research findings, the thesis suggests further research and discusses implications for researchers, policy makers, and business practitioners.
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My thanks go to my parents, brothers, and sister-in-law. My mother, Nguyet Hoang, took maternal care of my daughter in New Zealand while I was back in Vietnam for data collection. My father, Binh Vu, showed me how to grow independently. My brothers, Dzung and Tuan Vu, covered my son duties while I studied in New Zealand. My sister-in-law, Khanh Vu, assisted with Tommy for about two months after his birth.

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<tr>
<td>CFA</td>
<td>confirmatory factor analysis</td>
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<tr>
<td>CFI</td>
<td>comparative fit index</td>
</tr>
<tr>
<td>CMV</td>
<td>common method variance</td>
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<tr>
<td>EI</td>
<td>entrepreneurial intentions</td>
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<td>EO</td>
<td>entrepreneurial orientation</td>
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<tr>
<td>ERT</td>
<td>entrepreneurial risk-taking</td>
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<td>F-PEC</td>
<td>Family power, experience, and culture</td>
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<tr>
<td>FB</td>
<td>family benefits</td>
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<tr>
<td>FPS</td>
<td>financial performance satisfaction</td>
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<tr>
<td>JS</td>
<td>job satisfaction</td>
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<tr>
<td>NFPS</td>
<td>non-financial performance satisfaction</td>
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<tr>
<td>OB</td>
<td>organisational behaviour</td>
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<td>OC</td>
<td>organisational commitment</td>
</tr>
<tr>
<td>PA</td>
<td>personal attitudes</td>
</tr>
<tr>
<td>PAc</td>
<td>personal achievement</td>
</tr>
<tr>
<td>PBC</td>
<td>perceived behavioural control</td>
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<tr>
<td>PWS</td>
<td>proximal withdrawal states</td>
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<tr>
<td>RBT</td>
<td>resource-based theory</td>
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<tr>
<td>RMSEA</td>
<td>root-mean-square error of approximation</td>
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<tr>
<td>SEM</td>
<td>structural equation modelling</td>
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<tr>
<td>SEW</td>
<td>socio-emotional wealth</td>
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<tr>
<td>SN</td>
<td>social norms</td>
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<tr>
<td>SRMR</td>
<td>standardised root mean residual</td>
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<tr>
<td>TI</td>
<td>turnover intentions</td>
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Chapter 1

INTRODUCTION

This thesis is a synthesis of four studies that explore the relationships among entrepreneurial orientation, family involvement, organisational behaviour, and entrepreneurial intentions. Chapter 1 provides an introduction to the thesis including the rationale for the thesis, the context of Vietnam, the theoretical frameworks utilised across the four studies, the research questions, and the research design. Justification and contribution of the thesis are made and the thesis structure is outlined.

1.1 Rationale for the thesis

This thesis explores different sets of relationships among constructs from different research domains:

1) entrepreneurship (including entrepreneurial orientation [EO] and entrepreneurial intentions [EI]),
2) family business, and
3) organisational behaviour (OB).

This academic inquiry is rooted in the identification of gaps in the literature as well as the researcher’s personal experience in the study’s context of Vietnam.

The thesis examines if EO influences performance of small firms under involvement of the small firm owner-manager’s family. EO refers to how entrepreneurially an existing firm is managed (Miller, 1983) and EO has been extensively studied for its influence on firm-level performance (Miller, 2011; Rauch, Wiklund, Lumpkin, & Frese, 2009). Although it has been over three decades since Miller’s (1983) article, very...
recently Wales (2016) has suggested broader performance outcomes need to be included when studying EO. These can include financial outcomes (Covin & Slevin, 1991) as well as non-financial outcomes (Zahra, 1993), which are measured at the firm level. For a small firm, the owner-manager’s attainment of goals can be considered to be an outcome expected by the owner-manager (Mintzberg, 1993). Thus, this thesis examines firm-level performance in terms of financial and non-financial outcomes (Study 1), and the owner-manager’s own goal attainment (Study 2).

In addition to testing firm-level relationships, the thesis also examines the influence of EO (at the firm level) on job outcomes of employees working in small firms. Although Zahra (1993) suggested that EO should be studied for its influence on employee-level OB, this research direction still lacks academic attention (Wales, 2016). Several OB scholars (e.g., Cappelli & Sherer, 1991; Molloy, Ployhart, & Wright, 2011; Rousseau, 1985) – here and elsewhere, have also called for bridging individual and organisational levels in studying employee attitudes at work. This thesis does that by exploring whether the owner-manager’s entrepreneurial risk-taking (ERT), a fundamental component of EO (Miller, 1983), shapes employee-level job outcomes in terms of job satisfaction and organisational commitment. By doing so, this thesis helps to understand the consequences of ERT on employees working in entrepreneurial firms.

The thesis also explores whether the relationships mentioned above vary due to the involvement of the owner-manager’s family. Family businesses are dominant in most economies around the world (Colli, 2002; International Family Enterprise Research Academy, 2003) and several studies have shown that the family plays an important role in management practices (Donckels & Fröhlich, 1991; Gallo, Tàpies, & Cappuyns, 2004; Gudmundson, Hartman, & Tower, 1999) and impacts firm-level performance (Anderson & Reeb, 2003; Górriz & Fumás, 1996; McConaughy, Walker,
Henderson, & Mishra, 1998; Miller & Le Breton-Miller, 2004; Zahra, 2003). Taking the emergence of research on the family business concept into account, several scholars (e.g., Brockhaus, 1994; Dyer & Handler, 1994; Habbershon, Williams, & MacMillan, 2003; Habbershon & Williams, 1999; Hoy & Verser, 1994) have suggested research is required to study (a) family involvement in the context of entrepreneurship and (b) how the family may influence the entrepreneur’s creation and strategic management of their business ventures. As a subdomain of the study of entrepreneurship, EO research has expanded in the last three decades (Rauch et al., 2009; Wales, 2016) and family involvement has been examined for its moderating effect on the EO-performance relationship (e.g., Casillas & Moreno, 2010; Madison, Runyan, & Swinney, 2014).

However, confounding results have been presented in the EO literature. For example, while family involvement was found to intensify the EO-performance relationship in Casillas and Moreno (2010) and Casillas, Moreno, and Barbero (2010), it reduced the impact of EO on firm performance in Madison et al. (2014). Several recent studies treated family involvement as a multidimensional construct that includes dimensions of power, experience, and culture (e.g., Holt, Rutherford, & Kuratko, 2010; Koropp, Kellermanns, Grichnik, & Stanley, 2014; Merino, Monreal-Pérez, & Sánchez-Marín, 2015; Sánchez-Marín, Portillo-Navarro, & Clavel, 2016; Smith, Hair, & Ferguson, 2014). This thesis extends this research to explore the extent to which different dimensions of family involvement influence the impact of EO on performance of small-sized firms, and the attitudes of employees at the workplace in these ventures.

This thesis bridges OB and entrepreneurship scholarship by (a) studying the influence of firm-level EO on employees’ attitudes at work and (b) focusing on employees and whether their turnover intentions (TI) lead to development of their entrepreneur-
Chapter 1 Introduction

Intentions (EI) to start a new business venture. In other words, this is a potential transition: leaving a paid job to become a business owner.

Previous studies have suggested that employees think about quitting their current jobs and seizing new career opportunities (Franco, 2005; Paolillo & Estes, 1982; Rhodes & Doering, 1983; Shapero & Sokol, 1982). While a great deal of OB research has been devoted to predicting turnover and its consequences (Cotton & Tuttle, 1986; Holtom, Mitchell, Lee, & Eberly, 2008; Hom, Mitchell, Lee, & Griffeth, 2012), Hom et al. (2012) suggest the need to expand turnover criteria to include multiple types of turnover, such as enthusiastic versus reluctant leaving. This thesis focuses on enthusiastic leavers, the employees who want to and are able to quit their jobs to seek a particular alternative (Hom et al., 2012). Bergman, Payne, and Boswell (2012) suggest anticipated destinations in studying employees’ calculation for leaving and this thesis considers starting a new business as one of the possibilities that employees may target (Dyer, 1994; Franco, 2005; Kolvereid, 1996; Shapero & Sokol, 1982). Nevertheless, the literature on transition from employee to entrepreneur has not matured and only a few studies (e.g., Dobrev & Barnett, 2005; Kickul & Zaper, 2000; Lee, Wong, Foo, & Leung, 2011) have been devoted to this topic. This thesis contributes to understanding the transition from employee to entrepreneur by exploring whether the employee’s TI may cause them to think about being self-employed.

In addition to the academic rationale outlined above, there are personal reasons to pursue this research. I have worked in academia in Vietnam, the country of my birth, for more than a dozen years and I have business interests in several small firms in Vietnam, particularly in their strategic management and human management practices. While working in Vietnam, I saw an opportunity to make academic contributions by filling
gaps in the literature, using my experience to conduct several research projects in the context of the small business environment in Vietnam.

Many local business owner-managers told me that their successes were greatly attributed to support from their families (e.g., financing and working for the business in the start-up stage). Some also admitted that frequent interactions between their family members and their employees cause them (the owner-managers) to feel there is a strong family-business relationship. The owner-managers sometimes treat their business as an extension of their families, thereby bringing their family values into their business management practices. The more I read the literature on entrepreneurship, family business, and small business, the greater was my realisation that my experience aligned with several studies of small firms in Vietnam (Baughn, Lim, Le, Neupert, & Woods, 2004; Benedikter, Waibel, Birtel, Bui, & Tran, 2013; Do, Quilty, Milner, & Longstaff, 2008; Gerrard, Schoch, & Cunningham, 2003; Nguyen & Nguyen, 2008; Ronnås & Ramamurthy, 2001; Swierczek & Thai, 2003; Truong & Nguyen, 2002; Vuong & Tran, 2009). These studies, combined with my understanding of the gaps in the literature as presented above, inspired me to explore the relationships among the owner-managers’ management practices, their families, and their employees in the context of Vietnam. The result is this thesis of four studies and associated research materials.

1.2 Context of the study

This research is set in the context of Vietnam, a country of more than 90 million people (General Statistics Office of Vietnam, 2016) in South East Asia (see Appendix 1). Vietnam is a developing country where small firms are dominant (General Statistics Office of Vietnam, 2016). While the literature of EO has been well established in the context of Western developed economies (Martens, Lacerda, Belfort, & De Freitas,
2016; Rauch et al., 2009), Martens et al. (2016) commented that emerging countries “have received little attention from scholars in the field” (p. 575). They go on to suggest further research is required to explore EO in the context of developing economies, due to identified differences between patterns of entrepreneurial behaviours of firms in developing and developed economies (Boso, Story, & Cadogan, 2013; Chaston & Scott, 2012). This thesis does this with a focus on small firms in Vietnam. In addition, Vietnamese small firms are characterised by strong links between the firms and the owners-managers’ families (Do et al., 2008; Gerrard et al., 2003; Ronnás & Ramamurthy, 2001; Truong & Nguyen, 2002). Studying how small firms are managed and how family involvement influences management practices in small firms is relevant in this context.

Vietnam is a fast-developing economy with abundant opportunities for business creation (World Bank, 2015). In Vietnam, the transition from paid employment to self-employment is widely accepted because starting a new business venture is considered a promising way for attaining personal objectives, such as higher income, independence at work, and self-actualisation (Ardrey, Pecotich, & Shultz, 2006; Benedikter et al., 2013; Benzing, Chu, & Callanan, 2005; Nguyen & Nguyen, 2008). Employees working in small firms have frequent interactions with owner-managers (Ronnás & Ramamurthy, 2001; Truong & Nguyen, 2002) and through observing how their bosses pursue market opportunities, the employees may think about starting their own business.

1.3 Research questions

This thesis examines five research questions about the relationships among EO, family involvement, OB, and entrepreneurial intentions as follows:

1. Does EO contribute to the owner-manager’s satisfaction with firm-level performance under involvement of the owner-manager’s family?
2. Does EO contribute to the owner-manager’s goal attainment under involvement of the owner-manager’s family?

3. Does the owner-manager’s entrepreneurial risk-taking (ERT, a fundamental component of EO) detrimentally influence employee job outcomes?

4. Is the relationship between owner-manager’s ERT and employee job outcomes influenced by the involvement of the owner-manager’s family, such that it reduces the detrimental influence of ERT?, and

5. Do employees’ turnover intentions contribute to their intention to start a new business venture and become an entrepreneur?

1.4 Theoretical framework and research design

Figure 1-1 depicts the four studies that contribute to this thesis and the theoretical framework of the relationships among study variables. Studies 1, 2 and 3 test hypotheses about the relationships among EO, involvement of owner-manager’s family and employees’ OB in terms of job satisfaction and organisational commitment. Study 4 examines the relationships between employees’ turnover intentions and their entrepreneurial intentions.

This thesis adopts a quantitative approach to answer the research questions. Studies 1 and 2 used the same sample of 170 small firms in Vietnam and conducted hierarchical moderated regressions for hypothesis testing. Study 3 used two samples: a sample of 67 small firms that are a subset of the sample used in Studies 1 and 2, and a sample of 343 employees working in these 67 small firms. A multilevel analysis was undertaken for hypothesis testing. Study 4 used another sample of 147 Vietnamese employees, conducting a structural equation modelling (SEM) for hypothesis testing.
Figure 1-1 Theoretical framework and research design

Note: Study 1 (firm-level analysis): Entrepreneurial Orientation & Family Involvement towards Firm-Level Outcomes.
Study 2 (firm-level analysis): Entrepreneurial Orientation & Family Involvement towards Owner-Manager’s Goal Attainment.
Study 3 (multilevel analysis): Entrepreneurial Risk-taking and Family Involvement towards Job Satisfaction and Organisational Commitment.
Study 4 (employee-level analysis): Turnover Intentions towards Entrepreneurial Intentions.
1.5 Justification and contribution of the thesis

This thesis reports the findings from four studies, which together contribute to an increased understanding of the relationship between EO, firm performance, and family involvement in the context of small firms in Vietnam. It also explores the entrepreneurial intention of currently employed Vietnamese workers. Research on EO has developed over the past three decades, starting with Miller’s (1983) work in the early 1980s and the majority was empirically driven (Edmond & Wiklund, 2010; Wales, 2016). There is a need to explain EO under a relevant theory (Miller, 2011; Wales, 2016) and this thesis adopts resource-based theory (Barney, 1991), as suggested by Miller (2011) and Wales (2016), to explore the relationships between EO and firm performance.

This thesis builds on the literature by including family involvement and examining the moderating effect on the EO-performance relationship, using the F-PEC scale (Astrachan, Klein, & Smyrnios, 2002), in the Vietnamese context. This scale helps to measure a continuum of different dimensions of family involvement while a dichotomous variable (family versus non-family) has previously dominated the EO literature (Casillas & Moreno, 2010; Casillas et al., 2010; Górriz & Fumás, 1996; Lee, 2004). Thus, the thesis explores the potential moderating effects of different facets of family involvement on the EO-performance relationship.

It has been over two decades since Zahra’s (1993) suggestion for an inclusion of non-financial outcomes in studying EO, outcomes such as increasing employee motivation, lowering employee turnover, and creating positive organisational culture. Wales (2016) echoed Zahra’s (1993) suggestion in a recent call for broadening the domain of dependent variables in the field of EO scholarship. This thesis does this by including a multilevel analysis of the relationship between the owner-manager’s ERT, a fundamental component of EO (Miller, 1983), and employee job satisfaction and organisational
commitment, based on crossover theory (Ten Brummelhuis, Haar, & Roche, 2014). Furthermore, by reference to the socio-emotional wealth approach (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007), this thesis explores the potential moderating effect of family involvement on these relationships.

Finally, this thesis contributes to the literature on transition from employee to entrepreneur, a transition that has not received much academic attention. By considering business start-up as one of the possibilities for employees who want and are able to quit their jobs, under the proximal withdrawal states (PWS) approach (Hom et al., 2012), this thesis adds evidence that supports the extension of criteria for turnover (Campbell, Perry, Maertz, Allen, & Griffeth, 2013; Hom et al., 2012). That is, for employees, quitting a job should be treated as not only a traditional final outcome of the turnover process, but also a turning point leading to a change in the nature of the employee’s career. Thus, there may be a transition from having a paid job to being self-employed. Consequently, this thesis bridges OB and entrepreneurship scholarship, but at the individual level. By examining determinants of EI under the theory of planned behaviour (TPB) (Ajzen, 1991), this thesis confirms the application of this theory to the employee, beyond the dominant focus of using university student samples in the current literature on EI.

Finally, this thesis adapts constructs that have been developed in the Western context for Vietnam, which is set in an Eastern context. Differences in study context (Eastern versus Western) have been raised in the literature (Zoogah, 2012). This thesis considers particular characteristics of the Vietnamese context that were presented in the literature (Baughn et al., 2004; Benedikter et al., 2013; Do et al., 2008; Nguyen & Nguyen, 2008; Swierczek & Thai, 2003; Vuong & Tran, 2009) in arguing for the role of context, as well as in explaining empirical results.
1.6 Outline of this thesis

This thesis is a synthesis of multiple studies for publication and conforms to Massey University (2016) guidelines on PhD thesis by publication. For each of the studies that constitutes this thesis, a manuscript was drafted in a publication format that is from the sixth edition *Publication Manual of the American Psychological Association* (2010). Thus, the thesis has the following structure:

- Chapter 1 presents the rationale, context, research questions, theoretical framework, and research design. The justification and contribution of the thesis and an outline of its structure are provided.
- Chapter 2 presents a review of the literature on EO, family involvement, OB, and EI, leading to the five research questions of this thesis.
- Chapter 3 introduces the theoretical framework, research design and provides a brief description of the procedures of data collection and analysis used in the four studies that comprise this thesis.
- Chapters 4 to 7 present Studies 1 to 4 as publication drafts, respectively. Each chapter follows a structure of research paper that is prepared for publication, including introduction, theoretical framework and hypotheses, method, results, discussion, and conclusions. All references used in these four chapters are included collectively in the References section of this thesis.
- Chapter 8 discusses the main findings from the four studies, the limitations and the implications for literature, policy, and future research.
- Chapter 9 concludes this thesis and provides a summary of the overall thesis and its contributions.
Chapter 2
LITERATURE REVIEW

This chapter first provides an overview of small firms in Vietnam to set the context of this thesis and the studies within it. It then presents literature reviews on entrepreneurial orientation and family involvement in organisational performance that lead to research questions 1 to 4 (section 1.3 above) about the relationships among these constructs. The chapter concludes with an analysis from the literature on entrepreneurial intentions that leads to research question 5 about the potential transition from employee to entrepreneur.

2.1 Small firms in Vietnam

Vietnam has seen a striking change in its economy over the last decade, and an exponential increase in the number of small firms. As illustrated in Figure 2-1, the number of small firms, in terms of either scale of employment (less than 50 employees) or registered investments (less than VND 10 million, equivalent to approximately USD 450), rocketed from under 50,000 in the early 2000s to over 200,000 in the early 2010s. As such, Vietnam is characterised as a fast-developing economy with abundant opportunities for business creation (World Bank, 2015). Therefore, research on how small firm owner-managers manage their businesses and the influence on performance is relevant in the context of Vietnam. Furthermore, this context might also explain why employees chose to abandon paid work to start their own business.
Figure 2-1 Number of firms in the private sector in Vietnam, 2000–2014

Previous studies demonstrate strong links between small firms and the owner-managers’ families. In Vietnam, the family is “the central point of social life” (Dalton, Pham, Pham, & Ong, 2002, p. 371) and “remains the organising principle in Vietnam” (Do et al., 2008, p. 46). In the context of family-centred patterns in business, entrepreneurs were found to bring their family members onto management boards of their new firms (Baughn et al., 2004). The family is seen as “an increasingly important source of opportunity identification” (Baughn et al., 2004, p. 211) and a supplier of resources for businesses (Do et al., 2008; Ronnås & Ramamurthy, 2001; Truong & Nguyen, 2002). The family is “used by Vietnamese to overcome many of the problems they encounter when doing business” (Do et al., 2008, p. 46). Section 2.3 of this literature review provides evidence of different facets of family involvement in small firms.

Family involvement is largely attributed to the dominant values in the Vietnamese society that are rooted in Confucianism. Vuong and Tran (2009) argue that Confucian teachings, which require an individual to have respect and deference to another of higher status, are “deeply rooted in the mind of almost everyone” (p. 58). The teachings serve as guiding thoughts for leaders in various social systems, including entrepreneurs in their firms. The influence of Confucian values on the entrepreneurs’ behaviours were also presented in Gerrard et al. (2003) and Nguyen, Neck, and Nguyen (2008). Thus, it is not surprising that management practices in Vietnamese small firms are heavily biased toward, and based on, family relationships (Gerrard et al., 2003; Vuong & Tran, 2009).

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1 Confucianism originated in China about 2,000 years ago, specifying “five sets of relationships: [those] between the sovereign and ministers, father and son, husband and wife, elder and younger brothers, and between friends” (Tai, 2001, p. 159). Confucianism has been adopted in Vietnam in the long history and Confucian values are still dominant in Vietnamese society (Luong, 1989; Whitmore, 1984).
In short, small firms are a dominant force in the Vietnamese economy and there exist strong links between these firms and the owner-manager’s families. An investigation into entrepreneurial management in small firms and its influence on performance is of high value in understanding small firm performance in the Vietnamese context.

2.2 Entrepreneurial orientation and performance

2.2.1 Defining entrepreneurial orientation

Entrepreneurial orientation (EO) refers to entrepreneurial activity as a process at the firm level. EO can be inferred from the mode of strategic management. Specifically, Miller (1983) says an “entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with ‘proactive’ innovations, beating competitors to the punch” (p. 771). In other words, EO in this approach of Miller (1983) features innovativeness, risk-taking, and proactiveness. Although other definitions of EO have been introduced in the literature, this original conception of EO by Miller (1983) will be used for this thesis. This is because Miller’s (1983) definition highlighted the inherent nature of the construct or “what EO looks like” (Covin & Wales, 2012, p. 681). The original work of Miller (1983) titled “The correlates of entrepreneurship in three types of firms” plus refinement and development by Covin and Slevin (1986, 1989) created the foundation for subsequent development of EO research (Edmond & Wiklund, 2010; Rauch et al., 2009), and as such, forms the basis for the focus on EO in this thesis.

EO can be distinguished from entrepreneurship, intrapreneurship, and corporate entrepreneurship. Broadly speaking, entrepreneurship is “creation of new enterprise” (Low & MacMillan, 1988, p. 141) or new entry (Lumpkin & Dess, 1996). EO, however, “refers to the processes, practices, and decision-making activities that lead to new entry”,
or, briefly, “how the new entry is undertaken” (Lumpkin & Dess, 1996, p. 136). In Miller’s (1983) conception of EO, a firm with a high EO tends to be more innovative, proactive and willing to take more risks in their strategic management of the firm. Intrapreneurship is entrepreneurship in an existing firm and can be viewed in two identified approaches: (1) focusing on the firms’ mode of strategic management (leading to the EO stream) and (2) exploring a firm’s entrepreneurial activities that is labelled corporate entrepreneurship (Antoncic & Hisrich, 2003). Research of corporate entrepreneurship has identified two main forms: corporate venturing, in which an existing corporation creates and owns new businesses, and strategic entrepreneurship, which is centred on innovative behaviours to seek new opportunities and advantages (Corbett, Covin, O’Connor, & Tucci, 2013; Kuratko & Audretsch, 2013). Consequently, the corporate entrepreneurship stream complements the EO field of firm-level entrepreneurship, but is distinct from EO and is therefore not explored in the thesis.

2.2.2 Conceptualisation of entrepreneurial orientation

EO has been conceptualised through two dominant approaches: the three-dimension approach (Miller, 1983) and the five-dimension approach (Lumpkin & Dess, 1996). In his three-dimension approach, Miller (1983) identified: (1) innovation, (2) risk-taking, and (3) proactiveness as the main components. These dimensions were suggested to manifest concurrently (Miller, 1983), providing the rationale for a composite measure of EO.

The five-dimension approach (Lumpkin and Dess (1996) adds two further dimensions and defines dimensions of EO as follows:

1. Innovation: “a firm’s tendency to engage in and support new ideas, novelty, experimentation, and creative process that may result in new products, services, or technological processes” (p. 142);
2. Risk-taking: “firms with an entrepreneurial orientation are often typified by risk-taking behaviour, such as incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace” (p. 144);

3. Pro-activeness: “taking initiative by anticipating and pursuing new opportunities and by participating in emerging markets” (p. 146);

4. Autonomy: “independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion” (p. 140); and

5. Competitive aggressiveness: “a firm’s propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, outperform industry rivals in the marketplace” (p. 148).

These five dimensions may vary independently of each other and occur in different combinations. EO research could focus on one or combinations of these dimensions of the EO construct within a specific context (Lumpkin & Dess, 1996).

This thesis broadly adopts the three-dimension approach to EO by Miller (1983). This approach has been accepted widely and used consistently in the literature (Rauch et al., 2009). Following this approach can help to avoid the problem of conceptual stretching (Sartori, 1970). However, Study 3 focuses solely upon how risk-taking might crossover to employee attitudes, and the rationale for this is explored directly within that study.

Despite the advancement of EO to a five-dimension conceptualisation, this approach is not without its critics. According to George and Marino (2011), the five-dimension approach proposed by Lumpkin and Dess (1996) leads to an increase in the intention of EO and a concurrent decrease in the extension of EO. Consequently, the five-dimension approach refers to a smaller subset of firms than the larger (fuller) set
defined by the three-dimension approach. As such, firms are given the same label (e.g., high on EO) without a corresponding change in extension in the ladder of abstraction (i.e., conceptual stretching), thus causing confusion in capturing the extent of EO. As a result of this critique, the thesis focuses on Miller’s three-dimensional approach to EO.

### 2.2.3 Influence of entrepreneurial orientation on performance

The theoretical ground for the EO-performance relationship is still immature (Edmond & Wiklund, 2010; Miller, 2011). By and large, the literature has intensively explored the influence of EO on firm-level performance (Edmond & Wiklund, 2010; Miller, 2011). This practice was suggested by Covin and Slevin (1991) who proposed reciprocal relationships between EO, a firm’s financial outcomes, and a number of other outcome variables. While several studies have empirically confirmed the EO-performance link, a limited number of research studies have offered theoretical explanations of the relationship. Notably, Miller (2011) suggests resource-based theory (RBT) (Barney, 1991) as a theoretical base for researching the EO-performance relationship.

In RBT, EO can be treated as a dynamic intangible resource that contributes to sustainable competitive advantage for higher returns (Barney & Arikan, 2001; Barney, Ketchen, & Wright, 2011). Lee, Lee, and Pennings (2001) argue that EO is evident in a firm’s routines, and can take a great deal of time to cultivate and become embedded in a firm – making it unavailable and inimitable to competitors in the market. For example, innovation is not easily imitated by competitors due to quality and quantity of R&D personnel and complex social relationships among researchers. Wiklund and Shepherd (2003) view EO as “an important measure of the way a firm is organised – one that enhances the performance benefit of a firm’s knowledge-based resources by focusing attention on the utilisation of these resources to discover and exploit opportunities” (p.
These arguments suggest that theoretical lenses of RBT could help to answer why EO may relate to firm performance. In this regard, RBT is used as a theoretical lens to explore different types of influence of EO on performance in the context of small firms, as discussed in the following sections.

2.2.3.1 Firm-level performance from the small firm owner-manager’s perspective

With a focus on small firms, this thesis takes account of the inherent linkage of the owner-manager and the firm, which may contrast small firms from large firms. For large firms with a separation between ownership and management (Fama & Jensen, 1983), the top managers are professionals hired to undertake the entrepreneurial function. As such, EO may emerge in response to the shareholders’ creation of incentives for the top managers to take on entrepreneurial strategic behaviours (Jones & Butler, 1992). Burgelman and Sayles (1986) distinguish between strategic behaviours as follows: top managers conduct autonomous strategic behaviours to explore new opportunities, which in turn induces middle-level managers to adopt strategic behaviours within the organisational structure.

Contrary to large firms, small firms can be seen as an extension of their owner-managers (Levin & Travis, 1987; Welsh & White, 1981) as the owner-managers found the firm, mobilise resources for business development, and exert their personal influence on the strategic management and direction of the organisation (Birley & Westhead, 1990; Keats & Bracker, 1988). The distinction between autonomous and induced strategic behaviours is blurred in small firms as the owner-managers conduct their roles at different managerial levels (Levin & Travis, 1987) and “endure switching from role to role” (Welsh & White, 1981, p. 32). Thus, EO would be directly evident in both strategic intent and functional operations. The research implication is that EO in small
firms can be investigated through the owner-managers and their contribution to improved performance can be reasoned. This aligns with Rauch et al.’s (2009) conclusion about a strong EO-performance relationship for small firms.

Furthermore, the owner-manager of a small firm may pursue not only financial outcomes (e.g., return on sales, net income) and non-financial outcomes (e.g., employment growth, market expansion) but also the attainment of personal goals (Raymond, Marchand, St-Pierre, Cadieux, & Labelle, 2013). The owner-managers are motivated by their objectives and their strategic intent implies pursuit of their goals (Jarvis, Curran, Kitching, & Lightfoot, 2000; Raymond et al., 2013). In this regard, the owner-manager’s achievement of their goals can be studied as being influenced by EO.

Therefore, this thesis explores the influence of EO on small firm performance through the owner-manager as well as the owner-manager’s pursuit of their goals. This thesis also studies this relationship under involvement of the owner-manager’s family (discussed in Section 2.3.2). Thus, the above analysis of the literature of EO leads to two research questions – in partial form here, to be fully developed in Section 2.3.2 – as the following:

**Research Question 1** (partial): Does EO contribute to the owner-manager’s satisfaction with firm-level performance?

**Research Question 2** (partial): Does EO contribute to the owner-manager’s goal attainment?

### 2.2.3.2 Employee-level performance in small firms

While EO has been extensively researched for its influence on firm-level performance, as discussed above, there is a question whether EO may affect performance at the employee level. This question is relevant for small firms in Vietnam where the
employee often has frequent interactions with the owner-manager (Ronnås & Ramamurthy, 2001; Truong & Nguyen, 2002).

As they often interact with the owner-manager in the workplace (Matlay, 1999), employees have an opportunity to observe the owner-manager’s behaviour and see changes in the firm’s policies under the owner-manager’s entrepreneurial leadership, such as investing in a risky project and pursuing fierce competitive strategies against the firm’s rivals.

By its nature, EO implies some level of risk-taking which may cause negative emotions, such as pain and anxiety, to the one who undertakes the entrepreneurial activity (March & Shapira, 1987). In the context of small firms, employees may then absorb these negative emotions from the owner-manager (i.e., crossover from the owner-manager to the employees) if the employees have empathy for the owner-manager (Stotland, 1969; Westman, Shadach, & Keinan, 2013). This unhappy experience for the employees can undermine their appraisal of their job experience.

Furthermore, as employees think about uncertainty and possible firm-level financial loss due to the owner-manager’s entrepreneurial activities, this may induce them to care more about themselves and their job security and well-being (Stotland, 1969). As such, the employees’ perception of threats to their job security and well-being would eventually make the employee less committed to the firm (Meyer & Allen, 1997).

Therefore, there may be an influence of EO over employee-related variables of organisational behaviour (OB) in small firms, such as job satisfaction (JS) and organisational commitment (OC). Based on the established literature of risk-taking as a fundamental component of EO (Rauch et al., 2009) and suggestions about how entrepreneurial risk-taking can influence the employees working the firm, this thesis examines the
crossover from the entrepreneur’s risk-taking to the employee’s (follower) job outcomes.

Studying the influence of EO at the firm level, on organisational behaviour outcomes at the employee level will contribute to the bridging of the employee versus firm gap, which has been called for in OB research (Cappelli & Sherer, 1991; Molloy et al., 2011). Furthermore, by adopting the notion of crossover that has been established in psychology (Bakker, Westman, & Emmerik, 2009; Westman, 2001), this multilevel study of EO fills this gap in the OB literature (Molloy et al., 2011).

Therefore, this thesis sets out to answer the following research question:

**Research Question 3: Does the owner-manager’s entrepreneurial risk-taking (a fundamental component of EO) detrimentally influence employee job outcomes?**

### 2.3 Family involvement

This section deals with the literature surrounding family involvement and the corresponding influence at both the firm level and the employee level. Two theoretical approaches, resource-based theory (RBT) and socio-emotional wealth (SEW), are proposed to frame family involvement.

#### 2.3.1 Integration between entrepreneurship and family business

Family businesses are dominant in most economies around the world (Colli, 2002; International Family Enterprise Research Academy, 2003). The family plays an important role in asserting management practices (Donckels & Fröhlich, 1991; Gallo et al., 2004; Gudmundson et al., 1999) as well as influencing firm-level performance (Anderson & Reeb, 2003; Górriz & Fumás, 1996; McConaughy et al., 1998; Miller & Le Breton-Miller, 2004; Zahra, 2003). Taking this emergence of the study of family
business into account, several business scholars (e.g., Brockhaus, 1994; Dyer & Handler, 1994; Habbershon et al., 2003; Habbershon & Williams, 1999; Hoy & Verser, 1994) suggest linking family involvement with entrepreneurship to study how the family influences the entrepreneur’s creation and strategic management of their business ventures. Several studies present discussions on this topic (Chrisman, Chua, & Litz, 2003; Donnelley, 1964; Gómez-Mejía et al., 2007; Habbershon & Williams, 1999; Whiteside & Brown, 1991). As the EO research agenda, a subdomain of entrepreneurship scholarship, has expanded in the last three decades (Rauch et al., 2009; Wales, 2016), family involvement has emerged as an important factor that not only matters because of its influence on firm performance, but also how family involvement affects the EO-performance relationship.

### 2.3.2 Influence of family involvement on firm-level performance

Several studies have shown family involvement to have a positive influence on firm-level performance. For example, family control helped some firms to gain higher productive efficiency (Górriz & Fumás, 1996). Firms under founder/family control were found to run more efficiently than other firms of the same size, industry, and with similar ownership structures (McConaughy et al., 1998). Family ownership, which refers to the presence of family members on governance boards, and family involvement in strategic management were both positively associated with a higher percentage of revenue from the firms’ international operations (Zahra, 2003). Firms with family share holdings and family members on the management board were reported to have higher levels of assets and return on assets (ROA) (Anderson & Reeb, 2003).

There is further evidence of benefits of family involvement, including greater ROA and higher net income growth, when studies compare family firms to non-family
firms (Lee, 2004). Multi-generational family involvement was reported to be associated with higher revenue for the firm (Rutherford, Muse, & Oswald, 2006). Collectively, these findings suggest that families can exert their involvement within businesses through different mechanisms (e.g., ownership, family members on governance and management boards, generational succession).

While family involvement can be empirically analysed in various ways, as discussed above, this thesis applies the family business social system developed by Habbershon et al. (2003), as shown in Figure 2-2. This model consists of three subsystems: (1) the family unit with its history, traditions, and family life cycle; (2) the business entity with its strategies; and (3) the individual family members, including the participating family owner-managers with their interests, skills, and life stages. Each subsystem has its own actions and outcomes and continuously interacts with other subsystems. The family unit could influence the owner-manager’s strategic management (Habbershon & Williams, 1999; Tagiuri & Davis, 1996). For example, the family may require the family members who are managing the firm to respect the family’s traditions and values and contribute to the family’s goals. Thus, family involvement may have a direct effect on EO and may moderate the EO-firm performance relationship.

More importantly, family involvement can be a source of a firm’s competitive advantage and thus superior performance. In this regard, Habbershon and Williams (1999) propose that family involvement can be examined under RBT. Therefore, it can be argued that the system interactions between the family and the firm can create a unique bundle of resources, termed familiness, that provides a competitive advantage to the firm.
Figure 2-2 A meta-system model of interactions among the firm, the family, and the individual family members

Source: Adapted from Habbershon et al. (2003, p. 455).
Interestingly, previous studies present confounding results on the moderating effect of family involvement on the EO-performance relationship. Madison et al. (2014) found that the EO-performance relationship is weaker for family firms than non-family firms within the United States (US). Contrary to this, Casillas and Moreno (2010) reported a higher level influence of innovation on sales growth for family-run firms in Spain. Casillas et al. (2010) conclude that the more family generations on the management board, the stronger the effect of proactiveness on the firm’s growth.

One aspect of these findings, beyond the mixed results, is the strong US and European locale of research settings (Martens et al., 2016; Rauch et al., 2009). This encourages further exploration of these relationships in an Eastern context (e.g., Vietnam).

Noticeably, these studies investigated family involvement in a narrow manner (e.g., family versus non-family firms, single versus multi-generational involvement) while family involvement may have different facets, as outlined previously. The dichotomous approach (e.g., 1 = family firm, 0 = non-family firm) generates a blunt distinction, which may not adequately assess the complexities of family involvement and their influence on entrepreneurial firms. This is especially so under RBT where determining the complexities of families beyond a dichotomous approach is more likely to tap into the rare, valued, inimitable and leveraged features of family involvement.

This thesis argues that the discussion on the influence of family involvement on performance can be further developed by considering the work of Astrachan et al. (2002), who treated family involvement as a multidimensional construct that encompasses family power, family experience, and family culture. The power dimension represents the family’s ownership, governance, and management involvement in the firm. The experience dimension represents transfer of experience from generation to
generation owning the firm and from the family to the firm. The culture dimension exhibits value overlaps of the family and the firm (e.g., the owner-manager and the family members sharing similar views about management routines and goals for the firm) and the family's commitment to the firm. This approach considers a continuum of family involvement instead of a typical dichotomous classification such as family versus non-family.

Astrachan et al. (2002) propose a measure of family involvement called the F-PEC (family - power, experience, and culture) scale. This scale was validated and refined by Klein, Astrachan, and Smyrnios (2005), Holt, Rutherford, and Kuratko (2007); Holt et al. (2010). Rutherford, Kuratko, and Holt’s (2008) application of the F-PEC scale revealed that family culture was positively related to perceived financial performance, experience was negatively related to perceived financial performance, but positively related to sales revenue. The implication of this approach is that different facets of family involvement can be simultaneously considered with respect to firm performance and the EO-performance relationship.

As such, this thesis examines the following proposition: Does a multi-dimensional approach towards family involvement (i.e., family power, family experience, and family culture) influence the relationships towards firm-level performance, specifically as a moderator of the EO-firm performance relationship? This question focuses on the influence of family involvement and is combined with the questions about the relationship between EO and firm-level performance (Section 2.2.3.1) to develop research questions 1 and 2 fully as follows:

**Research Question 1:** Does EO contribute to the owner-manager’s satisfaction with firm-level performance under involvement of the owner-manager’s family?
**Research Question 2:** Does EO contribute to the owner-manager’s goal attainment under involvement of the owner-manager’s family?

### 2.3.3 Influence of family involvement on employee-level performance

Section 2.2.3.2 discussed the psychological effect of entrepreneurial risk-taking (ERT) on OB outcomes of employees. This thesis uses the theoretical lens of socio-emotional wealth (SEW) to study the influence of family involvement on employee-level performance. The SEW approach includes an affective aspect of family involvement in the firm, allowing researchers to explore the influence of family involvement on employee-level performance.

Gómez-Mejía et al. (2007) introduce a SEW approach that is especially designed for studying how a family’s affective endowment may lead to the firm’s unique behaviours. The family’s affective endowment refers to “the stock of affect-related value that a family derives from its controlling position in a particular firm” (Berrone, Cruz, & Gomez-Mejia, 2012, p. 259). Under this SEW approach, the family is motivated by preserving the family’s affective endowments, so the family prioritises socio-emotional outcomes over economic outcomes and intervenes in the firm’s strategic decision making towards this end (Gómez-Mejía et al., 2007). Support for this logical progression can be found in the work of Gómez-Mejía et al. (2007) that shows family-owned firms prefer remaining independent, thereby preserving the family’s control, rather than joining cooperatives, thereby reducing business risk but the family loses control. Gomez-Mejia, Makri, and Kintana (2010) conclude that firms under family control diversify less than firms not under family control, with an explanation that diversification may undermine family control over the firm (e.g., appointment of non-family members to business units, decentralisation of decision making).
Sciascia, Mazzola, and Kellermanns (2014) confirm that family generational involvement causes a change in the firm’s strategic focus: a firm managed by younger family generations has less concern for SEW preservation and stronger pursuit of financial return. Interestingly, this literature on the family’s SEW preservation, like other themes on family involvement in the firm, mainly focused on relationships towards organisation-level phenomena and outcomes (McKenny, Payne, Zachary, & Short, 2014). McKenny et al. (2014) suggest further examination of the influence of family involvement at different levels – organisation, subunit, and individual. This thesis adopts McKenny et al.’s (2014) rationale by considering employee’s job satisfaction and organisational commitment under the family’s pursuit of SEW preservation.

While preservation of a family’s affective endowment could be either good or bad in terms of both the family’s and the firm’s outcomes (Kellermanns, Eddleston, & Zellweger, 2012; Vardaman & Gondo, 2014), this thesis investigates the likely effect of the family’s pursuit of SEW on the employee’s perception of their working environment within the firm. According to Berrone et al. (2012), the family’s SEW encompasses different aspects; namely ownership, identity, and succession in governance/management boards. From a sample of 194 firms from eight countries (France, Germany, India, Italy, Japan, South Korea, Sweden, and the United Kingdom), Deephouse and Jaskiewicz (2013) present empirical evidence that supports the notion that family members who have a strong identity with their firm, being motivated for attaining better reputations for the firm, can enhance the family’s SEW. Zellweger, Kellermanns, Chrisman, and Chua (2012) found that founders with an intention for trans-generational control have higher perceived selling prices for their firms. The authors offered an explanation to this finding: the family intention to enhance SEW (i.e., maintaining the family’s long-term influence on the firm, the family’s identity and
reputation) is activated through the family’s vision for trans-generational control over the firm.

This literature implies the family’s priorities are for the firm’s long-term survival and sustainability. According to Miller and Le Breton-Miller (2014), these priorities may result in positive outcomes which go beyond the family to other stakeholders. In this regard, family’s pursuit of SEW could have a positive impact on employee well-being by enhancing their perception of the firm’s longevity, as well as the likelihood of continuing to work for the firm. Furthermore, this may also help to reduce the employee’s fear of losing their job and future well-being, due to risky managerial practices. For example, a risky project will be seen as a contribution to long-term growth that builds the family dynasty, rather than a short-term opportunistic venture.

Although the family’s pursuit of SEW can be examined through different mechanisms, such as family succession and family member’s identification with the firm (Berrone et al., 2012), this thesis considers family controlling power as a fundamental aspect of family involvement for preserving the family’s SEW (Deephouse & Jaskiewicz, 2013; Gómez-Mejía et al., 2007). Hence, the family might exert control of the firm through family ownership and presence of family members on governance and management boards (Astrachan et al., 2002). This approach is especially appropriate for small firms in which the family controlling power, in terms of family ownership and number of family managers, is critical to the firm’s adoption of the family-centred non-economic goals (Chrisman, Chua, Pearson, & Barnett, 2012).

The potential moderating effects of family involvement are well suited for exploration within the Vietnamese context. That is because in the Vietnamese society the family is the chief “organising principle” (Do et al., 2008, p. 46) and “the central point of social life” (Dalton et al., 2002, p. 371). Business management practices have strong
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links to the family in Vietnam (Gerrard et al., 2003; Truong & Nguyen, 2002; Vuong & Tran, 2009).

This thesis proposes that family involvement will act as a buffer because fundamentally the ERT behaviour relates to taking big risks, entering new hostile markets, and funding through external sources (e.g., bank loans) as opposed to funding these internally. This suggests to employees that there is real risk and the potential for real failure and the associated problems for them, such as loss of employment. However, this thesis argues that greater family involvement, notably family control, would signal to employees that the wider family group is not only aware of the ERT behaviour, but they also play an active strategic decision-making role in this behaviour. In the mind of the employee, family involvement mitigates the risk-taking behaviour of high-level ERT to lessen the impact on the employee’s well-being.

This also aligns with the family’s focus around preserving the family’s SEW (Deephouse & Jaskiewicz, 2013). As such, this greater family involvement is expected to reduce the detrimental crossover of ERT by providing surety and confidence to employees (followers) of the firm regards the ERT risk-taking strategies. This is because the ERT is seen as being part of a wider family behaviour and not just the whim of the entrepreneur alone. Hence, strong family involvement highlights a long-term commitment to employees that would ultimately make the risk perceptions be seen as being more strategic and less extreme.

Do et al. (2008) found that the Vietnamese family is a resource who can help firms overcome business problems. This is likely because stronger family involvement aligns itself with the strong family cultural norms of Vietnam. Consequently, employees will be less influenced in a detrimental manner by ERT. Indeed, it is suggested in this thesis that, at high levels of family involvement, the ERT behaviour will have a positive
influence on employee job outcomes. This is because employees will perceive the risks being taken as far more strategic and supported by the family’s interest in preserving their own wealth. Thus, this thesis sets out to answer the following research question:

**Research Question 4:** Is the relationship between owner-manager’s ERT and employee job outcomes influenced by the involvement of the owner-manager’s family, such that it reduces the detrimental influence of ERT?

### 2.4 Potential transition from employee to entrepreneur

This section discusses how employees’ turnover intentions (TI) can lead to development of their entrepreneurial intentions (EI). Entrepreneurship research suggests that employees who have an intention of changing jobs, due to their frustration with the working environment and dissatisfaction with their current jobs, are more likely to engage in a process leading to the formation of a new business (Shapero, 1975; Shapero & Sokol, 1982). Under the proximal withdrawal states (PWS) approach (Hom et al., 2012), employees considering leaving current employment may see starting their own business venture as one of the possibilities for a future career. Hence, PWS does not view turnover as an endpoint, as is typical in OB research, but as a potential starting point for new attitudes and behaviours, such as starting a new business venture. Consequently, this thesis seeks to extend the typical factors within the theory of planned behaviour (TPB) (Ajzen, 1991), which has three components: perceived behavioural control (PBC), social norms (SN), and personal attitudes (PA) (Schlaegel & Koenig, 2014), by including employee TI.

#### 2.4.1 Entrepreneurial intentions

Krueger (2009) defines EI as “the intent to start a business, to launch a new venture” (p. 55). Researchers typically apply the intentions-based approach developed
in psychology to investigate entrepreneurial potential (Bird & Jelinek, 1988). Entrepreneurship is by nature an intentional process towards creating value through the organisation of resources (Krueger & Carsrud, 1993). As such, the intention-based approach was applied to the entrepreneurship field as complementary to focusing on actual entrepreneurs’ functional behaviours and achievements (Palmer, 1971). For example, someone with a positive attitude towards being their own boss, with social support from friends and family about making the leap into self-employment, and who feels confident they have the creativity to start a business, will be more likely to consider an entrepreneurial start-up as a future option.

According to Ajzen (1991), intentions are “indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour” (p. 181). As such, a stronger intention is generally more likely to be performed, that is, to become reality. Intentions are well understood under TPB and Ajzen (1991) suggests three determinants of entrepreneurial intentions exist: (1) attitude towards the behaviour (how much the behaviour is favoured), (2) subjective norms (social pressure towards performance of the behaviour) and (3) perceived difficulty of behavioural performance. As such, people make decisions to be an entrepreneur because they think that being their own boss is important to them (i.e., attitudes), they have favourable support from family and friends (i.e., SN) and they believe they will be successful in a new venture (i.e., PBC). These factors provide impetus and focus for the potential entrepreneur, encouraging him or her to launch into business ownership.

Robinson, Stimpson, Huefner, and Hunt (1991) argue this approach towards entrepreneurship offers a more effective prediction of the phenomenon than does the personality/trait approach (e.g., measuring general tendencies) or the demographic approach (e.g., studying static demographic characteristics), both of which have been
less effective in adequately explaining entrepreneurship. Empirical support for TPB is found in a number of entrepreneurship studies (e.g., Carr & Sequeira, 2007; Kautonen, Van Gelderen, & Fink, 2015; Liñán & Chen, 2009; Schlaegel & Koenig, 2014). As such, predicting the entrepreneurial path has less to do with whether parents once owned a business or whether a person has a high locus of control, but rather whether they want to be their own boss, have confidence in themselves to be successful, and they have support from family and friends.

This thesis is set in Vietnam and the transition from paid employment to self-employment could be more likely in developing economies like Vietnam as starting a new business venture is considered promising for attaining personal objectives, such as higher income, independence at work, and self-actualisation (Benzing et al., 2005; Stefanovic, Prokic, & Rankovic, 2010). Vietnam is a fast-developing economy with abundant opportunities for small business creation (World Bank, 2015) and, therefore, provides a useful locale to test these relationships of interest.

2.4.2 From turnover intentions to entrepreneurial intentions

Turnover intentions (TI) refers to the probability of leaving an organisation (Parasuraman, 1982) and, according to Bluedorn (1982), TI is a critical element leading to voluntary turnover, which may cause negative organisational effects. For example, an organisation may suffer from a reduction in organisational performance due to loss of members who have above average performance as well as the costs associated with employee replacement. For the employees who are seeking to become self-employed, they may start putting less time and energy into their job as they prepare to start their own business. Since it was consistently found to be significantly related to actual leaving behaviour (Bluedorn, 1982; Hom, Griffeth, & Sellaro, 1984; Tett & Meyer,
1993), TI is often described as a destructive behavioural component that organisations need to consider for employee retention (e.g., Khanin, 2013; Parasuraman, 1982; Tett & Meyer, 1993).

However, Hom et al. (2012) suggests that TI might not only be an outcome of job factors, but also an antecedent towards alternative outcomes, which are termed proximal withdrawal states (PWS). Hom et al. (2012) propose PWS as a way to encourage exploring TI as “an expanded criterion” (p. 831). Consequently, they suggest TI might also predict other outcomes beyond actual turnover, which might typically be seen as a final outcome of TI in the literature. Other scholars have agreed that future research should “expand the turnover criterion” (Campbell et al., 2013, p. 777).

While Hom et al. (2012) provide a number of categories, this thesis adopts the category of enthusiastic leavers, employees who want to and are able to quit their jobs. In Hom et al.’s (2012) view, these employees seek to leave for a particular alternative. In line with Bergman et al.’s (2012) suggestion of anticipated destinations in studying withdrawal states, this thesis considers starting a new business as one of the possibilities that employees may target. As such, the PWS approach can help in understanding how TI might reinforce the entrepreneurial attitudes and intentions. This is important because their PWS approach aligns with TPB (Bergman et al., 2012) under the theory of reasoned action (Ajzen, 1991, 2011).

This thesis, therefore, explores an answer to the following research question:

**Research Question 5: Do employees’ turnover intentions contribute to their intention to start a new business venture and become an entrepreneur?**
2.5 Chapter conclusion

This thesis is set in the context of Vietnam, an economy dominated by small firms with strong links to the owner-managers’ families. It examines the influence of EO and family involvement on performance at the firm level and the employee level. The thesis follows Miller’s (1983) conception of EO in treating the concept as a concurrent manifestation of firm-level innovation, proactiveness, and risk-taking. With a focus on small firms, this thesis examines how EO could have an influence on the owner-manager’s satisfaction with the firm-level performance (research question 1), as well as their goal achievement (research question 2). The two studies associated with EO also examine direct effects and moderating effects of family involvement on the EO-firm performance relationship.

Furthermore, the thesis explores the crossover from the entrepreneur’s risk-taking, a fundamental component of EO at the firm level, to OB at the employee level, focusing on JS and OC and how the entrepreneur’s family involvement may reduce this crossover. This helps to find answers to research questions 3 and 4.

Set in Vietnam, a country with a vibrant economy with abundant opportunities for business start-ups, this thesis focuses on the employees and examines how their TI may contribute to development of their intentions of starting own business. This helps to answer research question 5.

Overall, the thesis seeks to understand entrepreneurship and its influence whether at the firm level and performance; or at the crossover level and follower attitudes; or at the employee level and what drives their behaviour towards becoming an entrepreneur.
Chapter 3

METHODOLOGY AND RESEARCH DESIGN

This chapter presents a brief description of the research methods used for the four studies that comprise this thesis. Overall aspects of the methods are described including theoretical framework, quantitative approach, sampling strategies, data collection, scales and survey development, and analytic procedures. Full details on the methods used in each of the four studies are included as part of the paper write-ups in the next four chapters.

3.1 Theoretical framework, research design and the quantitative approach

Chapter 2 developed five research questions about the relationships among the study variables based on different theories. Figure 3-1 outlines the theoretical framework with an overall design of four studies that are intended to answer the research questions. Studies 1, 2, and 3 tested hypotheses about these relationships among entrepreneurial orientation (EO), involvement of the owner-manager’s family and variables related to employees’ organisational behaviour (OB) in terms of job satisfaction and organisational commitment, offering answers to research questions 1 to 4. Study 4 examined the relationships among employees’ turnover intentions and their entrepreneurial intentions; this answers research question 5.

This thesis adopted a quantitative approach to all four studies. The quantitative approach helps in “testing objective theories by examining the relationship among variables” (Creswell, 2014, p. 4) where a variable “refers to a characteristic or an attribute of an individual or an organisation that can be measured or observed” (Creswell, 2014, p.
For example, a firm’s proclivity for entrepreneurship (e.g., being more innovative or willing to take risk) is a firm-level characteristic that is measured via the owner and/or the top management team (Khandwalla, 1976; Miller, 1983). In this way, the quantitative approach is appropriate to the hypothesis testing required by this thesis.

This thesis collected data on the study variables through surveys of small firm owner-managers and employees. A cross-sectional design was implemented for this thesis (i.e., data on the study variables were collected at a single point in time). While other methodological approaches can be superior – especially longitudinal data collection – such an approach was not possible due to the time constraints of the PhD study. This is especially so given I had a limited time to physically collect data in Vietnam.

This thesis utilised three different datasets on Vietnamese entrepreneurs (owner-managers) and employees: (1) entrepreneur rated data (firm level); (2) employee rated data (employee level, nested in a subset of entrepreneurs from dataset [1], a number of employees per entrepreneur supplied data); and (3) another employee-level dataset of currently employed workers. Studies 1 and 2 used the first dataset for firm-level analyses. Study 3, a multilevel analysis, used the second dataset (employee level) plus a subset of the first dataset (firm level) in which the second dataset is nested. Study 4 used the third employee dataset for testing employee-level relationships.

The four studies are reported separately in the next four chapters of this thesis (Chapters 4 to 7). The following sections in this chapter describe sampling strategies, data collection, scales and survey development, and analytic procedures used in these four studies.
Figure 3-1 Overall design of Studies 1 to 4

Note: Study 1 (firm-level analysis): Entrepreneurial Orientation & Family Involvement towards Firm-Level Outcomes.
Study 2 (firm-level analysis): Entrepreneurial Orientation & Family Involvement towards Owner-Manager’s Goal Attainment.
Study 3 (multilevel analysis): Entrepreneurial Risk-taking and Family Involvement towards Job Satisfaction and Organisational Commitment.
Study 4 (employee-level analysis): Turnover Intentions towards Entrepreneurial Intentions.
3.2 Sample and data collection

3.2.1 Sample and data collection for Studies 1 to 3

These studies focused on small firms in Vietnam and thus targeted firms with under 200 employees (Nguyen & Bryant, 2004; Raymond et al., 2013). A random list of 600 firms located in Hanoi was created from the Vietnam Business Directory 2013 (Vietnam Chamber of Commerce and Industry, 2014). It was decided to approach the firms on the list for the surveys involving the owner-managers and the employees. The researcher telephoned every firm on the list to confirm their physical addresses and then visited them to deliver a written invitation to participate in the study. In most cases, the researcher met the owner-managers in their offices to introduce the study and receive their response about their participation. In some cases, the researcher left the invitation for the owner-managers’ consideration and then called them later for their confirmation. This approach resulted in 481 firms broadly agreeing to participate in the study.

The researcher then distributed the firm survey to every owner-manager in their office and came back within a week to collect the survey. A total of 170 firm surveys were completed, resulting in a response rate of 35.3%. This firm sample includes representatives from different production sectors: 104 firms (61.2%) in the service sector, 25 firms (14.7%) were in industrial production, 37 firms (21.8%) operated in both services and industrial production, and three (1.8%) in both services and agricultural production. This sample characteristic closely represents the distribution of Vietnamese firms (i.e., 63.7% in the service sector, 35.2% in the industrial production, and 1.1% in the agricultural production) (General Statistics Office of Vietnam, 2016). Table 3-1 shows additional characteristics of the firm sample. Firm-level data from this sample were used in Studies 1 and 2.
The researcher also asked the owner-managers in the sample of 170 firms for permission to survey their employees. One hundred and twenty-one owner-managers broadly agreed to participate in this aspect of the study. The researcher randomly distributed the employee survey to the employees in these firms. Five employee surveys were delivered in the smallest firms (10 employees or less) and up to 15 employee surveys were randomly distributed in the largest firms (over 100 employees). These surveys were purposefully designed to be short and take minimal time to reduce the time demands on the firms. Such a procedure for surveying a limited number of level-1 respondents (employees) from every level-2 unit (the owner-manager firms) has been used in other crossover studies (Bakker, 2005; Westman & Etzion, 1999).

Overall, 910 employee surveys were distributed. In most of the cases, the employees answered and returned the survey to the researcher in the same visit; that is within the hour. In other cases, the researcher returned to the business the next day to collect the completed surveys. In the end, the researcher received 343 completed employee surveys (response rate of 37.7%), each matching with one of 67 completed firm surveys. Some reasons for the lack of employee responses include a lack of interest by employees to participate in the study and a concern for revealing sensitive information about their organisation despite being assured of confidentiality.

These 67 firms are a subset of the sample of 170 total firms presented in Table 3-1. As shown in Table 3-2, the employee sample is gender balanced. Most of the employees are under 30 years old (61.8%) or in their 30s (30.0%). Data from these 67 firms and 343 employees were used for Study 3.
### Table 3-1 Characteristics of the sample for Studies 1 and 2

<table>
<thead>
<tr>
<th></th>
<th>Number of firms (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm sample</strong></td>
<td>170 (100.0%)</td>
</tr>
<tr>
<td><strong>Firm age</strong></td>
<td></td>
</tr>
<tr>
<td>3–4 years</td>
<td>22 (12.9%)</td>
</tr>
<tr>
<td>5–10 years</td>
<td>74 (43.5%)</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>74 (43.5%)</td>
</tr>
<tr>
<td><strong>Registration status</strong></td>
<td></td>
</tr>
<tr>
<td>Joint stock companies</td>
<td>85 (50.0%)</td>
</tr>
<tr>
<td>Limited liability companies</td>
<td>72 (42.4%)</td>
</tr>
<tr>
<td>Sole proprietorships</td>
<td>13 (7.6%)</td>
</tr>
<tr>
<td><strong>Scale of employment</strong></td>
<td></td>
</tr>
<tr>
<td>Under 5 employees</td>
<td>17 (10.0%)</td>
</tr>
<tr>
<td>5–9 employees</td>
<td>35 (20.6%)</td>
</tr>
<tr>
<td>10–49 employees</td>
<td>80 (47.1%)</td>
</tr>
<tr>
<td>50 or more employees</td>
<td>32 (22.4%)</td>
</tr>
</tbody>
</table>

*The sum of percentages is not 100% due to rounding.*
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm sample</strong></td>
<td>67 (100.0%)</td>
</tr>
<tr>
<td>(number of firms)</td>
<td></td>
</tr>
<tr>
<td>Firm age*</td>
<td></td>
</tr>
<tr>
<td>3–4 years</td>
<td>11 (16.4%)</td>
</tr>
<tr>
<td>5–10 years</td>
<td>34 (50.7%)</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>22 (32.8%)</td>
</tr>
<tr>
<td>Registration status*</td>
<td></td>
</tr>
<tr>
<td>Joint stock companies</td>
<td>32 (47.8%)</td>
</tr>
<tr>
<td>Limited liability companies</td>
<td>29 (43.3%)</td>
</tr>
<tr>
<td>Sole proprietorships</td>
<td>6 (9.0%)</td>
</tr>
<tr>
<td><strong>Employee sample</strong></td>
<td>343 (100.0%)</td>
</tr>
<tr>
<td>(number of employees)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>171 (49.9%)</td>
</tr>
<tr>
<td>Male</td>
<td>172 (50.1%)</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
</tr>
<tr>
<td>Under 30 years of age</td>
<td>212 (61.8%)</td>
</tr>
<tr>
<td>30–39</td>
<td>103 (30.0%)</td>
</tr>
<tr>
<td>40–49</td>
<td>17 (5.0%)</td>
</tr>
<tr>
<td>50 or older</td>
<td>11 (3.2%)</td>
</tr>
</tbody>
</table>

* The sum of percentages is not 100% due to rounding.
3.2.2 Sample and data collection for Study 4

Study 4 examined relationships among employees’ turnover intentions and their entrepreneurial intentions. Accordingly, Study 4 used a different strategy for collecting data compared with the other three studies.

Based on their public information on Facebook, the researcher (PhD candidate) identified Vietnamese employees (working in Vietnam) as potential respondents. An invitation to participate in the survey was posted to 931 potential respondents in a social network of high school and university alumni. A Web-based questionnaire was used to collect responses. A total of 147 completed responses were received providing an initial response rate of 15.8%. While the response rate is low, large scale on-line surveys are notorious for providing a low response rate (Dollwet & Reichard, 2014).

Table 3-3 shows the main characteristics of the employee sample for Study 4. Just over half of respondents were female (55%) and about two-thirds were under 30 years old. About half of the sample had less than six years working experience and almost three-fourths held a non-managerial position. By education, 91 employees (61.9%) had a university degree, 47 employees (32.0%) held a master’s degree, and 7 employees (4.8%) held a PhD qualification. The high level of education can be explained by the fact that all participants are members of a university alumni network and thus are all likely to be educated at the undergraduate level or above.
Table 3-3 Characteristics of the sample for Study 4

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number of employees (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee sample</td>
<td>147 (100.0%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>81 (55.1%)</td>
</tr>
<tr>
<td>Male</td>
<td>66 (44.9%)</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
</tr>
<tr>
<td>Under 30 years of age</td>
<td>95 (64.6%)</td>
</tr>
<tr>
<td>30–39</td>
<td>51 (34.7%)</td>
</tr>
<tr>
<td>40-49</td>
<td>1 (0.7%)</td>
</tr>
<tr>
<td>Highest level of qualification*</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>91 (61.9%)</td>
</tr>
<tr>
<td>Master</td>
<td>47 (32.0%)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>7 (4.8%)</td>
</tr>
<tr>
<td>Others</td>
<td>2 (1.4%)</td>
</tr>
<tr>
<td>Organisational sector</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>103 (70.1%)</td>
</tr>
<tr>
<td>Not-for-profit</td>
<td>28 (19.0%)</td>
</tr>
<tr>
<td>Public</td>
<td>16 (10.9%)</td>
</tr>
<tr>
<td>Current working position</td>
<td></td>
</tr>
<tr>
<td>Non-manager</td>
<td>109 (74.1%)</td>
</tr>
<tr>
<td>Manager</td>
<td>38 (25.9%)</td>
</tr>
<tr>
<td>Working experience</td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>74 (50.3%)</td>
</tr>
<tr>
<td>6–10 years</td>
<td>30 (20.4%)</td>
</tr>
<tr>
<td>11–15 years</td>
<td>28 (19.0%)</td>
</tr>
<tr>
<td>16–20 years</td>
<td>11 (7.5%)</td>
</tr>
<tr>
<td>21–25 years</td>
<td>2 (1.4%)</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>2 (1.4%)</td>
</tr>
</tbody>
</table>

*The sum of percentages is not 100% due to rounding.
3.3 Scales for the study variables

As discussed in Chapter 2, this thesis examined different sets of relationships among study variables. Using resource-based theory (Barney & Arikan, 2001), this thesis sought to answer the research questions about the firm-level relationships of EO, family involvement, the owner-manager’s satisfaction with the firm outcomes, and the owner-manager’s attainment of goals. The socio-emotional wealth approach (Gómez-Mejia et al., 2007) serves as a theoretical framework for the relationships involving firm-level risk-taking, family involvement, and the employee-level OB. Theory of planned behaviour (Ajzen, 1991) and the proximal withdrawal states approach (Hom et al., 2012) help to argue for the relationships among the employee-level turnover intentions, entrepreneurial intentions, and its antecedents (perceived behavioural control, personal attitude, and social norms).

This thesis adopted scales available in the literature to measure the study variables. The original English versions of the scales were translated into Vietnamese and then back-translated to minimise translation error (Brislin, 1980). Table 3-4 lists the adopted scales and outlines the sources, level of unit of analysis, and the use for each. (See Appendix 3 for these scales). Chapters 4 to 7 present the properties of these scales in more detail.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Level of unit of analysis</th>
<th>Source of scale</th>
<th>Used in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Study 1 (Chapter 4)</td>
</tr>
<tr>
<td>Entrepreneurial Orientation</td>
<td>Firm</td>
<td>Covin and Slevin (1986)</td>
<td>✓</td>
</tr>
<tr>
<td>Entrepreneurial Risk-taking</td>
<td>Firm</td>
<td>Covin and Slevin (1986)</td>
<td>✓</td>
</tr>
<tr>
<td>Family Power</td>
<td>Firm</td>
<td>Klein et al. (2005)</td>
<td>✓</td>
</tr>
<tr>
<td>Family Experience</td>
<td>Firm</td>
<td>Klein et al. (2005)</td>
<td>✓</td>
</tr>
<tr>
<td>Family Culture</td>
<td>Firm</td>
<td>Klein et al. (2005)</td>
<td>✓</td>
</tr>
<tr>
<td>Owner-manager’s Goal Attainment</td>
<td>Firm</td>
<td>Swierczek and Thai (2003), Scheinberg and MacMillan (1988)</td>
<td>✓</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Employee</td>
<td>Judge, Bono, Erez, and Locke (2005)</td>
<td>✓</td>
</tr>
<tr>
<td>Turnover Intentions</td>
<td>Employee</td>
<td>Cammann, Fichman, Jenkins, and Klesh (1983)</td>
<td>✓</td>
</tr>
<tr>
<td>Personal Attitudes</td>
<td>Employee</td>
<td>Liñán and Chen (2009)</td>
<td>✓</td>
</tr>
<tr>
<td>Social Norms</td>
<td>Employee</td>
<td>Liñán and Chen (2009)</td>
<td>✓</td>
</tr>
<tr>
<td>Perceived Behavioural Control</td>
<td>Employee</td>
<td>Liñán and Chen (2009)</td>
<td>✓</td>
</tr>
<tr>
<td>Entrepreneurial Intentions</td>
<td>Employee</td>
<td>Liñán and Chen (2009)</td>
<td>✓</td>
</tr>
</tbody>
</table>
Chapter 3 Methodology and Research Design

3.4 Analysis

As shown in Table 3-4, Studies 1, 2, and 4 examine single-level relationships while Study 3 conducts a multilevel analysis. For the single-level analyses, this thesis followed the guidelines of Hair, Black, Babin, and Anderson (2010) in selecting multivariate techniques. The multiple regression technique was used in Study 1 (Chapter 4) and Study 2 (Chapter 5). Studies 1 and 2 also followed the direction of Aiken, West, and Reno (1991) in examining the moderating effect of family involvement on the EO-performance relationship. The statistical package SPSS version 22 was used to run hierarchical moderated regressions. Following Aguinis and Stone-Romero’s (1997) discussions regarding relaxing the criteria for determining significant interaction effects; a level of $p < .10$ was adopted for interaction effects and $p < .05$ for all other effects.

In Study 4 (Chapter 7), structural equation modelling (SEM) was used to examine the relationship of employee’s turnover intentions and their entrepreneurial intentions. The statistical package AMOS version 22 was employed for this analytical technique. Study 4 adopted the levels of model fit suggested by Williams, Vandenberg, and Edwards (2009): the comparative fit index (CFI) > .95, the root-mean-square error of approximation (RMSEA) < .08, and the standardised root mean residual (SRMR) < .10.

In Study 3 (Chapter 6) a multilevel analysis was conducted using the MLwiN program (Rasbash, Browne, Healy, Cameron, & Charlton, 2000). Two-level models were defined with the employees placed at the first level and the entrepreneurs situated at the second level. Following normal conventions, all variables were grand mean centred (Kreft, De Leeuw, & Aiken, 1995) and for the test of moderation, interacting variables were $z$-scored (Aiken et al., 1991; Fone, Lloyd, & Dunstan, 2007).

Table 3-5 provides a summary of the four studies, respective samples and analyses undertaken for this thesis.
Table 3-5 Summary of samples and analyses

<table>
<thead>
<tr>
<th>Study number</th>
<th>Sample</th>
<th>Focus</th>
<th>IV</th>
<th>DV</th>
<th>Other Variables</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>170 Vietnamese entrepreneurs (owner-managers)</td>
<td>EO and firm-level performance</td>
<td>EO</td>
<td>Financial and non-financial performance</td>
<td>Family involvement as a moderator</td>
<td>Hierarchical moderated regression</td>
</tr>
<tr>
<td>Study 2</td>
<td>170 Vietnamese entrepreneurs (owner-managers)</td>
<td>EO and firm-level performance</td>
<td>EO</td>
<td>Goal attainment</td>
<td>Family involvement as a moderator</td>
<td>Hierarchical moderated regression</td>
</tr>
<tr>
<td>Study 3</td>
<td>67 Vietnamese entrepreneurs (owner-managers) – a subset of the 170 entrepreneurs plus 343 Vietnamese employees of the 67 entrepreneurs</td>
<td>Entrepreneur’s risk-taking behaviour and its crossover towards job satisfaction and organisational commitment (of the employee/follower)</td>
<td>Risk-taking behaviour (of the owner-manager)</td>
<td>Job satisfaction and organisational commitment (of the employee/follower)</td>
<td>Family involvement as a moderator</td>
<td>Multilevel analysis</td>
</tr>
<tr>
<td>Study 4</td>
<td>147 Vietnamese employees</td>
<td>Entrepreneurial intentions, Turnover intentions, and TPB</td>
<td>Entrepreneurial intentions</td>
<td>TPB as a mediator</td>
<td>Mediation analysis in structural equation modelling</td>
<td></td>
</tr>
</tbody>
</table>
3.5 Ethics considerations

On 16 July 2014, the researcher submitted an application to the Massey University Human Ethics Committee for human ethics consideration. This application was for Studies 1 to 3 and included:

- A completed Human Ethics Application form;
- Information sheet (in English and Vietnamese) providing a brief introduction to the study;
- Questionnaire for the owner-manager survey (in English and Vietnamese);
- Letter to firm owner-managers to request access to the employees (in English and Vietnamese);
- Questionnaire for the employee survey (in English and Vietnamese); and
- Consent form for the participants (in English and Vietnamese).

This application was then reviewed and approved by Massey University Human Ethics Committee Northern. A notification of approval with ethics approval number MUHECN 14.035 was issued on 15 September 2014 (see Appendix 2).

The researcher made a supplementary addition to the ethics application for Study 4 on 10 November 2014. This addition was reviewed and approved by the Chair of The Massey University Human Ethics Committee Northern. An e-mail message from the Massey University Human Ethics Committee Administrator notifying the approval reached the researcher on 14 November 2014. Overall, all four studies comprising this thesis were approved by the Massey University Human Ethics Committee for human ethics.
4.1 Abstract

Study 1 examined how entrepreneurial orientation (EO) could be related to firm performance and whether family involvement could have an influence on firm performance, as well as moderating the EO-performance relationship. More specifically, using resource-based theory (RBT) (Barney, 1991), this study examined the relationship between EO and firm performance. A sample of 170 small firm entrepreneurs in Vietnam was used to test the direct effects of EO on performance and the potential moderating effects of the dimensions of family involvement (power, experience, and culture). The results showed positive relationships from EO and family culture towards both financial and non-financial performance satisfaction. The involvement dimension of family culture was found to moderate the relationship between EO and financial and non-financial performance satisfaction indicating the highest firm performance when EO and family culture are high. Overall, the study contributes through extending our understanding about the EO-performance relationship and the moderating effect of family involvement within the Vietnamese small business context.

4.2 Introduction

Entrepreneurial orientation (EO) refers to how the firm undertakes processes, practices, and decision-making activities to identify and pursue new market opportuni-
ties (Covin & Slevin, 1991; Miller, 1983). EO represents particular behavioural patterns that are believed to be recurring in entrepreneurial firms (Covin & Slevin, 1991; Lumpkin & Dess, 1996). Under resource-based theory (RBT) (Barney, 1991), EO can be treated as a source of competitive advantage by a firm whereby a higher EO provides the opportunity to create a higher level of performance for that firm (Lee et al., 2001; Wiklund & Shepherd, 2003). While the influence of EO on firm performance has been well established, there is less confirmation outside the United States (US) (Martens et al., 2016; Rauch et al., 2009). Indeed, countries like Vietnam, the locale of Study 1, provide an interesting context to the study, due to being an understudied context with a distinct difference around the important role of family.

It has also been suggested that the family can have an influence on a firm through different linkages, including family ownership, family members on governance and management boards, family commitment and value sharing (Astrachan et al., 2002; Habbershon et al., 2003). Under RBT (Barney, 1991), family involvement may also provide a source of competitive advantage to the firm (Anderson & Reeb, 2003; Górriz & Fumás, 1996; McConaughy et al., 1998). Regarding the EO-performance relationship, confounding results about the moderating effect of family involvement on this relationship exist (Casillas et al., 2010; Madison et al., 2014). Study 1 seeks to extend these findings by examining family involvement as a multi-dimensional construct, and to test for both direct effects on firm performance and potential moderating effects on the EO-performance relationship.

Study 1 is set in small firms in Vietnam, an economy dominated by small firms and family businesses (General Statistics Office of Vietnam, 2016). Management practices in Vietnamese small firms are found to be heavily biased (such as towards respect for family relationships) and where firms have strong family ties (Gerrard et al.,
As such, Study 1 contributes to the EO literature by exploring the influence of EO in an emerging economy (Vietnam). In addition, the strong Vietnamese culture around family involvement provides a useful setting to explore the effects of family involvement and this thesis contributes to the literature by exploring multiple dimensions of family involvement. Overall, Study 1 enhances our understanding of EO in an emerging economy, dominated by small firms and family businesses.

4.3 Theoretical framework and hypotheses

4.3.1 Resource-based theory

Resource-based theory (RBT) has significantly contributed to understanding why some firms sustain and leverage their competitive advantage to outperform their competitors (Barney et al., 2011; Hoskisson, Hitt, Wan, & Yiu, 1999; Kraaijenbrink, Spender, & Groen, 2010). To conceive of and implement their strategies, firms use their tangible assets (e.g., factories and warehouses) and intangible assets (e.g., patents, knowledge, and organisational climate). Under RBT, firms are considered to be heterogeneous in terms of their available resources while the resources are imperfectly mobile among firms (Barney, 1991). With a bundle of valuable, rare, inimitable, and non-substitutable resources, firms have an opportunity to improve their efficiency and effectiveness through an appropriate organisation by utilising their resources to formulate and implement value-creating strategies to outperform their competitors (Barney, 1991; Barney & Clark, 2007). RBT has gained legitimacy in research as a powerful framework for sustained competitive advantage through wide application in various topics of organisational study (Acedo, Barroso, & Galan, 2006; Barney et al., 2011).
Chapter 4 Study 1

this study, RBT was utilised to explore EO and family involvement towards performance in small firms.

4.3.2 Entrepreneurial orientation and small firm performance

Research on EO emerged from a systematic examination of entrepreneurial aspects of strategic decision making in existing firms (Edmond & Wiklund, 2010). These are particular behavioural patterns that are believed to be recurring in entrepreneurial firms (Covin & Slevin, 1991; Lumpkin & Dess, 1996). Firms are judged on their levels of entrepreneurship from the entrepreneurial behaviours they demonstrate (Covin & Slevin, 1991) with the focal concern of how firms undertake processes, practices, and decision-making activities to identify and pursue new market opportunities (Covin & Slevin, 1991; Miller, 1983). From a research approach, the conceptualisation of EO refers to how entrepreneurially the strategic management process in a firm is undertaken (Lumpkin & Dess, 1996).

EO has been considered as one of the most critical factors that determine a firm’s competitive advantage and consequently, performance (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra, 1993). EO research has consistently followed Miller’s (1983) notion of concurrent manifestation of innovativeness, proactiveness, and risk-taking (Edmond & Wiklund, 2010; Rauch et al., 2009). As such, firms with a high EO are seen as having greater novelty towards product-to-market combination, bold strategic decisions to seize new opportunities and being ahead of their competition. They are also characterised by their preference for risky scenarios with high potential returns. These behavioural patterns are seen as intangible resources imbedded in firm’s routines (Lee et al., 2001). Firm’s actual strategic moves can be perceived by competitors, but the manifestation of EO underlying those moves is difficult for competitors to understand or
imitate. More importantly, Wiklund and Shepherd (2003, p. 1308) state “EO could be an important measure of the way a firm is organised” that may facilitate the successful utilisation of firm resources. In this regard, EO per se and its contribution to competitive advantage and therefore performance can be justified through the lens of RBT.

The notion that EO has a significant influence on organisational performance has been largely supported in the literature. For example, EO was found to be positively related to several financial outcomes, including sales growth and profits growth (Atuahene-Gima & Ko, 2001), returns on sales (Kemelgor, 2002) and net profit (Swierczek & Thai, 2003). EO was also reported to have positive correlations with subjective assessment of financial outcomes (Covin & Slevin, 1989; Zahra & Garvis, 2000). In addition, EO was found to be highly related to non-financial outcomes (Barrett & Weinstein, 1998). In their meta-analysis, Rauch et al. (2009) arrived at a moderately sized EO-performance relationship (corrected correlation of .242). With a focus on small firms and their inherent characteristics, Study 1 is founded on there being a strong EO-performance relationship (Miller, 2011; Rauch et al., 2009) and this includes the scope of small firm performance (Raymond et al., 2013).

Small firms can be seen as an extension of their owner-managers (Levin & Travis, 1987; Welsh & White, 1981), which may imply different functions of top management in small firms compared to large firms. For large firms with a separation between ownership and management (Fama & Jensen, 1983), the top managers are professionals hired to undertake the entrepreneurial function. As such, EO may emerge in response to the shareholders’ creation of incentives for the top managers’ entrepreneurial strategic behaviours (Jones & Butler, 1992). Burgelman and Sayles (1986) distinguish between strategic behaviours as follows: autonomous strategic behaviours conducted by top management to explore new opportunities for the concept of strategy, which in turn lead
to induced strategic behaviours of middle-level managers within the organisational structure.

However, in small firms, there is an organic link between the owner-manager and the firm: the owner-managers found the firm mobilise resources for business development and exert their personal influence on the strategic management and direction of the organisation (Birley & Westhead, 1990; Keats & Bracker, 1988). The distinction between autonomous and induced strategic behaviours is blurred in small firms as the owner-managers conduct their roles at different managerial levels (Levin & Travis, 1987) and “endure switching from role to role” (Welsh & White, 1981, p. 32). Thus, EO would directly result in strategic intent and functional operations. The research implication is that EO in small firms would be investigated in a relevant manner through the owner-managers and its contribution to improved performance reasoned. This aligns with Rauch et al.’s (2009) conclusion about a strong EO-performance relationship for small firms.

The owner-managers in small firms not only pursue financial outcomes (e.g., return on sales and net income) and non-financial outcomes (e.g., employment growth and market expansion) but also satisfaction with their firms performance (Murphy & Callaway, 2004). More importantly, the owner-managers are motivated by their objectives and thus construct performance to align with their strategic intent (Jarvis et al., 2000; Raymond et al., 2013). As such, the small firm performance could be captured through the owner-managers’ perception of how well their businesses are running from both financial and non-financial perspectives. Study 1 adopts the approach by Wiklund and Shepherd (2003) and Lee et al. (2001) who treat EO as a source of firm competitive advantage, and other researchers (Covin & Slevin, 1986; Miller, 1983) who view EO as a firm-level behaviour. As the positive EO-performance link is widely supported in the
literature (Rauch et al., 2009), it is anticipated that EO would enhance small firm performance both financially and non-financially in our Vietnamese setting. As such, we posit:

**Hypothesis 1**: EO will be positively related to *(a) financial performance and (b) non-financial performance.*

### 4.3.3 Family involvement

Study 1 includes the roles of family involvement in an attempt to further explore the role of the family in the firm. Firms with family involvement are dominating business in most economies around the world (Colli, 2002; International Family Enterprise Research Academy, 2003) and family involvement has been shown to have positive influence on firm performance in several studies. For example, family control was found to help some firms to gain higher productivity (Górriz & Fumás, 1996). Firms under founder’s family control were confirmed to run more efficiently than other firms of the same size, industry, and with similar ownership structures (McConaughy et al., 1998). Family ownership, which refers to the presence of family members on governance boards, and family involvement in strategic management were reported to be both positively associated with a higher percentage of revenue from the firms’ international operations (Zahra, 2003). Firms with family share holdings and family members on the management board were found to have higher levels of assets and return on assets (ROA) (Anderson & Reeb, 2003).

There is further evidence of benefits, including greater ROA and higher net income growth, from Lee’s (2004) study that compared family firms to non-family firms. Multi-generational family involvement was reported to be associated with firms’ higher revenue (Rutherford et al., 2006). Collectively, these findings suggest that
families can exert their involvement within businesses through different mechanisms such as ownership, family members on governance and management boards, and generational succession. More importantly, family involvement can be a source of a firm’s competitive advantage and thus superior performance. In this regard, Habbershon and Williams (1999) propose that family involvement can be examined under RBT (Barney, 1991). These authors argue that the system interactions between the family and the firm could create a unique bundle of resources (termed *familiness*) that provides a competitive advantage to firms.

While family involvement can be analysed in various ways as mentioned above, Study 1 applied the family business social system developed by Habbershon et al. (2003). This system has three foundations: (1) the controlling family unit (family history, traditions, and life circle), (2) the business entity (with the strategies and structures for wealth creation), and (3) the individual family members (with the interests, skills, and life stage of the participating owners as managers). The interdependencies of these subsystems create an idiosyncratic firm-level bundle of resources and capabilities. Chrisman et al. (2003) extend the analysis of Habbershon and colleagues (2003) by adding non-economic benefits towards value creation for the family. These theoretical discussions suggest that the family may have an influence on the firm’s strategic management for value creation. With a focus on the EO towards firm performance in this thesis, Study 1 explored how family involvement could directly influence firm performance and moderate the EO-performance relationship in the context of Vietnamese small business.

Interestingly, confounding results on the moderating effect of family involvement on the EO-performance relationship have been presented in the literature. Madison et al. (2014) found that the EO-performance relationship is weaker for family firms than
non-family firms within the US. Contra to this, Casillas and Moreno (2010) reported a higher level of influence of innovation on sales growth for Spanish family-run firms. Casillas et al. (2010) conclude that the more family generations on the management board, the stronger the effect of proactiveness on the firm’s growth. One aspect of these findings, beyond the mixed results, is the strong US and European locale of literature (Martens et al., 2016; Rauch et al., 2009). This encourages further exploration of these relationships in a different context like Vietnam. Noticeably, these studies investigated family involvement in a narrow manner (family versus non-family firms, single versus multi-generational involvement) while family involvement may have different facets, as outlined previously. It is suggested this methodological approach is a limitation that other researchers have sought to address.

Study 1 argues that the discussion on the influence of family involvement can be further developed by considering the work of Astrachan et al. (2002), who treated family involvement as a multidimensional construct that encompasses three dimensions: (1) family power, (2) family experience, and (3) family culture. The power dimension represents the family’s ownership, governance, and management involvement in the firm. The experience dimension represents transfer of experience from generation owning the firm and from the family to the firm. The culture dimension exhibits value overlaps of the family and the firm (e.g., the owner-manager and the family members sharing similar views about management routines and goals for the firm) and the family’s commitment to the firm. This approach considers a *continuum* of family involvement instead of a typical dichotomous classification (family versus non-family). Astrachan et al. (2002) proposes a measure of family involvement: F-PEC (i.e., family - power, experience, and culture) scale. This scale was validated and refined by Klein et al. (2005) and Holt et al. (2007, 2010). Rutherford, Kuratko, and Holt’s (2008)
application of the F-PEC scale revealed that family culture was positively related to perceived financial performance, family experience was negatively related to perceived financial performance, but then also positively related to sales revenue. The implication of this approach is that different facets of family involvement can be simultaneously considered with respect to firm performance and the EO-performance relationship. Importantly, such an approach is likely to provide more sophisticated and accurate understanding of family involvement compared to a dichotomous approach to family involvement (yes or no).

Based on the literature above, Study 1 explores how family involvement could (1) be directly related to firm performance, and (2) have a moderating effect on the EO-performance relationship. We follow Habbershon and Williams (1999) who treats family involvement as a source of competitive advantage, where the interaction between family members and the firm creates a unique bundle of familiness resources that enhance performance. Thus, it is posited:

**Hypothesis 2:** Family involvement will be positively related to (a) financial performance and (b) non-financial performance.

Confronting the confounding results on the moderating effect of family involvement on the EO-performance relationship, the present study follows Astrachan et al. (2002) in selecting three dimensions of family involvement (power, experience, and culture) and examining them as distinct potential moderators of the EO-performance relationship. The moderating effects of family involvement are considered to be especially useful in the context of Vietnamese small firms. The country is dominated by small firms (General Statistics Office of Vietnam, 2016), in which management practices are heavily biased (such as towards respect for relationships) and where firms have
strong family ties (Gerrard et al., 2003; Vuong & Tran, 2009). The family is “the central point of social life” (Dalton et al., 2002, p. 371) and family values are predominant in doing business (Truong & Nguyen, 2002). Hence, the family is a source of resource for businesses and helps the firm overcome business problems (Truong & Nguyen, 2002). As such, we anticipate that greater family involvement will have a positive influence on Vietnamese firms with higher EO. This is because stronger family involvement will align itself with the cultural norms of Vietnam and provide greater quality familiness resources (via family members and shared values) that will ultimately leverage the strength of EO to achieve greater firm performance. As such, we hypothesize:

**Hypothesis 3:** Family involvement will moderate the EO-performance relationship, with firms with higher (a) family-power, (b) family-experience, and (c) family-culture reporting the highest performance when they also have high EO.

### 4.4 Method

#### 4.4.1 Sample and procedure

The present study focused on small firms in Vietnam and thus targeted firms with under 200 employees (Nguyen & Bryant, 2004; Raymond et al., 2013). A random list of 600 firms located in Hanoi from the *Vietnam Business Directory 2013* (Vietnam Chamber of Commerce and Industry, 2014) was created and I sent these firms an invitation to this study. Like cross-cultural surveys were English is not the first language (Haar, Russo, Suñe, & Ollier-Malaterre, 2014) the survey was translated into Vietnamese and then back-translated to minimise translation error (Brislin, 1980). I then delivered surveys to 481 owner-managers of small firms who agreed to participate in the study and a total of 170 surveys were completed for a response rate of 35.3%.
The sample includes, by scale of employment, 80 firms (47.1%) with 10 to 49 employees, 38 firms (22.4%) with 50 employees or more, 35 firms (20.6%) with five to nine employees, and 17 firms (10.0%) with less than five employees. This focus on small firms is relevant in Vietnam, where small firms are dominant (General Statistics Office of Vietnam, 2016). An illustration of the dominance of small firms in Vietnam is provided in Figure 2-1.

By industry, 104 firms (61.2%) were in the service sector and other 25 (14.7%) were in industrial production. There were 37 firms (21.8%) operating in both services and industrial production while three firms (1.8%) provided both services and agricultural production. By legal registration, 85 firms (50.0% of the sample) were limited liability companies, 72 firms (42.4%) were joint stock companies, and 13 firms (7.6%) were sole proprietorship. These sample characteristics represent the distribution of the Vietnamese firms. According to General Statistics Office of Vietnam (2016), by industry, 63.7% of the Vietnamese firms are in the service sector; 35.2% are in the industrial production; and 1.1% are in the agricultural production. And by legal status, 65.7% of the Vietnamese firms are limited liability companies; 21.5% are joint stock companies; and 12.8% are sole proprietorship.

By firm age, 74 firms (43.5%) have been operating for five and ten years, 74 firms (43.5%) for over ten years, and 22 firms (12.9%) for between three and four years.

4.4.2 Measures

Dependent variables. The owner-manager’s satisfaction was measured for subjective assessment of financial and non-financial performance, using items drawn from Gupta and Govindarajan (1984) and Raymond et al. (2013). All responses were coded 1 = not at all satisfactory and 7 = outstanding. Financial Performance Satisfaction (FPS)
was measured by seven items (sales volumes, operating profits, cash flow, growth of sales, growth of operating profits, returns on sales, and returns on investment); these items had an excellent internal consistency ($\alpha = .94$). Non-Financial Performance Satisfaction (NFPS) was measured by five items (number of employees, growth in number of employees, market development, personnel development, and dealing with political/public affairs) and these also showed good internal consistency ($\alpha = .84$).

**Independent variables.** Entrepreneurial Orientation (EO) was measured by a nine-item scale from Covin and Slevin (1986). It has three dimensions (innovation, proactiveness and risk-taking) which are usually combined together (e.g., Naman & Slevin, 1993). Questions follow the stem “Please indicate the tendency of your firm regarding the following statements:” and each item has a different coding scale, for example on a dimension of innovation the item is “1 = Changes in product or service lines have been mostly of a minor nature and 7 = Changes in product or service lines have usually been quite dramatic”. This scale has been well validated and used dominantly in EO research (Edmond & Wiklund, 2010; Rauch et al., 2009) ($\alpha = .72$).

Family involvement was measured by the F-PEC scale from Astrachan et al. (2002). This scale includes three subscales for family power, family experience, and family culture. Family power (F-Power) was measured by three items about the family ownership and family members who are active on governance and management boards. Sample item is “Percentage of family on the Board”, with response represented as a percentage ($\alpha = .74$). Family experience (F-Experience) was measured by three items about the family generation(s) holding family ownership and being active on governance and management boards. Sample item is “What generation(s) manage(s) the company?”; responses include first generation, second generation, and so on ($\alpha = .87$). Family culture (F-Culture) was measured by 12 seven-point scale items about the family
commitment to the firm and the overlap between the family values and the firm values 
\( \alpha = .94 \). Sample items are “Family members feel loyalty to the family business” and 
“Your family and business share similar values” \( 1 = \text{strongly disagree}, 7 = \text{strongly agree} \).

**Control variables.** This study was controlled for Firm Age (years), Firm Size 
(number of employees working for the firm), industry (were controlled by three dummy 
variables for Industrial, Services and Agricultural; coded 1 if operating in the industry 
or 0 if not operating in the industry). In addition, we controlled for environmental 
turbulence which relates to the extent a market is rapidly changing and unstable (Singh, 
1986). The four aspects of environmental turbulence have been found to relate poorly to 
each other (Singh, 1986) and thus we include them as separate factors. The factors were 
all coded 1 = strongly disagree, 7 = strongly agree: Business Environment (“very 
dynamic, changing rapidly in technical, economic, and cultural dimensions”); Business 
Risk (“very risky, one false step can mean the firm’s undoing”), Market Expansion 
(“very rapidly expanding through the expansion of old markets and the emergence of 
new ones”) and Market Competition (“very stressful, exacting, hostile, hard to keep 
afloat”). The four items correlated between .25 \( p < .01 \) > \( r > -.05 \) (non-significant) 
supporting the approach to control for these items separately and not combine them into 
a single construct.

**4.4.3 Analysis**

Data was analysed in SPSS (Version 22), running two hierarchical moderated 
regression models with FPS and NFPS as the dependent variables. In each model, 
control variables were entered in Step 1 and EO was entered in Step 2. Family power, 
family experience, and family culture were entered in Step 3. The interaction variables 
(EO multiplied by each family factor) were entered in Step 4, using the z-scored center-
ing procedure (Aiken et al., 1991). Following Aguinis and Stone-Romero’s (1997), discussions on relaxing the criteria for determining significant interaction effects, a level of \( p < .10 \) was adopted for interaction effects, and \( p < .05 \) for all other effects.

### 4.5 Results

Descriptive statistics for the study variables are shown in Table 4-1. This table shows that FPS and NFPS are significantly correlated to each other (\( r = .69, p < .01 \)), although this is not at the level of concept redundancy (Morrow, 1983). Firm size is significantly correlated to both FPS (\( r = .27, p < .01 \)) and NFPS (\( r = .23, p < .01 \)). Business environment is significantly correlated to NFPS only (\( r = .19, p < .05 \)), market competition is significantly correlated to FPS only (\( r = -.22, p < .01 \)), while market expansion is significantly correlated to both FPS (\( r = .37, p < .01 \)) and NFPS (\( r = .35, p < .01 \)). EO is significantly correlated to both FPS (\( r = .36, p < .01 \)) and NFPS (\( r = .34, p < .01 \)), as is family culture: FPS (\( r = .31, p < .01 \)) and NFPS (\( r = .32, p < .01 \)). Finally, amongst the moderators, all three family involvement dimensions are significantly correlated (\( .18 < r < .32, \text{ all } p < .05 \)). Although the strength of the relationships highlights they are only weakly related and thus are quite distinct.

Tables 4-2 and 4-3 show the results of the moderated regression analyses testing hypotheses 1 to 3. Table 4-2 shows regression results for the model predicting FPS and highlights include EO having a positive relationship (\( \beta = .25, p < .05 \)), accounting for an additional 3\% (\( p < .05 \)) variance. This is over and above the significant control variables of firm size (\( \beta = .01, p < .05 \)), business environment (\( \beta = .17, p < .05 \)), market expansion (\( \beta = .25, p < .001 \)), and market competition (\( \beta = -.18, p < .01 \)). Combined, the control variables accounted for a large 25\% variance (\( p < .001 \)). While the family involvement bundle of factors accounted for an additional 5\% variance (\( p < .05 \)), only
family culture (F-Culture) was positively related to FPS ($\beta = .24, p < .05$). Thus, neither family power (F-Power) nor family experience (F-Experience) was found to be significantly related to FPS. However, a significant interaction effect was found between EO and family culture (F-Culture) ($\beta = .15, p < .10$).

Table 4-3 shows regression results for the model predicting NFPS. Important findings include EO having a positive relationship ($\beta = .25, p < .01$), and accounting for an additional 4% ($p < .05$) variance. This is over and above the significant control variables of firm size ($\beta = .01, p < .01$), business environment ($\beta = .17, p < .01$), and market expansion ($\beta = .19, p < .001$). Combined, the control variables accounted for a large 21% variance ($p < .001$). While the family involvement bundle of factors accounted for an additional 6% variance ($p < .01$), as with the FPS model, only family culture (F-Culture) was positively related to NFPS ($\beta = .33, p < .001$). Again, neither family power (F-Power) nor family experience (F-Experience) was found to be significantly related to NFPS. However, a significant interaction effect was found between EO and family culture (F-Culture) ($\beta = .16, p < .05$).

To facilitate understanding of the interaction effects, plots of the interactions are shown in Figures 4-1 and 4-2. The interactions for financial performance satisfaction (Figure 4-1) shows that there are significant differences between respondent groups, with respondents with high family culture reporting higher financial performance satisfaction when they have low EO than those respondents with low family culture. At high levels of EO, all respondents report higher financial performance satisfaction, but again we see respondents with high family culture out-performing those with low family culture.

The interactions for non-financial performance satisfaction (Figure 4-2) are almost identical to those of financial performance satisfaction (Figure 4-1), with respondents
with high family culture reporting higher NFPS at all levels of EO. The highest levels of non-financial performance satisfaction are achieved when there are high levels of EO and high family culture. Overall, both interaction effects show that F-Culture enhances the influence of EO on performance satisfaction, supporting our hypothesis 3.

Finally, the regression models predicting the owner-manager’s satisfactions were significant and sizable for both models: FPS ($R^2 = .34$, $F = 4.891$, $p < .001$) and NFPS ($R^2 = .34$, $F = 4.900$, $p < .001$). The variance inflation factors (VIF) were also examined for evidence of multicollinearity. Our data scores were below 3.0, indicating no evidence of multicollinearity in the regression models (Hair et al., 2010).
Table 4-1 Study 1: Descriptive statistics and inter-correlations of study variables

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<td>8. F-Power</td>
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*n = 170, *p < .05, **p < .01 (two-tailed).*
Table 4-2 Study 1: Hierarchical moderated regression analysis towards financial performance satisfaction

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$B =$ unstandardised estimate, $SE =$ standard error. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).
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$R^2$ | .21 | .24 | .31 | .34 |
Adjusted $R^2$ | .16 | .19 | .25 | .27 |
$R^2$ Change | .21*** | .04** | .06** | .03† |
$F$ statistic | 4.631*** | 5.054*** | 5.270*** | 4.900***

$B = \text{unstandardised estimate, } SE = \text{standard error.}^*$

$^* p < .10, ^* p < .05, ^* p < .01, ^{***} p < .001$ (two-tailed).
Figure 4-1 Study 1: Interaction plot of EO and family culture with
financial performance satisfaction as dependent variable
Figure 4-2 Study 1: Interaction plot of EO and family culture with non-financial performance satisfaction as dependent variable.
4.6 Discussion

Study 1 set out to explore the direct effects of EO on firm performance (financial and non-financial) in the less studied context of small business in Vietnam. In addition, we also explored the moderating effects of family involvement dimensions on the EO-performance relationship. The present study distinguished between two types of subjective performance measures: FPS and NFPS. We found significant relationships between EO and FPS and between EO and NFPS and the strength of the relationships were consistent at $r = .36$ (financial) and $r = .34$ (non-financial). Interestingly, this is almost identical to the meta-analysis benchmark of $r = .35$ (corrected correlation) for micro-sized firms (1–49 employees), on the EO-performance relationship (Rauch et al., 2009). As such, we find strong alignment with the positive impact of EO on firm performance in the Vietnamese context. This gives support for hypothesis 1 and is consistent with relationships between EO and satisfactions with financial and non-financial outcomes in previous studies (e.g., Barrett & Weinstein, 1998; Covin & Slevin, 1989; Su, Xie, & Wang, 2015; Zahra & Garvis, 2000). Indeed, our findings align with Rauch et al. (2009) where they concluded in their meta-analysis that EO has similar relationships with various performance indicators (including financial and non-financial performance). As such, within the cultural context of Vietnam, it appears the influence of EO on performance is consistent with previous meta-analysis findings including the nature of performance being both financial and non-financial. This suggests that EO may be a cultural universal, or at least, culturally aligned in Vietnam, highlighting the vital importance that EO plays in firm performance around the world.

For family involvement, our study provides partial support for hypothesis 2 where we suggested that the three dimensions of family involvement would be directly related to performance. Indeed, we found two of the dimensions used (family power and family
experience) were not significantly correlated to either performance outcome, and thus only family culture was a significant predictor of financial and non-financial performance satisfaction. This finding is similar to Rutherford et al.’s (2008) conclusion about the relationships between family culture and financial performance satisfaction. However, our study did not find support for a significant negative relationship between family experience and financial performance satisfaction as per Rutherford et al. (2008).

This encourages further exploration of the multi-dimensional family involvement scale to better determine its usefulness across cultures. Overall, Study 1 extends the performance outcomes to include non-financial performance satisfaction, which was not addressed by Rutherford et al. (2008). As such, while we argue that family involvement should be important in our study of small firm performance, it appears that the key variable may be family culture. Perhaps this construct taps into the fine-grained notions of the role of family within a business, compared to simply exploring the allocation of family within management and the board structure of a firm. We encourage further studies of all three dimensions to confirm our findings.

Finally, we also found support again for family culture, this time as a moderator of the EO-performance relationship. Importantly, this held for both financial and non-financial performance satisfaction. As illustrated in the interaction plots (which were very similar for both financial and non-financial performance), it appears that a strong family culture makes a marked difference on the over performance of small Vietnam firms: firms with a strong family culture outperforming those with a weak family culture, at all levels of EO. In other words, with more family commitment and value sharing, the owner-manager appears to have a higher level of satisfaction with financial and non-financial outcomes of the firm. While Astrachan et al. (2002) assert that the family may link to the firm in different ways (such as family ownership, family mem-
bers in government and on management boards and value sharing), Study 1 applied the F-PEC scale measuring a continuum of different facets of family involvement and revealed the importance of the family commitment and value sharing to the owner-manager’s satisfaction with financial and non-financial outcomes. Overall, we found support for this multi-dimensional approach – although specifically with family culture only – and hereby suggest it is better than the typical dichotomous classification (family versus non-family).

### 4.6.1 Future research

As noted above, the use of the F-PEC scale provides much greater in-depth construction of the role of family involvement in small business. While all three dimensions of family (power, experience, and culture) were weakly related to each other, only family culture was significantly found to relate to performance. In this regard, the findings do offer support for utilising family culture and further exploration of this approach is encouraged. However, it may be that the other family involvement constructs are important in contributing to other firm outcomes, beyond the extent of those used in the present study (Study 1). As such, future research is encouraged to explore the three dimensions of family involvement to determine whether the F-PEC scale is important for understanding firm and owner outcomes. For example, while the present study found only family culture to have a significant direct and moderating effect, do the other dimensions of family involvement (power and experience) play a role in other outcomes associated with firm performance, such as the personal satisfaction of owners in their business activities? Furthermore, Study 1 tested the three F-PEC dimensions as moderators of EO and perhaps other predictors might be better for significantly interacting with the other family involvement dimensions, such as organisational climates.
4.6.2 Limitations

Despite the consistent findings in Study 1, it is not without some limitations. Our study used a cross-sectional design that does not support causal relationships to be concluded, although this is typical of the literature (Gibb & Haar, 2010). While the sample size is good ($n = 170$), there are always issues around the potential for common method variance (CMV) to occur with the same source data. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) note that while not perfect, Harman’s single-factor test does provide a useful rudimentary test of CMV. This approach has been used in entrepreneurial studies of firms (Haar & White, 2013) and involves conducting an un-rotated factor analysis to determine whether a single factor dominates. This analysis resulted in a number of factors, with the largest factor accounting for less than 24% of the overall variance, which provides support for CMV not being an issue (Podsakoff & Organ, 1986).

Overall, the study had a sufficient data size and while actual performance data would be desirable, the focus on owner perceptions is common (Gibb & Haar, 2010), and there is awareness of the lack of small firm archival data as these firms owners often have low incentives to disclose their business information (Murphy & Callaway, 2004; Sapienza, Smith, & Gannon, 1988). Similarly, Vietnam does not hold national data on small firm performance so there is no objective data available to conduct analysis of actual financial performance.

4.7 Conclusions

Under a theoretical framework underpinned by RBT (Barney, 1991), the present study presented empirical evidence supporting the notion that EO and family involvement can be sources of competitive advantage, enhancing a firm’s performance. Our
findings echoed several previous studies in a sense that both EO and family involvement bear a positive performance effect and this is important confirmation given the uncommonly studied cultural setting of Vietnam. Importantly, Study 1 found that beyond EO it appears that the role of family culture can both directly influence firm performance (financial and non-financial) and interact positively with EO to highlight the achievement of the greatest levels of firm performance. Overall, Study 1 extends the discussions on the influence of family involvement on performance and the interaction between EO and family involvement towards firm performance within a Vietnamese small business context.

### 4.8 Publication status

A manuscript on Study 1 including the contents of Chapter 4 has been sent to *Journal of Small Business Economics* for consideration for publication.
Chapter 5

STUDY 2: A RESOURCE-BASED ASSESSMENT OF VIETNAMESE SMALL FIRMS: GOAL ATTAINMENT AND COMPETITIVE ADVANTAGE RESULTING FROM AN ENTREPRENEURIAL ORIENTATION AND FAMILY INVOLVEMENT

5.1 Abstract

Study 2 explored the idea of a small firm being an extension of its owner-manager and followed the goal attainment approach to organisational effectiveness by studying the owner-manager’s attainment of goals as a criterion for small firm effectiveness. A measure of two dimensions of the owner-manager’s attainment of goals was developed in the context of small business in Vietnam. Under resource-based theory (RBT) (Barney, 1991), Study 2 presents empirical evidence supporting the fact that entrepreneurial orientation (EO) and family involvement can be sources of competitive advantage, enhancing the owner-manager’s attainment of goals. This study also found that different facets of family involvement may have different influence on the EO-performance relationship. Study 2, therefore extends the discussion on the influence of family involvement and the interaction between EO and family involvement towards firm effectiveness.

5.2 Introduction

Study 2 investigated the small firm owner-manager’s attainment of goals in the context of Vietnam, taking account of patterns of firm-level entrepreneurial behaviours and involvement of the owner-manager’s family in the firm. The present study reviewed
the idea of a small firm being an extension of its owner-manager (Carland, Hoy, Boulton, & Carland, 1984; Mintzberg, 1993) and followed the goal attainment approach to organisational effectiveness (Lewin & Minton, 1986; Quinn & Rohrbaugh, 1983) by studying the owner-manager’s attainment of goals as a criterion for small firm effectiveness. There has been little consensus on a global measure of the owner-manager’s goals and previous studies have suggested examination of the entrepreneur’s goals being specific to the research context (Scheinberg & MacMillan, 1988; Shane, Kolvereid, & Westhead, 1991). Therefore, this present study focused our study on Vietnam and argued for two dimensions of Vietnamese owner-managers’ goals: one for personal achievement and the other for family benefits.

The present study employs resource-based theory (RBT) (Barney, 1991) to examine how the small firm owner-manager’s attainment of goals may be influenced by firm-level entrepreneurial orientation (EO) and involvement of the owner-manager’s family. EO refers to how entrepreneurially the management process is undertaken in an existing firm (Lumpkin & Dess, 1996), with EO being demonstrated to contribute to a firm’s competitive advantage and performance (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra, 1993). This study also studies the interaction between the family and the firm, using the model proposed by Habbershon et al. (2003). The F-PEC scale (Astrachan et al., 2002) was adapted to measure different dimensions of family involvement. This study then explored potential moderating effects of family involvement on the relationship between EO and the owner-manager’s goal attainment.

The present study is set in Vietnam, an economy dominated by small firms (General Statistics Office of Vietnam, 2016). The country was a centrally planned economy until 1986, the year a comprehensive reform package (doi moi) was launched, turning the country into a transition economy (World Bank, 2015). While Vietnamese
entrepreneurs aspire to start their own businesses as a source of employment and income for their families (Ronnâs & Ramamurthy, 2001), their families also play an important role within the business (Do et al., 2008; Ronnâs, 2001; Truong & Nguyen, 2002). Thus, Vietnam provides a relevant context for Study 2 that explores the small firm owner-manager’s goal attainment, EO, and family involvement.

This report on Study 2 is designed as follows. It starts with an examination of the owner-manager’s attainment of goals and then discusses the relationship between EO and the owner-manager’s attainment of goals under RBT. The report continues with discussion on the influence of family involvement on the owner-manager’s attainment of goals and explores the relationship between EO and the owner-manager’s attainment of goals. It then describes the methods and analysis used for Study 2 followed by a presentation on results from the data analysis. The findings from the analysis are discussed with respect to the contemporary literature in the fields of EO and family business studies. Implications of the findings conclude the report.

5.3 Theoretical framework and hypotheses

5.3.1 Small firm owner-manager’s attainment of goals

Carland et al. (1984) define the small firm owner-manager as “an individual who establishes and manages a business for the principal purpose of furthering personal goals” (p. 358). Several studies of small firms presented evidence supporting the owner-manager’s pursuance of personal goals. For example, a number of studies found that seeking to increase income and financial security for their families is one of the owner-manager’s primary motives for running their own businesses (Greenbank, 2001; Morris, Miyasaki, Watters, & Coombes, 2006; Swierczek & Thai, 2003). The small firm owner-manager’s aspirations of having their firms being inherited by their children was found
to be another driver to engaging in business (LeCornu, McMahon, Forsaith, & Stanger, 1996). The small firm owner-managers were also reported to attempt to achieve various goals for themselves such as being their own boss (Caliendo & Kritikos, 2009), improved lifestyle, greater autonomy (Walker & Brown, 2004), independence (Boyd & Gumpert, 1983; Gray, 2002; Reijonen & Komppula, 2007), and a stronger voice in the local community (Shane et al., 1991). By running small firms, the owner-manager also makes their contributions to social development, including employment and support for local people (Jenkins, 2006).

More importantly, implications of the owner-manager’s pursuance of personal goals for small firms in operation have been presented in the literature. Walker and Brown (2004) found that lifestyle criteria were more important than financial criteria to the Australian owner-manager’s judgment on business success. Raymond, Marchand, St-Pierre, Cadieux, and Labelle’s (2013) work in the Canadian context supported the small firm owner-manager’s attainment of various personal objectives (such as income for family, being one’s own boss, gaining the best profit margin) being positively related to the owner-manager’s perceived firm performance. Evidence of the owner-manager’s goal attainment as well as its implications for management practices is rooted in the small business literature. Study 2 extends the discussion on the owner-manager’s goal attainment and small firm in operation by following the idea of treating a small firm as an extension of its owner-manager (Carland et al., 1984; Mintzberg, 1993) and focusing on how the small firm can facilitate the owner-manager’s goal attainment.

A small firm can then be treated as an extension of its owner-manager regarding the owner-manager’s purpose in starting their business, as argued by Mintzberg (1993): “all revolves around the entrepreneur. Its goals are his goals, its strategy his vision of its place in the world” (p. 161). While the owner-manager’s motive to attain their goals has
been routinely treated as a drive of small firm performance as discussed above, the relationship between small firm performance and the owner-manager’s goal attainment is reciprocal (Meyer, Tsui, & Hinings, 1993). Thus, this present study seeks to investigate the influence of small firm performance on the owner-manager’s goal attainment. Having said that, we followed the approach to organisational effectiveness proposed by Quinn and Rohrbaugh (1983) and Lewin and Minton (1986) in treating the owner-manager’s attainment of goals as one of the utmost criterion for assessing effectiveness of a small firm under the owner-manager’s control. We then considered measures of goal attainment available in the literature on small firm effectiveness that could be adapted for our study in the Vietnamese context.

Several empirical studies present patterns of the owner-manager’s goals inconsistently. Pistrui and colleagues examined a dozen goals pursued by the owner-managers in several national studies including: Germany (Pistrui, Welsch, Wintermantel, Liao, & Pohl, 2000), Romania (Pistrui, 2003) and China (Pistrui, Huang, Oksoy, Welsch, & Jing, 1999; Pistrui, Huang, Welsch, & Jing, 2006). Some priority goals that emerged as common include: being one’s own boss, having freedom at work, self-control of time, financial security, and better use of their training and skills. Raymond and colleagues’ (2013) work in the Canadian context factorised the owner-manager’s objectives into five dimensions: (1) personal (being my own boss, support for family, and better life quality), (2) economic (best profit margin, firm’s turnover, lots of money), (3) social (involving themselves in the community and their firm in charitable causes), (4) relational and environmental (behaving in an ethical manner, offering interesting and competitive work environment to employees, and environment protection) and (5) family (business succession by their children and preservation of family inheritance).
Swierczek and Thai (2003) identified four dimensions of Vietnamese small business owners’ motivation: (1) achievement (through contributing to local community and realising their business ideas), (2) necessity (survival need and fun at work), (3) challenge (striving for social recognition and challenging one’s entrepreneurial potential), and (4) security (money for family and economic security). It can be concluded from these studies that a global pattern of the owner-manager’s goals does not manifest through common specific objectives (such as being one’s own boss and financial support for family). We believe that the uniqueness of the research context matters to the owner-manager’s goal setting, as suggested by Gartner (1985).

Scheinberg and MacMillan’s (1988) study using samples of entrepreneurs from 11 countries (specifically Australia, China, Denmark, England, Finland, Italy, Norway, Portugal, Puerto Rico, Sweden, and United States) revealed country-level differences in motivations to starting a business. For example in the United States, entrepreneurs scored the need for independence higher than their peers in other countries, while entrepreneurs in Denmark scored higher for both needs for independence and personal development. Chinese entrepreneurs were found to score higher for need for approval, whilst Swedish entrepreneurs scored lower for the same need. Shane, Kolvereid, and Westhead’s (1991) study of three countries (Britain, New Zealand, and Norway) also evidenced national-level differences in reasons leading to venture initiation. New Zealand entrepreneurs were found to aspire to being more independent than their British peers were. Both the British and New Zealand entrepreneurs had a stronger desire to achieve a higher position in society as well as to increase the status and prestige of family than Norwegian entrepreneurs did.

Gartner (1985) proposes a framework for studying venture creation that integrates four major perspectives: (1) the entrepreneur, (2) the organisation created by the entre-
preneur, (3) the environment in which the new venture is launched, and (4) the process by which the entrepreneur starts the new venture. Under this framework, variations in these dimensions and interaction among them may cause a complexity of the venture creation, including setting goals for the new business. From a research approach, the implication of these studies is that this present study of the owner-manager’s motivation should be specifically designed in the Vietnamese context.

Vietnam had adopted a centrally planned economy before its launch of so-called *doi moi* in 1986 turning the country into a transition economy (World Bank, 2015). *Doi moi* refers to a comprehensive reform package that promotes development of the domestic market economy as well as open the country to the rest of the world (Le, 2012). The private sector was then explicitly recognised and has quickly become the engine room of the country (Ronnås & Ramamurthy, 2001). New entrepreneurs aspire to start their small businesses as a critical source of income for their families (Hemlin, 2001) as well as job creation for their family members (Ronnås, 2001). This implies that meeting survival needs, including providing income and financial security and creating jobs, are fundamental objectives of business start-ups in Vietnam. Therefore, in the context of Vietnam, the present study argues for small firm owner-managers’ striving for survival of their firm and positive outcomes for themselves and their family. We sought to examine Vietnamese owner-managers’ goals for business start-up by adapting measures of goals available in the literature, particularly the one from Swierczek and Thai’s (2003) study of Vietnamese entrepreneurs which was then employed by Benzing et al. (2005) in the same context.

In short, Study 2 adopted the goal attainment approach to organisational effectiveness (Lewin & Minton, 1986; Quinn & Rohrbaugh, 1983) to examine small firm owner-manager’s achievement of personal goals. Being aware of variations in measur-
ing the owner-manager’s goals due to differences in research context, this study conducted in the Vietnamese context focused on outcome goals for the owner-managers and their families and considered adapting measures of goals available in the literature. The next sections discuss how the small firm owner-manager’s goal attainment could be related to the firm-level EO and involvement of the owner-manager’s families.

5.3.2 Entrepreneurial orientation in small firms

In a small firm there exists an organic link between the owner-manager and the firm regarding the owner-manager’s efforts in starting and running their business: the owner-manager founds the firm, mobilises resources to ensure business development and carries out the strategic management in alignment with their intentions (Birley & Westhead, 1990; Keats & Bracker, 1988). Having treated a small firm as a means for the owner-manager to attain their goals as discussed above, the present study argues for a link from EO to the owner-manager’s personal goal attainment, using RBT (Barney, 1991) as the theoretical framework for analysis.

Firms use their resources in the form of tangible assets (e.g., geographic location and factory) and intangible assets (e.g., patents and know-how) for their competitive strategies. Under RBT, firms are considered to be heterogeneous in terms of their available resources while the resources are imperfectly mobile among firms (Barney, 1991). A firm with a bundle of valuable, rare, inimitable, and non-substitutable resources will have an opportunity to improve their efficiency and effectiveness through an appropriate organisation for utilising their resources in formulating and implementing value-creating strategies (Barney, 1991; Barney & Clark, 2007; Barney et al., 2011). Under RBT, firm-level EO is seen as a factor contributing to the owner-manager’s attainment of personal goals.
EO refers to how entrepreneurially the entrepreneurial process is undertaken in an existing firm (Lumpkin & Dess, 1996). EO research focuses on firm-level entrepreneurial behaviour patterns of strategic decision making processes (Edmond & Wiklund, 2010), which are believed to be recurring in entrepreneurial firms (Covin & Slevin, 1991; Lumpkin & Dess, 1996). The focal concern for the EO of a firm is how firm-level processes, practices, and decision-making activities are undertaken to identify and pursue new market opportunities (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Miller, 1983). EO research has consistently followed Miller’s (1983) idea about the concurrent manifestation of innovativeness, proactiveness, and risk-taking (Edmond & Wiklund, 2010; Rauch et al., 2009) that can contribute to a firm’s competitive advantage and performance (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra, 1993).

According to Miller (1983), an entrepreneurial firm is characterised by its tendency to being novel for product-market strategies (i.e., marketing current/new products for current/new market segments) as well as its preference for risky ventures. Such a firm often arrives at bold strategic decisions involving the seizing of new opportunities and being ahead of the competition rather than responding to competitors’ moves. These behavioural patterns can be treated as intangible resources imbedded in firm’s routines (Lee et al., 2001). A firm’s competitors may perceive the firm’s realised strategy but hardly be able to understand or imitate the firm’s decision-making resulting in that strategy. For example, knowing a competitor likes to take risks and introduce new product lines does nothing for that firm regarding introducing their own new ideas, or understanding what risks they should take. As such, these processes are inimitable and hard to copy.

Wiklund and Shepherd (2003) view EO as “an important measure of the way a firm is organised” (p. 1308) that helps to facilitate utilisation of firm resources. Several
studies presented positive influence of EO on firm performance, such as sales growth (Atuahene-Gima & Ko, 2001; Lee et al., 2001), growth in profit (Atuahene-Gima & Ko, 2001), return on sales (Kemelgor, 2002) and net profit (Swierczek & Thai, 2003). EO was also found to be positively related to subjective assessment of firm’s financial outcomes (Covin & Slevin, 1989; Covin, Slevin, & Schultz, 1994; Su et al., 2015; Zahra & Garvis, 2000) as well as to non-financial outcomes (Barrett & Weinstein, 1998). A moderate correlation between EO and firm performance (corrected correlation of .242) was reported in a meta-analysis by Rauch and colleagues (2009). In this study of small firms, we argue that there is a direct link between EO and performance (in terms of the owner-manager’s attainment of personal goals) in a small firm compared to a large firm.

In a large firm with a separation between ownership and management (Fama & Jensen, 1983), the top managers are professionals hired to undertake entrepreneurial functions. EO may emerge in response to the shareholders’ creation of incentives for the top managers’ entrepreneurial strategic behaviours, which helps to align interests of the shareholders and the managers (Jones & Butler, 1992). For example, shareholders may desire greater risk-taking to be conducted by a firm and provide financial incentives for management to implement such a strategy. Burgelman and Sayles (1986) distinguish between autonomous strategic behaviours and induced strategic behaviours: autonomous strategic behaviours conducted by top management to explore new opportunities for the firm’s strategies, which in turn induce strategic behaviours of middle-level managers within the organisational structure. Therefore, the shareholders of a large firm should expect translation of EO into firm performance to be complex, while not being under their direct control.

However, the distinction between autonomous and induced strategic behaviours is blurred in small firms as the owner-managers play their roles at different managerial
levels (Levin & Travis, 1987) and “endure switching from role to role” (Welsh & White, 1981, p. 32). Due to the owner-managers direct control over the firm’s strategic decision making and daily operations, EO manifestation would directly result in strategic intent as well as functional operations, as per the owner-manager’s aspiration. As such, a conservative and risk adverse owner-manager is less likely to engage in risk-taking behaviours because that does not suit their own personal goals and vision for their firm. Conversely, an owner-manager who envisaged high risk equating to high reward, may pursuit much higher risk-taking behaviours in an endeavour to generate greater financial rewards. The research implication is that EO in small firms is carried out for the owner-manager’s attainment of personal goals and therefore, the relationship between EO and the owner-manager’s attainment of personal goals would be expected to be strong in small firms. This aligns with Rauch et al.’s (2009) conclusion about a strong EO-performance relationship for small firms. Therefore, we expected EO in small firms to link to the owner-manager’s attainment of personal goals and hypothesised:

**Hypothesis 1:** EO in the small firm will be positively related to the owner-manager’s attainment of personal goals.

### 5.3.3 Involvement of the owner-manager’s family in the small firm

The importance of the family to the firm has drawn academic interest as firms with family involvement dominate worldwide economic production and employment (Colli, 2002; International Family Enterprise Research Academy, 2003). These firms form “the backbone of a significant number of recently industrialised economies, and still a lively presence in the ‘old industrialisers’, as well as in a large number of sectors, from the labour-intensive and craft-based to specialised suppliers” (Colli, 2002, p. 8).
Several studies presented evidence supporting the positive influence of family involvement on firm performance, including performance benefits such as greater efficiency (Górriz & Fumás, 1996), revenue (Rutherford et al., 2006), returns on assets, return on invested capital, and net income growth (Lee, 2004). These findings collectively imply that family involvement can be a source of a firm’s competitive advantage and superior performance. In this regard, Habbershon and Williams (1999) propose that family involvement can be examined under RBT (Barney, 1991). The authors argued that the interactions between the family, the family members, and the firm create a unique bundle of resources (termed familiness) that provides a competitive advantage to the firm. As with the earlier example of risk-taking, knowing a competitor has family involvement might be relatively easy, but mirroring and capturing the exact composition and relationships across multiple family members might be impossible for competitors to follow. Specifically, family involvement can be analysed using Habbershon, Williams, and MacMillan’s (2003) model of three components: (1) the controlling family unit (representing the history, traditions, and life circle), (2) the business entity (with the strategies and structures for wealth creation) and (3) the individual family members (with the interests, skills, and life stage of the participating owners as managers).

The interdependencies of these three subsystems turn these subsystems into the family business social system, creating the idiosyncratic firm-level bundle of resources and capabilities. Chrisman et al. (2003) extend Habbershon et al.’s (2003) analysis by adding the family’s pursuance of non-economic benefits. The firm with family involvement then pursues both economic and non-economic benefits. This allows the family firm to evaluate allocation of resources for the firm’s decisions, such as altering the level of family involvement, changing the firm’s strategy or disposing the business.
These theoretical discussions suggest that the family may have an influence on how the firm is strategically managed for value creation.

With a focus on the small firm owner-manager’s goal attainment as a criterion for firm effectiveness, the present study argues that the owner-manager attains their personal goals in alignment with their family’s values due to inherent linkage between the owner-manager and their family. As the owner-manager could seek to increase income and financial security for their family (Greenbank, 2001; Morris et al., 2006; Swierczek & Thai, 2003) as well as aspire to have the firm inherited by their children (LeCornu et al., 1996), the family involvement in the firm could then be expected to reinforce the owner-manager’s desire for business success that eventually benefits their family.

Furthermore, we argue that the inherent linkage between the owner-manager and their family may result in positive influence of family involvement on the relationship between EO and the owner-manager’s attainment of goals. As discussed above, in a larger firm with a separation between ownership and management (Fama & Jensen, 1983), EO could be a function of incentives created by the shareholders for the top managers (Jones & Butler, 1992). But in a small firm the owner-manager is a key shareholder and plays their roles at different managerial levels within their firm (Levin & Travis, 1987). EO in the small firm is, therefore, designed by the owner-manager for the sake of the firm as an extension of the owner-manager (Mintzberg, 1993) and eventually for the owner-manager and their family. As such, the decision making process under the owner-manager’s control will be expected to take account of the owner-manager and the family’s stakes so as to yield more benefits for the owner-manager and their family. In this regard, family involvement could strengthen a translation of EO into small firm’s effectiveness. This argument aligns with findings on positive influence of family involvement on the EO-firm performance relationship.
presented in the literature, such as the higher level of influence of innovation on sales growth for family firms (Casillas & Moreno, 2010) and more family generations sitting on management boards being associated with a stronger effect of proactiveness on firm’s growth (Casillas et al., 2010). However, some studies suggested moderating effects of family involvement, such as the EO-performance relationship being weaker for family firms than non-family firms (Madison et al., 2014).

The present study extends the discussion on the role of the family in business by taking account of the multidimensional approach to family involvement proposed by Astrachan et al. (2002). These authors treated family involvement as a multidimensional construct that encompasses (1) family power (family ownership, governance and management involvement in the firm), (2) family experience (transferring of experience from generation to generation owning the firm and from the family to the firm), and (3) family culture (value overlaps of the family and the firm and the family’s commitment to the firm). This approach considers a continuum of family involvement instead of a dichotomous classification, i.e., family versus non-family firms (Casillas & Moreno, 2010; Casillas et al., 2010). Thus, it moves beyond a dichotomous classification (family involvement versus no family involvement), and instead allows researchers to capture the complexities and intricacies of the various roles that family may play.

Astrachan et al. (2002) propose the so-called F-PEC scale to measure three dimensions of family involvement. This scale was validated and refined by Klein et al. (2005) and Holt et al. (2007, 2010). Rutherford, Kuratko, and Holt’s (2008) application of the F-PEC scale revealed that family involvement was unrelated to employment growth; but family culture was positively related to perceived financial performance, family experience was negatively related to perceived financial performance, but positively related to sales revenue. An implication of these findings is that different
facets of family involvement can be examined simultaneously for understanding the influence of different dimensions of family involvement.

Based on the above discussion, this present study explores how family involvement could (1) be related to the small firm owner-manager’s attainment of personal goals and (2) have an influence on the relationship between EO and small firm owner-manager’s attainment of personal goals. We follow Habershon and Williams (1999) by treating family involvement as a source of competitive advantage for the firm and posit the second hypothesis for Study 2:

**Hypothesis 2:** Family involvement in small firms will be positively related to the owner-manager’s attainment of personal goals.

In addition to the direct effects of family involvement, the present study also follows Astrachan et al. (2002) by studying three dimensions of family involvement (power, experience, and culture) and examine them as potential moderators of the EO to personal goals relationships. In this regard, it is expected that family involvement (from power, experience, and culture will enhance the positive influence of EO towards goal attainment and provide enhancement effects. Based on this notion, the third hypothesis was posited for Study 2:

**Hypothesis 3:** Family involvement will moderate the relationship between EO and the small firm owner-manager’s attainment of personal goals.

These hypothesised relationships were tested within Vietnamese small firms. The country’s economy is dominated by small firms (General Statistics Office of Vietnam, 2016), where small businesses serve as a critical source of income for the owner-managers’ families (Hemlin, 2001) and job creation for their families members.
In this research context, the family is “the central point of social life” (Dalton et al., 2002, p. 371), remaining “the organising principle in Vietnam” (Do et al., 2008, p. 46). The family is a source of resource for businesses and helps the firm overcome business problems (Do et al., 2008). As such, Vietnam can provide a context for testing the hypotheses of the study.

5.4 Method

5.4.1 Sample and procedure

The present study focused on small firms in Vietnam and thus targeted firms with under 200 employees (Nguyen & Bryant, 2004; Raymond et al., 2013). I created a random list of 600 firms located in Hanoi from the Vietnam Business Directory 2013 (Vietnam Chamber of Commerce and Industry, 2014) and sent these firms a written invitation to this study. Like cross-cultural surveys where English is not the first language (Haar et al., 2014), the survey was translated into Vietnamese and then back-translated to minimise translation error (Brislin, 1980). The lead author then handed surveys out to 481 owner-managers of small firms who agreed to participate in the study and a total of 170 surveys were completed achieving a response rate of 35.3%.

By scale of employment, 80 firms (47.1%) hired 10 to 49 employees, 38 firms (22.4%) with 50 employees or more, 35 firms (20.6%) with five to nine employees, and 17 firms (10.0%) with less than five employees. This focus on small firms is relevant in Vietnam, where small firms are dominant (General Statistics Office of Vietnam, 2016). An illustration of the dominance of small firms in Vietnam is provided in Figure 2-1.

By industry, 104 firms (61.2%) were in the service sector and other 25 (14.7%) were in industrial production. There were 37 firms (21.8%) operating in both services and industrial production while three firms (1.8%) provided both services and agricul-
tural production. By legal registration, 85 firms (50.0% of the sample) were limited liability companies, 72 firms (42.4%) were joint stock companies, and 13 firms (7.6%) were sole proprietorship. These sample characteristics represent the distribution of the Vietnamese firms. According to General Statistics Office of Vietnam (2016), by industry, 63.7% of the Vietnamese firms are in the service sector; 35.2% are in the industrial production; and 1.1% are in the agricultural production. And by legal status, 65.7% of the Vietnamese firms are limited liability companies; 21.5% are joint stock companies; and 12.8% are sole proprietorship.

By firm age, 74 firms (43.5%) have been operating for five and ten years, 74 firms (43.5%) for over ten years, and 22 firms (12.9%) for between three and four years.

5.4.2 Measures

Dependent variables. Since there has been little consensus on a global measure for owner-manager’s goals, this present study developed a measure for Study 2 based on scales available in the literature. We argued above that Vietnamese owner-managers strive for two groups of goals: the first group includes outcomes for the owner-manager’s personal achievement while the second group includes benefits for the owner-manager’s family. Six items from Swierczek and Thai (2003) were adapted for the owner-manager’s personal goal, specifically: “realising ideas of new product & business”, “having variety in work”, “having a sense of accomplishment”, “need to have fun”, “gaining recognition and social status”, and “controlling one’s work”. Two items were adapted for goals for the owner-manager’s family and these were “preserving family tradition” and “earning more money for the family”. Our scale also included an item for job creation for family members based on Ronnås (2001), and an item for freedom based on Scheinberg and MacMillan (1988). All items were designed on 7-
point Likert scale for level of satisfaction with goal attainment (1 = not satisfied at all, 7 = very satisfied). We also took account of item-level importance (1 = not important at all, 7 = very important), i.e., satisfaction level with attainment of each goal was weighted by the importance given by the owner-manager to the goal.

We tested our scale of the two groups of goals by SEM using AMOS 22.0 for the data from the sample of 170 surveyed owner-managers, arriving at a comparative fit index (CFI) = .964, a root-mean-square error of approximation (RMSEA) = .077 and a standardised root mean residual (SRMR) = .042. These results satisfy threshold levels of model fit suggested by Williams et al. (2009) (CFI > .95, RMSEA < .08, and SRMR < .10). Based on these results, we then created two measures of the owner-manager’s attainment of goals: one including seven goals for the owner-manager’s personal achievement (PAch, $\alpha = .87$) and the other including three goals for the owner-manager’s family benefits (FB, $\alpha = .83$).

**Independent variables.** Entrepreneurial Orientation (EO) was measured by a nine-item scale from Covin and Slevin (1986). It has three dimensions (innovation, proactiveness, and risk-taking) which are usually combined together (e.g., Naman & Slevin, 1993). Questions follow the stem “Please indicate the tendency of your firm regarding the following statements:” and each item has a different coding scale, for example on a dimension of innovation the item is “1 = Changes in product or service lines have been mostly of a minor nature and 7 = Changes in product or service lines have usually been quite dramatic”. This scale has been well validated and is the dominant instrument used in EO research (Edmond & Wiklund, 2010; Rauch et al., 2009) ($\alpha = .72$).

Family involvement was measured by the F-PEC scale from Astrachan et al. (2002). This scale includes three subscales for family power, family experience, and family culture. Family power (F-Power) was measured by three items about family
ownership and family members who are active on governance and management boards. Sample item is “Percentage of family on the Board”, with response represented as a percentage ($\alpha = .74$). Family experience (F-Experience) was measured by three items about the family generation(s) holding family ownership and being active on governance and management boards. Sample item is “What generation(s) manage(s) the company?”; responses include first generation, second generation, and so on ($\alpha = .87$). Family culture (F-Culture) was measured by 12 seven-point scale items about the family commitment to the firm and the overlap between the family values and the firm values ($\alpha = .94$). Sample items are “Family members feel loyalty to the family business” and “Your family and business share similar values” (1 = strongly disagree, 7 = strongly agree).

Control variables. This study was controlled for Firm Age (years), Firm Size (number of employees working for the firm), industry (measured by percentage of firm’s turnovers from three sectors: Industrial production, Agricultural production, and Services). In addition, we controlled for environmental turbulence which relates to the extent a market is rapidly changing and unstable (Singh, 1986). The four aspects of environmental turbulence have been found to relate poorly to each other (Singh, 1986) and thus we include them as separate factors. The factors were all coded 1 = strongly disagree, 7 = strongly agree: Business Environment (“very dynamic, changing rapidly in technical, economic, and cultural dimensions”); Business Risk (“very risky, one false step can mean the firm’s undoing”), Market Expansion (“very rapidly expanding through the expansion of old markets and the emergence of new ones”) and Market Competition (“very stressful, exacting, hostile, hard to keep afloat”). The four items correlated between .25 ($p < .01$) > r > -.05 (non-significant) supporting the approach to control for these items separately and not combined them into a single construct.
5.4.3 Analysis

Data was analysed in SPSS (Version 22), running two hierarchical moderated regression models with personal achievement (PAch) and family benefits (FB) as the dependent variables. In each model, control variables were entered in Step 1 and EO was entered in Step 2. Family power, family experience and family culture were entered in Step 3. The interaction variables (EO multiplied by each family factor) were entered in Step 4, using the z-scored centering procedure (Aiken et al., 1991). Following Aguinis and Stone-Romero’s (1997) discussions regarding relaxing the criteria for determining significant interaction effects, a level of $p < .10$ was adopted for interaction effects, and $p < .05$ for all other effects.

5.5 Results

Table 5-1 shows descriptive statistics and inter-correlations of the study variables. Business environment change is significantly correlated to both PAch ($r = .24, p < .01$) and FB ($r = .20, p < .01$), as is market expansion: PAch ($r = .25, p < .01$) and FB ($r = .22, p < .01$). EO is also significantly correlated to PAch ($r = .31, p < .01$) as well as FB ($r = .21, p < .01$). While family culture is significantly correlated to both PAch ($r = .43, p < .01$) and FB ($r = .62, p < .01$), family power is significantly correlated to FB only ($r = .24, p < .01$). Family experience is insignificantly correlated to either PAch or FB. All the moderators, the three family involvement dimensions, are significantly correlated ($.18 < r < .31$, all $p < .05$), but these relationships are only weakly, implying that these dimensions are quite distinct.

Tables 5-2 and 5-3 present the results of the moderated regression analyses testing the hypotheses. The regression results for the model predicting the owner-manager’s attainment of goals for personal achievement (PAch, Table 5-2) shows the control
model accounting for 15% variance ($p < .01$) with two significant control variables: business environment change ($\beta = .25, p < .001$) and market expansion ($\beta = .16, p < .05$). EO was found to be positively related to PAch ($\beta = .16, p < .01$), accounting for an additional 4% ($p < .01$). The family involvement bundle accounted for an additional 13% ($p < .001$) variance. Nevertheless, only family culture was positively related to PAch ($\beta = .32, p < .001$) while family power and family experience were not significantly related to PAch. Significant interaction effects were found between EO and family experience ($\beta = .18, p < .10$) as well as family culture ($\beta = .15, p < .10$).

Table 5-3 shows the regression results for the model predicting the owner-manager’s attainment of goals for family benefits (FB). The control model accounted for 12% variance ($p < .05$) with two significant control variables: business environment change ($\beta = .25, p < .001$) and market expansion ($\beta = .18, p < .05$). EO was not found to be significantly related to FB. While the family involvement bundle accounted for an additional 32% ($p < .001$) variance, only family culture was found to be significantly related to FB ($\beta = .62, p < .01$). No interaction effect was found between EO and any of the family involvement dimensions towards FB.

Figures 5-1 and 5-2 illustrate the interaction effects towards the owner-manager’s attainment of goals for personal achievement (PAch). Figure 5-1 shows the owner-managers with low family experience reporting higher levels of PAch when they have low EO than those with high family experience. At high levels of EO, all the respondents did not show significant difference in levels of PAch. However, Figure 5-2 shows that the owner-managers with high family culture reported higher PAch when they have low EO than those with low family culture. At higher levels of EO, the owner-managers reported higher PAch and the owner-managers with higher family culture gained more satisfaction than those with low family culture.
Finally, the regression models predicting the owner-manager’s attainment of goals were significant and sizable for both models: P Ach \( (R^2 = .35, F = 5.038, p < .001) \) and FB \( (R^2 = .46, F = 8.088, p < .001) \). The variance inflation factors (VIF) were also examined for evidence of multicollinearity. Our data scores were below 3.0, indicating no evidence of multicollinearity in the regression models (Hair et al., 2010).
Table 5-1 Study 2: Descriptive statistics and inter-correlations of study variables

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<td>2. Firm size</td>
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<td>6. Business environment change</td>
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<td>.24**</td>
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n = 170, *p < .05, **p < .01 (two-tailed).
### Table 5-2: Hierarchical moderated regression analysis towards the owner-manager’s attainment of goals for personal achievement

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*B* = unstandardised estimate, *SE* = standard error. †*p < .10, *p < .05, **p < .01, ***p < .001 (two-tailed).
Table 5-3 Study 2: Hierarchical moderated regression analysis towards the owner-manager’s attainment of goals for family benefits

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\( B = \) unstandardised estimate, \( SE = \) standard error.  \( \dagger p < .10, * p < .05, ** p < .01, *** p < .001 \) (two-tailed).
Figure 5-1 Study 2: Interaction plot of EO and family experience with attainment of goals for personal achievement as dependent variable
**Figure 5-2 Study 2: Interaction plot of EO and family culture with attainment of goals for personal achievement as dependent variable**

- Low Family Culture
- High Family Culture
5.6 Discussion

We investigated the small firm owner-manager’s attainment of goals for personal achievement (PAch) and family benefits (FB) in the context of Vietnam, taking account of patterns of firm-level entrepreneurial behaviours (EO) and involvement of the owner-manager’s family in the firm. We distinguished two groups of goals: one for the owner-manager’s personal achievement and the other for the owner-manager’s family benefits. Our analysis using the data on the sample of 170 Vietnamese small firm owners-managers confirmed these two dimensions of goals.

Our results revealed that EO was significantly related to the owner-manager’s attainment of goals for PAch but was not significantly related to their attainment of goals for FB. The latter was significantly correlated with EO at $p < .05$ and the regression analysis was not significant at $p < .10$, providing an indication that while these two variables were significantly related, the two significant control variables (particularly business environment and market expansion) might have weakened this relationship above the normal threshold of $p < .05$. Overall, these findings give partial support for hypothesis 1. The results also provided evidence of significant relationships of the culture dimension of family involvement with the owner-manager’s attainment of goals for personal achievement and family benefits. However, the other two dimensions (family power and family experience) were found not to have any significant relationships with the owner-manager’s attainment of goals. Hypothesis 2 was therefore only partially supported. While attainment of goals was largely studied in the literature for implications for business start-up (e.g., Greenbank, 2001; Morris et al., 2006; Swierczek & Thai, 2003), our findings support researching the owner-manager’s attainment of goals under the firm’s strategic management and participation of the owner-manager’s family in the firm.
We found interaction effects between EO and family experience as well as family culture towards the owner-manager’s attainment of goals for PAch, giving partial support to hypothesis 3. Nevertheless while the family experience was found to have a buffering effect, the culture dimension of family involvement was found to have an intensifying effect, on the same relationship between EO and the owner-manager’s attainment of goals for personal achievement. Our finding on the buffering effect aligns with a conclusion by Madison et al. (2014) about EO-performance relationship being weaker for family firms than non-family firms. Unlike Madison, Runyan, and Swinney (2014) – who utilised a dichotomous classification of studied firms (family versus non-family), we traced the buffering effect to degrees of family experience as a dimension of family involvement. We also note that our finding on the buffering effect contrasts with Casillas, Moreno, and Barbero’s (2010) conclusion on positive interaction between EO and generational involvement towards firm performance. We argue that operationalisation of generational involvement may matter: Casillas et al. (2010) considered only generations managing the firm, but our study takes into account the influence of family generation(s) holding ownership and being active on governance and management boards.

Our finding regarding the intensifying effect echoes the work of Casillas and Moreno (2010) who championed the positive impact of family involvement on the EO-performance relationship. Casillas and Moreno (2010) found that family members’ involvement in management and long-term strategy formulation moderates the relationship between EO and firm growth. However, we point to family culture (encompassing family commitment to the firm and value overlap between the family and the firm) as an important influence in enhancing the positive impact of EO on the owner-manager’s attainment of goals for personal achievement. Previous studies (e.g., Dalton et al., 2002;
Do et al., 2008) also confirmed the important role of the family to the entrepreneur and the firm in the context of Vietnam.

The findings on the interaction effects, therefore, extend the discussion on the role of family involvement. By adopting the F-PEC scale (Astrachan et al., 2002) to measure different dimensions of family involvement simultaneously, our findings suggest that different facets of family involvement may influence the EO-performance relationship differently. These effects suggest that the family involvement bundle should be split into different components, each deserving separate examination. The influence of family culture, a significant dimension of family involvement in our study, certainly warrants more work. Possible qualitative exploration as future research is also needed for a deeper and richer understanding of family involvement as a complex construct.

5.6.1 Limitations

Our study primarily considers two dimensions of the owner-manager’s attainment of goals as a result of EO (gauged by a composite measure) and different facets of family involvement in small firms. Future research examining dimensions of EO (Lumpkin & Dess, 1996; Miller, 1983) may help to discover possible dimensional-level influence of EO on the owner-manager’s attainment of goals. Interactions between dimensions of EO and dimensions of family involvement might give greater insight into these important relationships.

Our study used a cross-sectional design that does not support a conclusion about cause-effect relationship from EO and family involvement to the owner-manager’s attainment of goals, although the usage of cross-sectional design is typical of the literature (Gibb & Haar, 2010). As this study collected data from a single respondent from 170 small firms there may be common method variance (CMV) occurring in our
data for analysis. We employed Harman’s single-factor test for potential of CMV (Podsakoff et al., 2003) and found from the un-rotated factor analysis that the largest factor accounted for 23.2% of the overall variance. This provides support for CMV not being an issue in our sample data (Podsakoff & Organ, 1986).

5.7 Conclusions

We reviewed the idea of a small firm being an extension of its owner-manager and followed the goal attainment approach to organisational effectiveness by studying the owner-manager’s attainment of goals as a criterion for small firm effectiveness. We confirmed a measure of two dimensions of the owner-manager’s attainment of goals in the context of Vietnamese small business: one for personal achievement and the other for family benefits. Under RBT, we presented empirical evidence supporting that EO and family involvement can be sources of competitive advantage, enhancing the owner-manager’s attainment of goals. Noticeably, our study evidenced that the various facets of family involvement may influence the EO-performance relationship differently, which need to be better understood in the future. As such, Study 2 extends the discussion on the influence of family involvement on performance and the interaction between EO and family involvement towards firm effectiveness. Over and above, small firm owner-managers as practitioners may reflect on their pursuance of goals through firm-level entrepreneurial strategic postures while maintaining the relationship between the firm and the family.

5.8 Publication status

A manuscript on Study 2 reporting the contents of Chapter 5 is in preparation for submission to Asia Pacific Journal of Management.
6.1 Abstract

Study 3 examined how the owner-manager (leader) entrepreneurial risk-taking (ERT), an important component of entrepreneurial orientation at the firm level, may have a negative influence on the employee (follower) job attitudes. Study 3 also examined whether the entrepreneur’s family involvement may reduce this crossover in the context of small firms in Vietnam. Using crossover theory, Study 3 examined how ERT might crossover and transmit to employee (follower) job outcomes. We hypothesised that while high-risk-taking is likely to crossover detrimentally to followers this would be alleviated by family involvement. Consequently, we tested whether stronger familial ties signal an interest in long-term success and thus lessen the detrimental influence of risk-taking.

Using a sample of 67 Vietnamese entrepreneurs (leaders) and 343 employees (followers) we found direct support for ERT being negatively related to followers’ job satisfaction (JS) and organisational commitment (OC). Family power (regarding ownership, governance, and management involvement in the firm) was found to positively interact with ERT to follower outcomes, with followers reporting higher JS and OC at all levels of ERT when there was high family power (involvement) in the business. The highest levels of follower job outcomes occurred when risk-taking and family power
were high. We discuss the role of crossover theory in the entrepreneurship literature and how this provides insights into understanding what occurs inside a risk-taking firm.

6.2 Introduction

Rauch et al. (2009) define risk-taking as firms taking “bold actions by venturing into the unknown, borrowing heavily, and/or committing significant resources to ventures in uncertain environments” (p. 763). Risk-taking forms an important part of entrepreneurial orientation which includes the processes and decision-making activities firms undertake when identifying and pursuing new opportunities (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Miller, 1983). Entrepreneurial risk-taking (ERT) is a particular behavioural pattern which occurs in firms (Covin & Slevin, 1991; Lumpkin & Dess, 1996), where the entrepreneur takes daring risks in return for (potentially) large yields. Indeed, firms with higher risk-taking behaviour have been found to have better performance across a range of outcomes (Lee et al., 2001; Wiklund & Shepherd, 2003). While the examination of risk-taking behaviour has been wide ranging there are a number of important gaps that Study 3 seeks to fill.

Fundamentally, Study 3 seeks to understand what firms undertaking high-risk ventures are like for employees working within them (and not owners). One challenge for researchers is that risk-taking is linked to failure (Miller & Friesen, 1978), and thus such studies are naturally biased because those who demonstrate risk-taking behaviour and fail are typically not studied (Rauch et al., 2009). As such, examining the conditions within firms may shed some light on the impact of firm-level risk-taking behaviour on employee attitudes at the workplace, which is seldom explored (e.g., Monsen & Boss, 2009). The present study explores what it is like for employees inside a firm that is undertaking a high-risk strategy. Furthermore, research has recently shown that leaders
can influence their followers, whether by mood (Sy, Côté, & Saavedra, 2005) or other behaviours (Ten Brummelhuis et al., 2014). Crossover theory was initially used to understand the transmission of feelings across working couples (Ten Brummelhuis, Haar, & Van der Lippe, 2010; Westman, 2001), but has been extended to include the crossover between leaders and followers (Ten Brummelhuis et al., 2014). This approach also aligns with social contagion theory (Sy et al., 2005) which has been used to show how leaders create conditions through their moods, attitudes, and behaviours that can directly influence their employees. One critique of these studies is the almost sole focus on managers within firms (e.g., Ten Brummelhuis et al., 2014) and not other forms of leaders such as entrepreneurs. As such, the present study suggests that by exploring the entrepreneur’s risk-taking behaviour we can understand what working within such a risky environment does for employees and how they react. This approach is important for entrepreneurship researchers because we might fundamentally believe a risk-taking firm is a high performing firm, but we have little insight into the human (employee or follower) consequence of these behaviours.

Finally, Study 3 also breaks the strong United States (US) and European focus within the entrepreneurship literature (Martens et al., 2016; Rauch et al., 2009) and explores ERT in the Vietnamese context. Vietnam is dominated by small firms (General Statistics Office of Vietnam, 2016) and management practices in Vietnamese firms have strong links to the family (Gerrard et al., 2003; Truong & Nguyen, 2002; Vuong & Tran, 2009). The links to family are important because studies have shown that family involvement through ownership, management, or value sharing (Astrachan et al., 2002; Habbershon et al., 2003) can be important for firm performance (e.g., Anderson & Reeb, 2003; Górriz & Fumás, 1996; McConaughy et al., 1998). Hence, in addition to the direct crossover influence of ERT on employee job attitudes, the present study tests
whether family involvement under socio-emotional wealth (SEW) approach (Gómez-Mejia et al., 2007) plays a role in moderating this relationship. Overall, Study 3 enhances our understanding of (1) the risk-taking behaviour of entrepreneurs in an emerging economy (Vietnam); (2) the role that family involvement in business might play; and (3) how these factors of risk-taking and family involvement can crossover from the entrepreneur (and their family) to their employees.

6.3 Theoretical framework and hypotheses

6.3.1 Crossover effect

Crossover refers to the transmission of stress and/or strain between two persons in the same social context, such that the stress experienced by one person causes a change in the level of stress in another person (Bakker et al., 2009; Westman, 2001). Such a process may occur in the workplace (Westman, 2001) where it can be peer-to-peer contagion among team members (Barsade, 2002; Westman & Bakker, 2008). Crossover in the organisational context can also be from the leader to their followers (Bakker, 2005; Ten Brummelhuis et al., 2014; Westman & Etzion, 1999). The present study explores crossover from the entrepreneur (the owner-manager, who determines the firm-level risk-taking) to their employees (focused on job satisfaction [JS] and organisational commitment [OC]), in small-sized firms in Vietnam. This bridging from the firm level to the individual level has been called for in OB research (Cappelli & Sherer, 1991; Molloy et al., 2011) and provides a unique insight for the entrepreneurial literature.

Exploring crossover between entrepreneurs and their employees is logical given that small firms can be seen as an extension of their entrepreneurs (Levin & Travis, 1987; Welsh & White, 1981). In small firms it is the entrepreneur who mobilises firm resources for business development and exerts their personal influence on the strategic
direction of the organisation (Birley & Westhead, 1990; Keats & Bracker, 1988). The entrepreneur engages in both autonomous and induced strategic behaviours (Levin & Travis, 1987), often switching between various roles (Welsh & White, 1981, p. 32). From a crossover theory perspective, the entrepreneur as owner is clearly in a position to signal their behaviour, which is likely to be viewed by followers, and therefore potentially influence them.

6.3.2 Entrepreneurial risk-taking

The research on ERT emerges from organisational-level entrepreneurial strategic decision making (Edmond & Wiklund, 2010), with risk-taking being viewed as a recurring behavioural pattern in entrepreneurial firms (Covin & Slevin, 1991; Lumpkin & Dess, 1996). This stream of research focuses upon demonstrated entrepreneurial behaviours rather than firm organisational attributes, such as culture (Covin & Slevin, 1991). An example of the alternative approach is by Haar and White (2013), who explored entrepreneurial culture as a predictor of firm retention of employees. The current approach of ERT is that it addressed how firms undertake processes and decision-making activities related to risk-taking and the pursuit of new market opportunities (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Miller, 1983). The literature has explored firm performance almost exclusively, and ERT (along with other prime factors) has been found to be a critical factor in determining firm performance (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Zahra, 1993). The present study suggests the influence of ERT on employee outcomes is an area that has not received enough attention. This is despite crossover research that shows that leaders and managers can influence their followers (Sy et al., 2005; Ten Brummelhuis et al., 2014).
Miller and Friesen (1978) assert that risk-taking is associated with a willingness to commit large amounts of resources to projects where the cost of failure may be high, while Wiklund and Shepherd (2003) state that risk-taking “implies committing resources to projects where the outcomes are unknown” (p. 1309). While ERT does form a part of entrepreneurial orientation (Edmond & Wiklund, 2010; Miller, 1983; Rauch et al., 2009) we focus on the crossover of ERT from entrepreneur to followers specifically due to the bold actions required (Rauch et al., 2009) as these behaviours are likely to be easily recognised by employees as well as being challenging for the employees who work for an entrepreneur who is undertaking such behaviours. Furthermore, an entrepreneur venturing into uncertain environments provides employees with a direct opportunity to witness challenges, which might aid the crossover process (Wiklund & Shepherd, 2011). The challenges for employees might leave them wondering: What will happen to the firm if a risky strategy is not successful? Will jobs be lost – and if so, will it be my job? Thus, while ERT might be part of firm behaviour that leads to successful firm performance, we understand little about how this might translate to those working inside such endeavours (Wales, 2016).

One approach might be that ERT has a positive influence on employees regarding risk-taking. In this option, employees feed off the excitement of being in a firm taking new risks and trying new things, such as launching a new product line that is unknown and potentially risky. They might understand that these come with risks, including the firm losing money, but nevertheless this makes the job more exciting and satisfying. An employee might think: I can really make a difference here. Likewise, the employee might perceive the risks that are being taken as also signalling faith in the workers to make something risky become a success. This in turn might leave the employee more committed and loyal to their firm. While we believe there is scope for risk-taking to be
positive towards employees, we argue in the next section that we think the effect will typically be detrimental and negative.

Within the literature on entrepreneurship, there is an acknowledgement that some behaviours are likely to influence non-financial outcomes. Rauch et al. (2009) highlight the links between risk-taking and the entrepreneur’s satisfaction by stating “the uncertainty associated with the bold initiatives and risk-taking … could potentially lead to agony, sleepless nights, and less satisfaction” (p. 765). Indeed, March and Shapira (1987) note that risk-taking can involve negative emotions such as pain and anxiety. Similarly, business project failure may lead to organisational changes, causing employee concerns about their job security (Kiefer, 2005) and subsequent deterioration of their well-being (Gray, 2001). Consequently, we suggest that employees working for an entrepreneur who is embracing a high ERT – through boldly engaging in new and uncertain markets, and doing so through heavy financing – will ultimately provide a firm environment that is not conducive to higher JS and OC. Indeed, the sleepless night proposed for the entrepreneur (Rauch et al., 2009) might similarly hold for employees, making them less satisfied with their jobs and less committed to the firm. Perhaps employees lie awake at night wondering whether the new line proposed above will end in disaster and failure – and job losses. Perhaps employees see the stress and strain of the risk-taking on the entrepreneur and share the emotional contagion (Sy et al., 2005). In this regard, the employees feel the stress and it reduces their satisfaction in their job because they recognize the strong failure potential. Perhaps the entrepreneur begins to pay greater attention to workplace expenditure, signalling financial pressures. Indeed, Rauch et al. (2009) noted an issue with high risk-taking is that it is likely to lead to greater chances of failure. It is hard to imagine employees of a firm that is financially
struggling, and potentially about to collapse and go out of business, to be readily committed to the organisation, and similarly rating their jobs as highly satisfying.

In summary, we suggest that an entrepreneur engaging in behaviours of high risk-taking are likely to directly crossover to employees. One advantage of studying small firms is unlike other crossover studies where leaders typically include managers across a number of organisational levels (Ten Brummelhuis et al., 2014); we can expect the transmission of the entrepreneur’s risk-taking to be directly perceptible to followers. Thus, we hypothesize that followers will be detrimentally influenced by an entrepreneur engaging in high risk-taking behaviour and as such, expect them to react with lower job outcomes. As such, we posit:

**Hypothesis 1:** ERT will be negatively related to follower JS.

**Hypothesis 2:** ERT will be negatively related to follower OC.

### 6.3.3 The moderating effects of family involvement

Family firms dominate throughout the world, in both employment and economic production (e.g., Colli, 2002; International Family Enterprise Research Academy, 2003), with estimates that family firms account for the majority of all US businesses (International Family Enterprise Research Academy (2003). Colli (2002) stated that small firms form the backbone of many economies, and consequently, researchers have explored the role of the family business and firm benefits have been found (Górriz & Fumás, 1996; McConaughy et al., 1998). For example, Zahra (2003) found that the presence of family members on governance boards and family involvement in strategic management were linked to higher firm performance. Studies have explored family involvement (Chrisman et al., 2003; Habbershon et al., 2003) and show that family involvement can have both economic and non-economic benefits. While family in-
volvement has been tested as a moderator on other entrepreneurial factors, the results have been mixed (e.g., Casillas & Moreno, 2010; Casillas et al., 2010; Madison et al., 2014). Such studies typically explore firm performance and not crossover relationships.

In relation to risk, Kotlar, De Massis, Fang, and Frattini (2014) found that family management was negatively related to the firm’s strategic risk-taking in terms of changes in investments for research and development. Gómez-Mejía et al. (2007) introduce the socio-emotional wealth (SEW) approach to study how the firm with the family’s affective endowment may influence firm behaviours, and this approach has gained empirical support (Berrone et al., 2012; Gomez-Mejia, Cruz, Berrone, & De Castro, 2011). In this approach, the family is motivated to preserve its affective endowments, and thus prioritises socio-emotional over economic outcomes and intervenes in strategic decision making towards this end (Gómez-Mejia et al., 2007). Empirical evidence supports that firms under family control diversify less than firms not under family control (Gomez-Mejia et al., 2010), and that family-owned firms prefer remaining independent (thereby preserving the family’s control) as opposed to joining cooperatives (Gómez-Mejía et al., 2007). McKenny et al. (2014) suggested that further examination of the influence of family involvement at different levels (e.g. individual employees) is warranted, and the present study aligns with this crossover focus.

Although the family’s pursuance of SEW can be examined through different mechanisms, such as family succession, and family member’s identification with the firm (Berrone et al., 2012), we consider family controlling power as a fundamental aspect of family involvement for preserving the family’s SEW (Deephouse & Jaskiewicz, 2013; Gómez-Mejía et al., 2007). Hence, family might exert control of the firm through family ownership and the presence of family members on governance and management boards (Astrachan et al., 2002). This approach is especially appropriate for
small firms in which the family controlling power (in terms of family ownership and number of family managers) is critical to the firm’s adoption of the family-centred non-economic goals (Chrisman et al., 2012).

The potential moderating effects of family involvement is well suited for exploration within the Vietnamese context. In Vietnam, Dalton et al. (2002) state that family is “the central point of social life” (p. 371), with the family being the chief “organising principle in Vietnam” (Do et al., 2008, p. 46). Business management practices have strong links to the family in this country (Gerrard et al., 2003; Truong & Nguyen, 2002; Vuong & Tran, 2009).

We propose that family involvement will act as a buffer because fundamentally the ERT behaviour relates to taking big risks, and entering new hostile markets typically funded through external sources (e.g., bank loans) as opposed to internal funding. This highlights the family stake in the ERT and shows employees that there is real risk and therefore, potentially, the risk of real failure and associated problems for them (e.g., loss of jobs). However, we argue that greater family involvement, notably family control, would signal to employees that the wider family group is not only aware of the ERT behaviour but also playing an active strategic decision making role in this behaviour.

This also aligns with the family’s focus around preserving the family’s SEW (Deephouse & Jaskiewicz, 2013). As such, this greater family involvement will reduce the detrimental crossover of ERT by providing surety and confidence to employees (followers) of the entrepreneur and their risk-taking strategies. This is because the ERT is seen as being part of a wider (family) behaviour and not just the whim of the entrepreneur alone.

Hence, strong family involvement highlights a long-term involvement to employees that we suggest will ultimately make the followers risk perceptions be seen as being
more strategic and less extreme. Do et al. (2008) found that the family is a resource that can help firms overcome business problems. This is likely because stronger family involvement aligns itself with the strong family cultural norms of Vietnam. Consequently, employees will be less detrimentally influenced by ERT. Indeed, we hypothesize that at high levels of family involvement the ERT behaviour will act positively towards employee job outcomes. This is because they will perceive the risks being taken as far more strategic and backed by the family’s interest in preserving their wealth. Thus, we posit:

**Hypothesis 3:** Family involvement will moderate the influence of ERT towards follower JS. Such that, at high levels of family involvement, the detrimental influence of ERT will be negated and followers will report greater JS.

**Hypothesis 4:** Family involvement will moderate the influence of ERT towards follower OC. Such that, at high levels of family involvement, the detrimental influence of ERT will be negated and followers will report greater OC.

Figure 6-1 shows the overall model depicting the hypothesised relationships.
Figure 6-1 Study 3: Conceptual model

Entrepreneur

H1 & H2: negative

Entrepreneurial Risk-Taking

H3 & H4: positive

Family Involvement

Entrepreneur

Follower: Job Satisfaction

Org. Commitment

Follower
6.4 Method

6.4.1 Sample and procedure

The present study focused on small firms in Vietnam, targeting SMEs with around 200 employees maximum (Nguyen & Bryant, 2004; Raymond et al., 2013). A random list of firms based in Hanoi were drawn up from the Vietnam Business Directory 2013 (Vietnam Chamber of Commerce and Industry, 2014) and an invitation to this study was sent out. This invitation detailed that the survey required the entrepreneur to fill in one survey and for a number of employees to fill in a different survey. As the survey instruments were not in English the instruments were translated into Vietnamese and then back-translated to minimise translation error (Brislin, 1980). This approach is accepted practice in cross-cultural studies (Haar et al., 2014).

Overall, from an initial invitation to 600 Vietnamese entrepreneurs who are running their businesses, 121 volunteered themselves and their employees. In the end, 67 entrepreneurs provided a completed survey (55.3% response rate of those agreeing to participate, 11.2% overall) with a number of completed surveys from randomly selected employees (assigned by the lead author). While this response rate can be considered typical in organisational study (Anseel, Lievens, Schollaert, & Choragwicka, 2010; Baruch & Holtom, 2008), we suggest the 11.2% entrepreneur response rate reflects the nature of this methodology where they had to commit both themselves and a selection of employees (based on the size of their firm) to be surveyed. We sought not to overload the firms, distributing up to 5 surveys from the smallest firms (10 employees or less) and up to 15 surveys in the largest-sized firms (over 100 employees). Employees were randomly selected and a hand delivered survey was provided with the responses being picked up by the first author personally. Overall, nine hundred and ten employee
surveys were distributed and 343 completed employee surveys were returned (response rate of 37.7%). The mode was 5 employees per firm.

The sample presents a focus on small-sized firms, i.e., by scale of employment, 29 firms (43.3%) hire 10 to 49 employees, 24 firms (35.8%) with less than 10 employees, and 14 firms (20.9%) with 50 employees or more. This focus is relevant in Vietnam, where small firms are dominant (General Statistics Office of Vietnam, 2016). The dominance of small firms in Vietnam is illustrated in Figure 2-1.

The firm sample includes, by industry, 48 service providers (71.6% of the sample), 10 industrial production companies (14.9%), and 9 firms (13.4%) operating in both services and industrial production. The sample represents the key characteristic of the Vietnamese firms, i.e., the services and industrial production firms account for 98.9% of total firms in the country (General Statistics Office of Vietnam, 2016). The firm sample includes, by legal registration, 32 joint stock companies (47.8% of the firm sample), 29 limited liability companies (43.3%), and 6 sole proprietorships (9.0%). The sample represents the dominance of limited liability companies and joint stock companies in Vietnam. According to General Statistics Office of Vietnam (2016), by legal status, 65.7% of the Vietnamese firms are limited liability companies; 21.5% are joint stock companies; and 12.8% are sole proprietorship. By firm age, 34 firms (50.7%) in the sample have been operating for five to ten years, 22 firms (32.8%) for over ten years, and 11 firms (16.4%) for between three and four years.

The employee sample is gender balanced (172 females and 171 males). There are 212 employees under 30 years old (61.8%), 103 in the age range of the 30s (30.0%), 17 in the age range of the 40s (5.0%) and 11 were aged 51 or more (3.2%).
6.4.2 Measures

6.4.2.1 Dependent variables

Job Satisfaction was measured using three items of the scale by Judge et al. (2005), coded 1 = *strongly disagree*, 7 = *strongly agree*. Sample questions are “Most days I am enthusiastic about my work” and “I find real enjoyment in my work”. This measure had excellent reliability (α = .91).

Organisational Commitment was measured using four items of Meyer, Allen, and Smith’s (1993) affective commitment subscale of OC, coded 1 = *strongly disagree*, 7 = *strongly agree*. Sample questions are “I would be very happy to spend the rest of my career with this organisation” and “I do not feel ‘emotionally attached’ to this organisation” (reverse coded). This measure also had very good reliability (α = .85).

6.4.2.2 Independent variables

Entrepreneurial Risk-taking (ERT) was measured by three items from the scale by Covin and Slevin (1986). Questions follow the stem “Please indicate the tendency of your firm regarding the following statements” and each item has a different coding scale. An example is “1 = *Typically adopts a cautious, ‘wait-and-see’ posture in order to minimise the probability of making costly decisions* 7 = *Typically adopts a bold, aggressive posture in order to maximise the probability of exploiting potential opportunities*”. This scale has been well validated in entrepreneurial research (Edmond & Wiklund, 2010; Rauch et al., 2009). Overall, the measure had adequate reliability (α = .70).

Family involvement was measured using the F-PEC scale by Klein et al. (2005) for three dimensions: family power, family experience, and family culture, with coding that varies for each dimension. Family Power (F-Power) was measured by three items representing the family ownership structure including family members who are active...
on the firms’ management board. A sample item is “Percentage of family on the Board”, with response represented as a percentage. This measure had an adequate reliability ($\alpha = .70$). Family Experience (F-Experience) was measured by three items representing the family ownership and the generational activity within the firm with relation to owning, governing and managing the firm. A sample item is “Which generation(s) owns the company?”, responses include first generation, second generation, and so on. This measure had excellent reliability ($\alpha = .95$). Family Culture (F-Culture) was measured by three items coded 1 = strongly disagree, 7 = strongly agree. The items relate to the overlap between the family values and the firm values. A sample item is “Family members support the family business in discussions with friends, employees, and other family members”. This measure had very good reliability ($\alpha = .88$).

### 6.4.2.3 Control variables

We controlled for firm-level variables that might influence the overall ERT behaviour of the entrepreneur. These were: Firm Age (years), Firm Size (number of employees working for the firm), industry were controlled by two dummy variables: industrial and services (coded 1 if operating in the industry or 0 if not operating in the industry). In addition, we controlled for environmental turbulence, i.e., the extent a market is rapidly changing and unstable (Singh, 1986) as these might influence the ERT behaviour. The four aspects of environmental turbulence have been found to relate poorly to each other (Singh, 1986) and thus we include them as separate factors. The factors were all coded 1 = strongly disagree, 7 = strongly agree. Business Environment (“very dynamic, changing rapidly in technical, economic, and cultural dimensions”); Business Risk (“very risky, one false step can mean the firm’s undoing”), Market Expansion (“very rapidly expanding through the expansion of old markets and the
emergence of new ones”) and Market Competition (“very stressful, exacting, hostile, hard to keep afloat”). The four items correlated between -.03 (non-significant) < r < .31 (p < .01) supporting our approach to control for these items separately.

6.4.2.4 Measurement models

To confirm the separate dimensions of the various study measures in our sample of entrepreneurs and followers, we conducted a CFA in SEM using AMOS 22.0. Following recommendations from Williams et al. (2009), the following fit indices were used to assess the CFA: (1) the comparative fit index (CFI), (2) the root-mean-square error of approximation (RMSEA), and (3) the standardised root mean residual (SRMR). The hypothesised measurement model included six factors: two from the follower (JS and OC) and four from the entrepreneur (ERT, family power, family experience, and family culture). The overall analysis showed a good fit to the data, meeting minimum levels of fit indices: CFI ≥ .90, RMSEA ≤ .08, and SRMR ≤ .10 (Bentler & Bonett, 1980; Williams et al., 2009): \( \chi^2 (137) = 399.1 \) (p < .000), CFI = .94, RMSEA = .08, and SRMR = .05. We tested two alternative models, and the results confirmed that the hypothesised model was the best fit (Hair et al., 2010). Table 6-1 shows the measurement analysis.
<table>
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<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>$p$</th>
<th>Details</th>
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<td>1815.7</td>
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<td>Model 3 to 1</td>
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</table>

Model 1 = Hypothesised 6-factor model: follower: Job Satisfaction and Organisational Commitment, and owner: ERT, Family Power, Family Experience, and Family Culture.

Model 2 = Alternative 5-factor model: follower: Job Satisfaction and Organisational Commitment combined, and owner: ERT, Family Power, Family Experience, and Family Culture.

Model 3 = Alternative 5-factor model: follower: Job Satisfaction and Organisational Commitment, and owner: ERT, and Family Power, Family Experience, and Family Culture combined.
6.4.3 Analysis

We ran two hierarchical moderated regression models with follower Job Satisfaction and Organisational Commitment as the dependent variables. Given the nested structure of the data with employees working under entrepreneurs, we conducted multilevel analysis with the MLwiN program (Rasbash et al., 2000). We used a two-level model: first level \( n = 343 \) employees and the entrepreneurs at the second level \( n = 67 \). Each model had four steps: Step 1 (control variables), Step 2 (ERT), Step 3 (three family involvement dimensions) and Step 4 (interactions between ERT multiplied by each of the family involvement dimensions: power, experience, and culture). Following convention all variables were grand mean centred (Kreft et al., 1995) and for the test of moderation, interacting variables were \( z \)-scored (Aiken et al., 1991; Fone et al., 2007).

6.5 Results

In order to examine the proportion of variance that is attributed to the different levels of analysis, the zero random intercept models showed that a significant amount of the variance could be attributed to firm influences for follower job satisfaction (25%) and follower organisational commitment (37%); justifying our multilevel approach.

Descriptive statistics for the study variables are shown in Table 6-2. This table demonstrates that ERT is significantly correlated with all the study variables including follower job satisfaction \( (r = .16, p < .01) \) and organisational commitment \( (r = .14, p < .05) \); the family involvement dimensions: family power \( (r = -.18, p < .01) \), family experience \( (r = .13, p < .05) \) and family culture \( (r = -.11, p < .05) \), as well as all control variables: firm age \( (r = .16, p < .01) \), firm size \( (r = .26, p < .01) \), business environment \( (r = -.19, p < .01) \), business risk \( (r = -.19, p < .01) \), market expansion \( (r = .28, p < .01) \), and market competition \( (r = -.14, p < .05) \). Of significant correlations at the crossover
level, only family culture is significantly correlated with both job satisfaction ($r = .11, p < .05$) and organisational commitment ($r = .16, p < .01$), while business risk is significantly and negatively correlated to organisational commitment ($r = -.12, p < .05$). From three family involvement constructs, family power is significantly correlated to family experience ($r = .18, p < .01$) and family culture ($r = .17, p < .01$). Finally, amongst the two follower job outcomes, they are highly significant in their correlation ($r = .70, p < .01$), although not at the level of concept redundancy (Morrow, 1983). Furthermore, the CFA model did confirm these two follower constructs to be a better fit to the model as distinct constructs and not a combined measure (see Table 6-1, model 2).

Tables 6-3 and 6-4 show the results of the multilevel moderated regression analyses.

6.5.1 Direct effects

Table 6-3 shows regression results for the model predicting follower job satisfaction and as expected, ERT is significantly and negatively related ($\beta = -.20, p < .05$). This is over and above the control variables which also shows that market competition is significantly and positively related to follower job satisfaction ($\beta = .15, p < .05$). The three family involvement constructs have no significant direct effects on follower job satisfaction. Table 6-4 shows regression results for the model predicting follower organisational commitment and as expected, ERT is significantly and negatively related ($\beta = -.19, p < .05$). This is over and above the control variables, although there are no significant control variables towards follower organisational commitment. Similar to the job satisfaction model, the three family involvement constructs have no significant direct effects on follower job satisfaction. Overall, these findings provide support for hypotheses 1 and 2.
6.5.2 Moderating effects

Tables 6-3 and 6-4 show significant moderating effects towards follower job outcomes. Interacting with ERT, family power is significantly related to follower job satisfaction ($\beta = .26, p < .05$) and similarly so towards follower organisational commitment ($\beta = .39, p < .001$). In both models, there are no significant interactions between ERT and family experience or family culture. To facilitate understanding of the interaction effects, plots of the interactions are shown in Figures 6-2 and 6-3.

The interactions for follower job satisfaction (Figure 6-2) and follower organisational commitment (Figure 6-3) are almost identical, so we provide a combined illustration. At low levels of ERT there are significant differences between respondent groups, with respondents with high family power reporting higher follower job satisfaction and follower organisational commitment compared to those with low family power. Overall, the highest levels of follower job satisfaction and follower organisational commitment are reported when there are high levels of ERT and high family power. Overall, both interaction effects show that family power not only buffers the detrimental influence of ERT but leads to greater follower job outcomes. These findings provide strong support for hypotheses 3 and 4.
Table 6-2: Study 3: Descriptive statistics and inter-correlations of study variables

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<td>-.26**</td>
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<td>11. Job Satisfaction</td>
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<td>-.07</td>
<td>.11*</td>
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<td>-.06</td>
<td>-.05</td>
<td>.16**</td>
<td>.70**</td>
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</table>

n₁ = 343 (Level 1, Followers) and n₂ = 67 (Level 2, Entrepreneurs), ERT: Entrepreneurial Risk-taking, *p < .05, **p < .01 (two-tailed).
Table 6-3: Multilevel moderated regression analysis towards follower job satisfaction

<table>
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<tr>
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Table 6-4 Study 3: Multilevel moderated regression analysis towards follower organisational commitment

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†$p < .10, *$p < .05, **$p < .01, ***$p < .001 (two-tailed).
Figure 6-2 Study 3: Interaction plot of ERT and family power with follower job satisfaction as dependent variable
Figure 6-3 Study 3: Interaction plot of ERT and family power with follower organisational commitment as dependent variable
6.6 Discussion

This Study 3 contributes to the literature on entrepreneurship and family business by being set in Vietnam, a much less studied context compared too much of the literature. While the entrepreneurship literature have focused on US and Europe (Martens et al., 2016; Rauch et al., 2009), we confirmed an application of a fine-grained measure of entrepreneurial risk-taking in the context of a developing economy. The F-PEC scale as a measure of family involvement in business developed in the Western context (Astrachan et al., 2002; Holt et al., 2007, 2010) was also found to work for our study sample of Vietnamese small firms.

This study set out to explore the direct effects of ERT on follower job attitudes to extend the leader-follower literature to include entrepreneurs. While it is understood that risk-taking forms an important part in the entrepreneurial orientation of firms and is linked to firm performance (Covin & Slevin, 1991; Lee et al., 2001; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003) we know little about what such firms are like for the employees within them (Wales, 2016). Building on social contagion theory (Sy et al., 2005) and crossover theory (Ten Brummelhuis et al., 2014), we tested whether an entrepreneur’s behaviours regarding risk-taking would crossover and leave followers less satisfied in their job and less committed to the firm. We suggested the potential stress and strain evident in the entrepreneur in being associated with making bold strategic decisions with additional financing, would be evident to followers and the resulting fear from uncertainty would leave them less satisfied and less committed. Consequently, evidence of crossover effect was supported by the direct negative effects found between ERT and follower job outcomes. As such, for the first time we find evidence that the crossover between entrepreneur and follower appears to work similarly to that of leaders and managers in smaller-sized groups and teams (e.g., Ten
Brummelhuis et al., 2014), and importantly, that risk-taking by the entrepreneur may have detrimental influences on those working within the firm. By presenting empirical evidence of the crossover from ERT to followers’ outcomes in the workplace, we suggest that firm-level entrepreneurial behaviour could have different impacts for performance at different levels within the firm, i.e., positively related to performance of the firm as a whole, but negatively related to performance of the individuals working in the firm. Thus, this study helps to move the entrepreneurship scholarship beyond the widely researched entrepreneurial behaviours-firm performance nexus.

The present study also contributes to the understanding of family involvement as well as the crossover process at the workplace by taking account of family involvement as a moderator. Under the SEW approach (Gómez-Mejia et al., 2007), we considered the family as an influential stakeholder pursuing SEW and examined whether family involvement could moderate the detrimental impacts of ERT on the followers in the firm. The confirmed moderating effects provide evidence that the family may, as suggested by McKenny et al. (2014), have a positive impact on processes which directly involve performance at different levels (e.g., the employee outcomes). The present study also highlights that family involvement as an organisational-level factor could buffer the crossover process within a firm, which extends a routine investigation of the crossover process (e.g., cohesiveness and colleague social support) within teams/groups (Bakker et al., 2009; Westman, Bakker, Roziner, & Sonnentag, 2011). While previous studies in the context of Vietnam pointed to the family as a focal point of social life and strong links between the family and the firm in Vietnam (Gerrard et al., 2003; Ronnás & Ramamurthy, 2001; Truong & Nguyen, 2002; Vuong & Tran, 2009), we suggest the positive influence of family involvement on the employee-level performance under the owner-manager’s entrepreneurial risk-taking.
Nevertheless, of the three dimensions of family involvement, this study confirmed a significant moderating effect for the family power dimension only. We argued previously that family controlling power is a fundamental aspect of family involvement for preserving the family’s SEW (Deephouse & Jaskiewicz, 2013; Gómez-Mejía et al., 2007). The family’s ownership and the presence of family members on management/governance boards could be much more perceptible to the followers than the family’s values and the family members’ experience. To the individuals working under the firm’s entrepreneurial management and caring about their well-being, the former can be understood as evidence of family involvement for preserving affective endowments, but the latter can hardly be perceived as the family’s commitment to the firm.

6.6.1 Future research

As previously noted, ERT is not all about firm-level entrepreneurial behaviour because a global behavioural pattern of an entrepreneurial firm may encompass other dimensions, namely innovativeness and proactiveness (Covin & Slevin, 1991; Lumpkin & Dess, 1996; Miller, 1983). While this study presents evidence for the crossover from ERT to follower job outcomes, how other dimensions of the firm-level entrepreneurial behaviour may relate to the individual’s performance is beyond this analysis. Further investigation may consider different job outcomes, such as follower job stress and turnover intentions under the firm’s entrepreneurial postures.

With the findings about the moderating effect of family controlling power, this study does offer support for utilising a measure of family power as a fundamental aspect of family involvement for the family’s affective endowments. Further analysis might look into how family values and family experience contribute to family commitment towards SEW.
6.6.2 Limitations

The present study is not without limitations. Our study used a cross-sectional design that does not support causal relationships to be concluded, although this is typical of the entrepreneurial risk literature (Gibb & Haar, 2010). In addition, because the outcome variables were collected from followers, this inherently limits issues of common method variance (Ten Brummelhuis et al., 2014), thus strengthening the relationships tested. Although the data on the entrepreneur sample was retrospective, in the present study of small firms we followed suggestions of Huber and Power (1985) and Miller, Cardinal, and Glick (1997) in surveying the entrepreneurs with every effort to maximise accuracy of the data (e.g., emphasising salience, ensuring confidentiality, and personally distributing surveys with high emotional involvement). The survey strategy is commonly used to collect data from strategic-level executives in organisational research (Baruch & Holtom, 2008; Huber & Power, 1985) while the entrepreneurs of small firms have low incentives to disclose their business information (Murphy & Callaway, 2004; Sapienza et al., 1988).

6.7 Conclusions

We presented empirical evidence for the crossover from the entrepreneur’s risk-taking to follower outcomes in the workplace in the context of small firms in Vietnam. Our findings extend the discussion on the influence of firm-level entrepreneurial behaviour on performance at different levels in the firm. We also confirmed that family controlling power can buffer the crossover of interest under the SEW approach. Family involvement for preserving affective endowments can therefore contribute to neutralising negative influence of risky strategic policies on the individuals working in the firm. Importantly, Study 3 breaks the strong United States (US) and European focus within
the entrepreneurship literature by being set in Vietnam, a transition economy. Overall, this Study 3 extends the discussion on the crossover in the workplace and the importance of family involvement to the crossover process in the context of small firms in Vietnam.

6.8 Publication status

A manuscript on Study 3 reporting the contents of Chapter 6 has been sent to Asia Pacific Journal of Management for consideration for publication.
Chapter 7

STUDY 4: TRANSITION FROM EMPLOYEE TO ENTREPRENEUR

7.1 Abstract

Study 4 extends the theory of planned behaviour (TPB) (Ajzen, 1991) to explore the relationships between turnover intentions (TI) and entrepreneurial intentions (EI), and tests whether there is support from the proximal withdrawal states (PWS) approach (Hom et al., 2012) to understanding potential entrepreneurs. This study tested the relationships using SEM on 147 Vietnamese employees and finds overall, strong support. Using TPB, this study found that social norms (SN) and perceived behavioural control (PBC) influence personal attitudes (PA) which in turn, predicts EI. Under the PWS approach, TI predicts EI but is fully mediated by PA. The discussion explores the implications of PWS and how we can better understand the transition from employee to entrepreneur.

7.2 Introduction

Entrepreneurs are often perceived as college dropouts who leave an academic path to fulfil their entrepreneurial drive. Examples include Bill Gates, Larry Page, and Sergey Brin. However, not all entrepreneurs begin their businesses at this stage. For some, they must decide to leave their current job to embrace the entrepreneurial urge. Under the theory of planned behaviour (TPB) (Ajzen, 1991) and the proximal withdrawal states (PWS) approach (Hom et al., 2012), Study 4 explored the potential transition from employee to entrepreneur. Rhodes and Doering (1983) suggest a model of career change which postulates employees may have intentions of
changing job or careers due to perception of working environmental factors and alternative opportunities for change. The present study also suggests employees’ destination for vocational changes might include an entrepreneurial career. Nevertheless, how turnover intentions (TI) influence entrepreneurial intentions (EI) has not been thoroughly explored.

Entrepreneurship research suggests that employees who have an intention of changing job, due to their frustration with the working environment and dissatisfaction with their jobs, are more likely to engage in a process leading to the formation of a new business (Shapero, 1975; Shapero & Sokol, 1982). As such, employee intention to leave may also influence new business venture intentions. We seek to extend upon the typical factors within the theory of planned behaviour (TPB) (Ajzen, 1991), which has three components: (1) personal attitudes (PA), (2) social norms (SN), and (3) perceived behavioural control (PBC) (Schlaegel & Koenig, 2014), by including employee TI. This is because contemporary research suggests that TI might not only be an outcome of job factors but could also be an antecedent towards alternative outcomes, which are termed proximal withdrawal states (PWS) (Hom et al., 2012).

Study 4 makes a number of contributions: (1) we model relationships between TI and determinants of EI; (2), we then include TI towards EI to test the PWS approach to understand what influence TI has on the EI of employees. Finally (3) by testing mediated models we will show the interplay and relationships between constructs which supports the PWS approach. We test this all within the cultural context of Vietnam. It is an economy that includes numerous entrepreneurial opportunities and is a cultural setting seldom explored in the literature.
7.3 Theoretical frameworks and hypotheses

7.3.1 Theory of planned behaviour and hypotheses

Krueger (2009) defines EI as “the intent to start a business, to launch a new venture” (p. 55). Researchers have typically applied the intention-based approach developed in psychology to investigate entrepreneurial potential (Bird & Jelinek, 1988). Entrepreneurship is by nature an intentional process focused towards creating value through the organisation of resources (Krueger & Carsrud, 1993). As such, the intention-based approach was applied to the entrepreneurship field as complementary to focusing on actual entrepreneurs’ functional behaviours and achievements (Palmer, 1971). For example, someone with a positive attitude towards being their own boss, with social support from friends and family about making the leap into self-employment, and who feel confident they have the creativity to start a business, will be more likely to consider an entrepreneurial start-up as a future option.

According to Ajzen (1991), intentions are “indications of how hard people are willing to try, or how much of an effort they are planning to exert, in order to perform the behaviour” (p. 181). As such, a stronger intention is generally more likely to be performed and thereby becoming a reality. Intentions are well understood under the theory of planned behaviour (TPB) and Ajzen (1991) suggests three determinants of EI exist: (1) attitude towards the behaviour (how much the behaviour is favored), (2) subjective norms (social pressure towards performance of the behaviour), and (3) PBC (perceived difficulty of behavioural performance). As such, people make decisions to be an entrepreneur because they think that being their own boss is important to them (PA), they have favorable support from family and friends (SN), and believe they will be successful in a new venture (PBC).
Robinson et al. (1991) argue this approach towards entrepreneurship offers a more effective prediction of the phenomenon than does the personality/trait approach (e.g., measuring general tendencies) or the demographic approach (e.g., studying static demographic characteristics), both of which have been less effective in adequately explaining entrepreneurship. Empirical support for TPB is found in a number of entrepreneurship studies (e.g., Carr & Sequeira, 2007; Kautonen et al., 2015; Liñán & Chen, 2009; Schlaegel & Koenig, 2014).

Based on the studies above, we similarly suggest that the three established determinants: SN, PA, and PBC, will all be related to EI (Ajzen, 2011), as supported in employee samples (e.g., Carr & Sequeira, 2007; Kautonen et al., 2015). We follow the approach of Liñán and Chen (2009), who predict that SN will positively influence PA and PBC, which in turn predict EI. Consequently, we expect that current employees who have support from external sources (such as family and friends) will become more confident in their entrepreneurial nature, will have greater belief that they can make and keep a venture viable, and in turn, they will be more likely to consider starting a new business. Hence we predict:

**Hypothesis 1:** SN will be related to (a) PA and (b) PBC.

**Hypothesis 2:** (a) PA and (b) PBC will be related to EI.

The present study notes that one criticism of studies using TPB to understand EI is the use of student populations (Schlaegel & Koenig, 2014). Although some previous studies addressed the relationship between organisational attitudes and entrepreneurial aspects (e.g., Brockhaus, 1980; Kickul & Zaper, 2000; Lee et al., 2011) the transition from employee to entrepreneur under TPB has not been thoroughly explored. The dominance of studies on students means that those who are working are seldom tested.
for their potential to become an entrepreneur. A theoretical discussion of such a transition was presented by Mourmant, Gallivan, and Kalika (2009). These authors proposed a model for the entrepreneurial turnover process based on readiness to quit and necessary configuration to quit. This aligns with Hom et al. (2012) in that leaving a job to start a new venture is a result of the fit between readiness to quit and necessary configuration to quit. The present study follows suggestions by Rhodes and Doering (1983) and Shapero and Sokol (1982) that the entrepreneurial path for employees is a possible alternative to their careers. As such, we merge the TI with the determinants of EI, to address the gap in the EI literature amongst paid employees. This meets Ajzen’s (2011) suggestion of expanding TPB to increase predictability towards EI as well as the PWS approach proposed by Hom et al. (2012).

Furthermore, the series of studies making up this thesis were conducted in Vietnam, a developing economy. The transition from paid employment to self-employment could be more likely in developing economies as starting a new business venture is considered promising for attaining personal objectives, such as higher income, independence at work and self-actualisation (Benzing et al., 2005; Stefanovic et al., 2010). Vietnam is a fast-developing economy with abundant opportunities for small business creation (World Bank, 2015) and therefore provides a useful locale to test these relationships of interest. The next section will discuss such a transition under the PWS approach.

### 7.3.2 Proximal withdrawal states approach and hypotheses

Hom et al. (2012) suggest that turnover research needs to be expanded because with regard to employees and their jobs, “everyone eventually leaves” (Hom et al., 2012, p. 833). They used the term proximal withdrawal states (PWS) to encompass a
broad array of factors behind why an employee may want to leave or stay in their organisation, and suggest a new approach is needed for elucidating turnover research. They propose PWS as a way to also encourage exploring TI as “an expanded criterion” (Hom et al., 2012, p. 831). Consequently, they suggest TI might also predict other outcomes beyond actual turnover, which might typically be seen as a final outcome of TI in the literature. Others have agreed that future research should “expand the turnover criterion” (Campbell et al., 2013, p. 777). While Hom et al. (2012) provide a number of categories, we highlight a category of enthusiastic leavers, i.e., employees who want to and are able to quit their jobs. In Hom et al.’s (2012) view, these employees seek to leave for a particular alternative. As Bergman et al. (2012) suggest anticipated destinations in studying withdrawal states, we point to starting a new business as one of possibilities that employees may target. As such, we utilise the PWS approach to understand how TI might mix with the entrepreneurial attitudes and intentions. This is important because their PWS approach aligns with TPB (Bergman et al., 2012) under theory of reasoned action (Ajzen, 1991, 2011).

Under the PWS approach (Hom et al., 2012) we suggest that employees who have a high level of TI are likely to have greater EI. That is, those more likely to consider leaving their job are also more likely to consider starting a business. This is because of an entrepreneurial venture being a potential career option (Shapero & Sokol, 1982). This responds to recent calls in the literature regarding exploring other outcomes of TI (Direnzo & Greenhaus, 2011; Holtom et al., 2008). Unlike other blanket categorisations of TI, we do not suggest in this context it will be universally detrimental. Indeed, aligned with Hom et al. (2012), we argue that TI will positively build other intentions like being entrepreneurial. In addition, we argue it will also influence the determinants of EI in a positive way. For example, a current employee might discuss their TI with
family and friends to gain feedback and support towards their entrepreneurial venture. This aligns well with PWS (Hom et al., 2012) and the expected behaviour of the enthusiastic leaver. Similarly, these employees might find their decision towards leaving their job solidifies their own belief in themselves and their attitude towards being their own boss. As such, we hypothesise:

**Hypothesis 3:** TI will be related to (a) SN, (b) PA, (c) PBC and (d) EI.

In addition, we hypothesise that the TI influence on EI will be mediated by PA and PBC. Thus, in effect, an employee who is strongly considering leaving their job will have greater confidence and faith in their abilities to make it as an entrepreneur, and in turn, these factors will drive the employee towards becoming an entrepreneur. This aligns with TPB of Ajzen (2011), which supports PA and PBC as fundamental predictors of EI. This leads to our final hypothesis.

**Hypothesis 4:** The influence of TI on EI will be mediated by PA and PBC.

The hypothesised model is shown in Figure 7-1.

### 7.4 Method

#### 7.4.1 Sample and procedure

Data were collected from local employees in Vietnam. Employees as potential respondents were identified on Facebook (based on their public information) and then approached via a social network of high school and university alumni for their participation. A web-based questionnaire was then used to collect responses. From 931 invitations, 147 completed responses were received for an initial response rate of
Figure 7-1 Study 4: Theoretical output model
15.8%. Just over half of respondents were female (55%), and ages ranged between 22-43 years, with an average age of 29.1 years (SD = 5.7 years). Respondents had an average work experience of 7.7 years (SD = 7.2 years), and by position, the majority were in non-managerial positions (74%). By industry, the majority were from the private sector (70.1%) and by education, 62% had a university degree and 32% had a master’s degree. The high level of education is explained by the fact all participants are members of a university alumni network. That said, highly educated samples are not uncommon in studying EI (e.g., De Clercq, Honig, & Martin, 2013; Wang, Lu, & Millington, 2011).

7.4.2 Measures

Entrepreneurial Intention (EI) was measured using the three items of Liñán and Chen (2009), coded 1 = strongly disagree, 7 = strongly agree. Sample questions are “I will make every effort to start and run my own business” and “I am determined to create a business venture in the future” ($\alpha = .88$).

Personal Attitudes (PA) was measured using a 3-item scale by Liñán and Chen (2009), coded 1 = strongly disagree, 7 = strongly agree. Sample questions are “If I had the opportunity and resources, I would love to start a business” and “Being an entrepreneur would give me great satisfaction”. This scale had good reliability ($\alpha = .80$).

Social Norms was measured using a 3-item scale by Liñán and Chen (2009), coded 1 = strongly disagree, 7 = strongly agree. For each item there are two parts: (1) an initial question, sample item “My immediate family would approve of my decision to start a business” is then multiplied by (2) an importance anchor, sample item “Importance of family’s approval” to give an overall score. As such, scores range from
1 to 49 (i.e., 1×1 to 7×7). The three items relate to family (example above), and similarly so for friends and colleagues. This scale had very good reliability ($\alpha = .84$).

Perceived Behavioural Control (PBC) was measured using three items of Liñán and Chen (2009), coded $1 = \text{strongly disagree}$, $7 = \text{strongly agree}$. Sample questions are “Starting a firm and keeping it viable would be easy for me” and “If I tried to start a business, I would have a high chance of being successful”. This scale had adequate reliability ($\alpha = .75$).

Turnover Intentions (TI) was measured using a 3-item scale by Cammann et al. (1983), coded $1 = \text{strongly disagree}$, $7 = \text{strongly agree}$. Sample questions are “I probably will look for a new job in the next year” and “I will likely actively look for a new job in the next year”. This scale had very good reliability ($\alpha = .88$).

Control variables: The following variables were controlled for, as they are common in TPB and turnover literatures (e.g., Díaz-García & Jiménez-Moreno, 2010; Fraser & Greene, 2006; Haar, Roche, & Taylor, 2011; Hom et al., 2012; Maes, Leroy, & Sels, 2014): Gender ($1 = \text{female}$, $0 = \text{male}$), Age (in years), and Work Experience (total work experience in years).

### 7.4.3 Measurement models

To confirm the separate dimensions of the various constructs, measures were tested by SEM using AMOS 22.0. We followed Williams et al.’s (2009) recommendations of three goodness-of-fit indexes and threshold levels to assess model fit: (1) the comparative fit index (CFI > .95), (2) the root-mean-square error of approximation (RMSEA < .08), and (3) the standardised root mean residual (SRMR < .10). The hypothesised measurement model and two alternative models are shown in Table 7-1.
Overall, the hypothesised measurement model did fit the data best. We confirmed this by re-analysing the CFA, testing a combination of alternative models. This resulted in the two alternative measurement models being a poorer fit as per Hair, Black, Babin and Anderson’s (2010) instructions regarding testing comparison models.

### 7.4.4 Analysis

Hypotheses were tested using SEM in AMOS to assess the direct and mediating effects of the study variables. We controlled for the effects of age, gender, and work experience. However, these variables made no difference to the results so for ease of analysis and presentation; these variables have been removed from the analyses shown.

### 7.5 Results

Table 7-2 shows the descriptive statistics and inter-correlations of the study variables. This table shows that the entrepreneurial factors are significantly correlated with each other in the expected directions (all $p < .05$). TI is significantly correlated with PA ($r = .24, p < .01$) and EI ($r = .25, p < .01$).

#### 7.5.1 Structural models

Three structural models were tested in order to determine the most optimal model based on the data. The models were: (1) Direct Effects Model, (2) Mediation Model 1 (only SN), and (3) Mediation Model 2 (SN, PA, and PBC). The three structural models and comparisons between them are shown in Table 7-3.

Using analyses recommended by Hair et al. (2010) regarding testing comparison models, it was found that model 3 (mediation model 2) was a superior fit to the data over the other models (all at $p < .001$). It was also the only model to achieve all the
requirements on the fit indices. The final structural models are shown in Figure 7-2. Figure 7-2 also shows the effects of mediation on the relationship of TI to EI (comparing model 1 and model 3 effects).

7.5.2 Final structural model

Aligned with the recommendations of Grace and Bollen (2005), unstandardised regression coefficients are presented. Figure 7-2 shows that SN are significantly linked with PA (path coefficient = .07, $p < .001$) but not PBC, supporting hypothesis 1a only. Similarly, hypothesis 2a is supported with PA being significantly related to EI (path coefficient = .72, $p < .001$) while PBC is not. PBC was however significantly related to PA (path coefficient = 1.2, $p < .001$) indicating an indirect effect towards EI.

Hypotheses 3 suggested TI would predict the other variables and this was supported towards PA (path coefficient = .11, $p < .05$) and PBC (path coefficient = .05, $p < .05$), supporting hypotheses 3b and 3c. TI was also related to EI (path coefficient = .21, $p < .01$) in the direct effects model (model 1) but became non-significant in the final model (model 3) (path coefficient = .04, $p > .05$), which subsequently supports hypothesis 4.

The final structural model accounts for large amounts of variance towards EI ($r^2 = .57$) and PA ($r^2 = .53$). However, there is only a small amount of variance for PBC ($r^2 = .03$) and SN ($r^2 = .01$).
Table 7-1 Study 4: Results of confirmatory factor analysis for study measures

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fit Indices</th>
<th>Model Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$</td>
<td>$df$</td>
</tr>
<tr>
<td>1. Hypothesised 5-factor model: TI, PA, SN, PBC, and EI.</td>
<td>104.6</td>
<td>80</td>
</tr>
<tr>
<td>2. Alternative 4-factor model: TI and EI combined, PA, SN, and PBC.</td>
<td>414.5</td>
<td>84</td>
</tr>
<tr>
<td>3. Alternative 3-factor model: TI, EI and PA, SN, and PBC combined.</td>
<td>307.1</td>
<td>87</td>
</tr>
</tbody>
</table>
Table 7-2 Study 4: Descriptive statistics and inter-correlations of study variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>29.1</td>
<td>5.7</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Work Experience</td>
<td>7.7</td>
<td>7.2</td>
<td>.63**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Turnover Intentions</td>
<td>3.4</td>
<td>1.9</td>
<td>-.29**</td>
<td>.24**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Personal Attitudes</td>
<td>5.4</td>
<td>1.3</td>
<td>-.07</td>
<td>.00</td>
<td>.24**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social Norms</td>
<td>23.6</td>
<td>10.3</td>
<td>.01</td>
<td>.14</td>
<td>.02</td>
<td>.39**</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Perceived Behavioural Control</td>
<td>3.7</td>
<td>1.1</td>
<td>.04</td>
<td>.09</td>
<td>.11</td>
<td>.49**</td>
<td>.19*</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>7. Entrepreneurial Intentions</td>
<td>5.0</td>
<td>1.6</td>
<td>.01</td>
<td>.05</td>
<td>.25**</td>
<td>.65**</td>
<td>.38**</td>
<td>.45**</td>
<td>–</td>
</tr>
</tbody>
</table>

n = 147; *p < .05; **p < .01 (two-tailed).
### Table 7-3 Study 4: Model comparisons for structural models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>$\chi^2$</th>
<th>$\Delta df$</th>
<th>p</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>263.7</td>
<td>86</td>
<td>.85</td>
<td>.12</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>203.5</td>
<td>83</td>
<td>.90</td>
<td>.10</td>
<td>.13</td>
<td>60.2</td>
<td>3</td>
<td>.001</td>
<td>Model 1 to 2</td>
</tr>
<tr>
<td>Model 3</td>
<td>107.1</td>
<td>81</td>
<td>.98</td>
<td>.05</td>
<td>.07</td>
<td>156.6</td>
<td>5</td>
<td>.001</td>
<td>Model 1 to 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>96.4</td>
<td>2</td>
<td>.001</td>
<td>Model 2 to 3</td>
</tr>
</tbody>
</table>

Model 1 = Direct Effects Model: TI to SN, PA, PBC, and EI.
Model 2 = TPB Mediation Model 1: Same as Model 1 with addition: SN towards PA, PBC, and EI.
Model 3 = TPB Mediation Model 2: Same as Model 2 with addition: PA and PBC towards EI. Also, PBC to PA.
Figure 7-2 Study 4: Final model
Chapter 7 Study 4

7.6 Discussion

Study 4 sought to test the influence of PWS and TPB as determinants of EI. This bridges the emerging literature on PWS with calls within TPB to better understand the role of career change amongst employees towards becoming an entrepreneur. Overall, we found strong support from these theories regarding understanding entrepreneurial behaviour and this further broadens the application of these theories by confirming their effects within the emerging economy of Vietnam.

Study 4 also found strong support for TPB with positive links from SN to PA and then to EI, which is consistent with several studies using student samples (e.g., Liñán & Chen, 2009; Liñán, Urbano, & Guerrero, 2011; Maes et al., 2014). Thus, our finding adds support for the generalisation of TPB in studying EI of employees, beyond a student focus. Furthermore, the setting of Vietnam allows an emerging economy approach which provides additional support for a global theoretical approach.

Importantly, when these two theories are combined in a single model, significant links towards EI were found which supports the PWS approach (Hom et al., 2012). TI was found to crossover and enhance the PA towards new business creation. Thus, employees considering leaving their jobs are able to build their attitudes around becoming and enjoying being an entrepreneur, which reinforces the need to extend TI research towards other criterion (Hom et al., 2012). Furthermore, these intentions towards leaving an organisation were also positively related to PBC. Thus, employees considering leaving their job feel they will have greater control in making their venture work. This might represent the experiences gained (both positive and negative) from the workplace such as determination and success (positive factors) and red-tape and failure (negative factors) that ultimately propel them out of their current job and into an entrepreneurial start-up venture.
Importantly, PA was found to fully mediate the influence of TI towards entrepreneurship intentions and these findings contribute to explaining how organisational attitudes like TI could influence the development of EI, unlike the direct effects of individual organisational attitudes presented in the literature (Brockhaus, 1980; Henley, 2007; Kickul & Zaper, 2000; Lee et al., 2011). Overall, the present study provides evidence that TI, a job attitude considered detrimental and destructive, can actually be positive and beneficial towards helping develop the background factors towards EI. However, we do acknowledge that employees leaving an organisation to start their own business may still be detrimental to the organisation, for example through reduced job performance and financial expenses in training replacements (Cascio & Boudreau, 2008). Interestingly, TI appears not to directly influence EI but are best understood as working indirectly through PA and PBC. In this regard, employees ready to check out of their organisation appear to be able to raise their own belief in their perceptions of successfully making it as an entrepreneur, and this in turn, then generates enhanced intentions to start a business venture. We suggest this might be because the employee is recognizing their future career path and this aligns with Hom et al.’s (2012) theorisation of the enthusiastic leaver planning their future destination outside of their current organisation.

7.6.1 Implications of Study 4

One implication is that organisations could create a more supportive working environment for their employees which has been shown to lead to lower TI (Rhoades & Eisenberger, 2002). However, an employee’s intention to create their own business venture may still develop alongside typical employer-employee relationships, so in this regard; an enthusiastic leaver (Hom et al., 2012) is still likely to leave an organisation,
irrespective of felt obligations under SET to stay. One option organisations might consider – especially in developing economies where entrepreneurial ventures are more appealing – are factors which could help to divert employees’ potential entrepreneurial focus, such as the development and enhancement of an innovation or entrepreneurial culture, and technical excellence incentives (Lee et al., 2011). Haar and White (2013) found that entrepreneurial cultures can help retain employees. However, it is worth noting the correlation between TI and EI was only 0.25. As such, not all employees considering leaving a company are likely to want to start their own business venture. That said, TI is typically seen as a destructive behaviour and one that organisation’s should seek to universally manage. Another option might be organisations playing a greater career planning role and even encouraging employees to break out and create a new start-up – perhaps with venture capital from their current employer? This might be especially useful if the employee is considering a potential new venture that is complimentary to the existing organisation and job.

Study 4 supports the PWS approach and the links between TI and entrepreneurship amongst employees. However, the linkages between employees considering quitting their job and becoming an entrepreneur are only beginning to be explored. Future research could seek to test under which PWS categorisations employees’ seek to pursue the entrepreneurial path. Other suggestions for this direction are Gartner’s (1985) framework for describing new venture creation and Mourmant’s (2009) mixed methods research design for understanding how employees leave their paid jobs for entrepreneurship. For example, future researchers might tease out cultural context because values and beliefs embedded in an entrepreneurially-oriented culture may promote development of individuals’ entrepreneurial potential (Mueller & Thomas, 2001; Shneora, Camgözb, & Karapinar, 2013). Also, family business background could
be explored for its contribution to employees’ attitudes towards entrepreneurship (Zellweger, Sieger, & Halter, 2011).

7.6.2 Limitations

Study 4 used self-reporting surveys and therefore lacked data on actual turnover and levels of actual business start-up. This is inevitable with the cross-sectional design which is commonly applied when studying EI (Schlaegel & Koenig, 2014), although we similarly encourage longitudinal designs for future research. Furthermore, the SN construct is self-rated and since this construct details support for the entrepreneurial idea from family, friends, and co-workers, future research might explore these factors from external sources. Likewise, having others validate employees’ attitudes around turnover – for example, having a partner rate this, might also provide different sources to allow greater confidence in the findings. Furthermore, Hom et al.’s (2012) conceptualisation of PWS provided four distinct withdrawal states and these were not explicitly explored. Future research could look to these to determine whether these relationships hold stronger (say) for one type of leaver over another, such as enthusiastic leaver over the reluctant leaver.

Another limitation of Study 4 is its highly educated sample, which aligns with previous studies of EI (Schlaegel & Koenig, 2014). Research has shown that entrepreneurs’ qualifications widely range from no high school qualification to postgraduate education (e.g., Department for Business Innovation and Skills of the United Kingdom, 2013; Small Business Branch of Industry Canada, 2013). As such, research designs using samples of employees with various forms of education are also suggested. However, as noted earlier, the majority of studies in TPB field do use student samples, so this thesis at least extends beyond that sample. Also, while our sample size
is relatively small \((n = 147)\) it is typical of studies in this field, e.g., \(n = 96\) in Brockhaus (1980), \(n = 123\) in Shariff and Saud (2009), and \(n = 111\) in Robinson et al. (1991). Finally, our use of CFA in SEM and in particular, mediation models, counters the potential disturbance of common method variance (CMV) (Kenny, 2008). As such, given the robust nature of the measures used in Study 4 and the lack of over-inflated correlations between variables, there is solid evidence to suggest our findings are genuine and not due to common method issues.

### 7.7 Conclusions

Study 4 used a sample of employees from a developing country (Vietnam), explored the influences of PWS and TPB towards better understanding the drivers of employees toward their own entrepreneurial ventures. We re-affirmed the TPB relationships between EI and its antecedents (PBC, SN, and PA). Importantly, by exploring TI we find empirical evidence for supporting PWS towards EI and two of its TPB antecedents (PBC and PA). TI, a traditionally negative organisational behavioural construct, was positively related to EI antecedents, highlighting that intentions to leave one’s job can positively influence attitudes around starting a business. Overall, Study 4 supports exploring employees’ attitudes towards their jobs to understand their new venture potential, and we encourage researchers to look more in-depth at workers and the way their current job attitudes help shape their EI.

### 7.8 Publication status

Preliminary results of Study 4 were presented at the 3rd New Zealand Industrial/Organisational Psychology Conference, Massey University (Albany), 11 December 2014. It is currently under review at the *Journal of Management and Organization*. 
As presented in Chapter 2, this thesis set out to find answers to five research questions in the context of small business in Vietnam, including:

1. Does entrepreneurial orientation (EO) contribute to the owner-manager’s satisfaction with firm-level performance under involvement of the owner-manager’s family?

2. Does EO contribute to the owner-manager’s goal attainment under involvement of the owner-manager’s family?

3. Does the owner-manager’s entrepreneurial risk-taking (ERT, a fundamental component of EO) detrimentally influence employee job outcomes?

4. Is the relationship between owner-manager’s ERT and employee job outcomes influenced by the involvement of the owner-manager’s family, such that it reduces the detrimental influence of ERT?, and

5. Do employees’ turnover intentions contribute to their intention to start a new business venture and become an entrepreneur?

This chapter presents a discussion on the empirical evidence from Studies 1 through 4 and considers limitations of the study, implications of the findings, and suggestions for future research. Importantly, this chapter does not repeat the discussion sections from the four individual papers (Chapters 4 to 7) and instead presents a broad overview and discussion of the overall thesis. Table 8-1 provides a summary of results of hypothesis testing that help to answer the above research questions.
Table 8-1 Summary of research questions and results of four studies

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Study number and hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does EO contribute to the owner-manager’s satisfaction with firm-level</td>
<td>Study 1 (Chapter 4)</td>
<td>Supported</td>
</tr>
<tr>
<td>performance under involvement of the owner-manager’s family?</td>
<td>• EO will be positively related to financial performance.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• EO will be positively related to non-financial performance.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• Family involvement will be positively related to financial performance.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td>• Family involvement will be positively related to non-financial performance.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td>• Family involvement will moderate the EO-performance relationship, with firms with higher (a) family-power, (b) family-experience, and (c) family-culture reporting the highest performance when they also have high EO.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>2. Does EO contribute to the owner-manager’s goal attainment under involvement</td>
<td>Study 2 (Chapter 5)</td>
<td>Partially supported</td>
</tr>
<tr>
<td>of the owner-manager’s family?</td>
<td>• EO in the small firm will be positively related to the owner-manager’s attainment of personal goals.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td>• Family involvement in small firms will be positively related to the owner-manager’s attainment of personal goals.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td>• Family involvement will moderate the relationship between EO and the small firm owner-manager’s attainment of personal goals.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>Research Question</td>
<td>Study number and hypothesis</td>
<td>Result</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>3. Does the owner-manager’s entrepreneurial risk-taking (ERT, a fundamental component of EO) detrimentally influence employee job outcomes?</td>
<td>Study 3 (Chapter 6)</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• ERT will be negatively related to follower job satisfaction (JS).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ERT will be negatively related to follower organisational commitment (OC).</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• Family involvement will moderate the influence of ERT towards follower JS.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td>Such that, at high levels of family involvement, the detrimental influence of ERT will be negated and followers will report greater JS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Family involvement will moderate the influence of ERT towards follower OC.</td>
<td>Partially supported</td>
</tr>
<tr>
<td></td>
<td>Such that, at high levels of family involvement, the detrimental influence of ERT will be negated and followers will report greater OC.</td>
<td></td>
</tr>
<tr>
<td>4. Is the relationship between owner-manager’s ERT and employee job outcomes influenced by the involvement of the owner-manager’s family, such that it reduces the detrimental influence of ERT?</td>
<td>Study 4 (Chapter 7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social norms (SN) will be related to personal attitudes (PA).</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• SN will be related to perceived behavioural control (PBC).</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>• PA will be related to entrepreneurial intentions (EI).</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• PBC will be related to EI.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Turnover intentions (TI) will be related to SN.</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>• TI will be related to PA.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• TI will be related to PBC.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• TI will be related to EI.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• The influence of TI on EI will be mediated by PA and PBC.</td>
<td>Supported</td>
</tr>
<tr>
<td>5. Do employees’ turnover intentions contribute to their intention to start a new business venture and become an entrepreneur?</td>
<td>Study 4 (Chapter 7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social norms (SN) will be related to personal attitudes (PA).</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• SN will be related to perceived behavioural control (PBC).</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>• PA will be related to entrepreneurial intentions (EI).</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• PBC will be related to EI.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Turnover intentions (TI) will be related to SN.</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>• TI will be related to PA.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• TI will be related to PBC.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• TI will be related to EI.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>• The influence of TI on EI will be mediated by PA and PBC.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
8.1 On the relationships between entrepreneurial orientation, family involvement and firm-level performance

Using resource-based theory (RBT) (Barney, 1991), EO was treated in Studies 1 and 2 as an intangible resource that helps create a firm’s competitive advantage. Therefore, EO was hypothesised to be related to firm performance. Empirical findings from Studies 1 and 2 support the hypothesised link from EO to perceived firm performance. Specifically, in Study 1 EO was found to be positively related to the owner-manager’s satisfaction with firm-level financial and non-financial outcomes. In Study 2, EO was also found to have a positive relationship to the owner-manager’s attainment of goals for personal achievement. Overall, Studies 1 and 2 provide consistent evidence of positive associations between EO and broad indicators of firm performance.

In summary, these two studies contribute to confirming the legitimacy of the RBT approach in the study of EO (Lee et al., 2001; Wiklund & Shepherd, 2003). In addition, Studies 1 and 2 found the association between EO and performance to be consistent at $r = .36$ (financial), $r = .34$ (non-financial), and $r = .31$ (personal achievement). This is nearly identical to the meta-analysis benchmark of $r = .35$ (corrected correlation) for micro-sized firms (1–49 employees) found by Rauch et al. (2009) in their meta-analysis of the EO-performance relationship. Thus, the Vietnamese data aligns very well with established data from predominately Western economies, suggesting the Vietnamese data is broadly equivalent.

Furthermore, these two studies suggest the positive EO-performance relationship found in previous studies, largely from US and European firms (Martens et al., 2016; Rauch et al., 2009), can be extended to small firms in a developing economy, such as Vietnam, for which there is limited literature. This helps build the internationalisation and legitimacy of both RBT and EO research and suggests they may be applied from
Western cultures to Eastern cultures. Indeed, the strength of the relationships between
variables complements the meta-analysis by Rauch et al. (2009), providing additional
confidence in the findings and their generalisability.

Under RBT, family involvement was also introduced into Studies 1 and 2 as a
bundle of resources, termed familiness, that contribute to creating a firm’s competitive
advantage (Habbershon & Williams, 1999). Family involvement was treated as a
multidimensional construct with three dimensions: family power, family experience,
and family culture (Astrachan et al., 2002). Family involvement was hypothesised to be
both (1) directly related to firm performance and (2) to moderate the EO-performance
relationship. Studies 1 and 2 simultaneously examined these three dimensions of family
involvement and the results revealed that the culture dimension was positively related to
the owner-manager’s satisfaction with firm-level outcomes, both financial and non-
financial, as well as the owner-manager’s attainment of goals, for both personal
achievement and family benefits.

Collectively, Studies 1 and 2 support the hypothesised influence of family culture
on firm performance and the requirement to treat family involvement as a multidimen-
sional construct. These findings align with several previous studies of the role of the
family in the firm (e.g., Anderson & Reeb, 2003; Górriz & Fumás, 1996; Lee, 2004;
McConaughy et al., 1998; Rutherford et al., 2006; Zahra, 2003). Importantly, this
research provides more richness than previous studies that typically test the role of
family involvement as a dichotomous value (e.g., family versus non-family). The
present measure (F-PEC scale) by Astrachan et al. (2002) provides greater depth and
breadth of construct and thus allows the particular dimensions of family involvement to
be better understood. Indeed, the F-PEC scale approach aligns better with the RBT of
the firm because the complexities of familiness are better established and explored using
a multidimensional framework, as opposed to simply saying family involvement is present or not. This allows for the complexities and inimitableness of family involvement to be more accurately assessed in its relationship with firm performance.

However, the findings showed that the power and experience dimensions of family involvement were not significantly related to firm-level outcomes in Study 1 or the owner-manager’s attainment of goals in Study 2. These findings suggest that while family involvement could serve as a source of a competitive advantage for a firm, the three dimensions may have different influences on firm performance, or different aspects of firm performance not explored in Studies 1 and 2. As this thesis is set in the context of Vietnam, where the family is the central to social life (Dalton et al., 2002) and family values are predominant in doing business (Truong & Nguyen, 2002), the culture dimension could be the most influential in enhancing firm performance.

The reasons why the family culture dimension is so dominant and why family power and family experience dimensions have less influence warrants further exploration. One reason might be that the family culture dimension is much more complex than the other two dimensions. Specifically, the family culture dimension has 12 items versus three items each for the family power and family experience dimensions. Consequently, using a RBT framework, perhaps these larger number of items provided greater clarity and insight. In future, researchers might want to more fully explore the family culture construct and determine whether it can be unpacked further – or whether the other dimensions of power and experience need further development. This issue notwithstanding, it should be noted that the multidimensional family involvement construct adopted does improve on the typical dichotomous approach used in the literature. Another reason for the dominance of the family culture dimension in this study may be
the prominence of the family in business life in the case of Vietnam. This needs to be tested in less family-dominant cultures.

Regarding the moderating effect of family involvement, Study 1 found that the family culture dimension strengthens the relationship between EO and firm-level outcomes, both financial and non-financial. Similarly, Study 2 provides evidence that the family culture dimension has an intensifying effect on the relationship between EO and the owner-manager’s attainment of goals for personal achievement. Collectively, these findings confirm that the culture dimension of family involvement enhances the EO-performance relationship.

Despite these effects, it was found that the experience dimension of family involvement moderates the relationship between EO and the owner-manager’s attainment of goals for personal achievement. A similar pattern of effect was reported by Madison et al. (2014). By simultaneously exploring different dimensions of family involvement, the finding of confounding effects suggests that each dimension of family involvement may have a distinct effect on the EO-performance relationship. This provides strong empirical evidence that warrants treating family involvement as a multidimensional construct to ascertain both direct and potential moderating effects.

Overall, the relationships between entrepreneurial orientation, family involvement, and firm-level performance, as posed by research questions 1 and 2, were investigated in Studies 1 and 2. These studies extend the literature about the positive influence of EO on performance, which has been largely confirmed for business entities in the US and Europe (Martens et al., 2016; Rauch et al., 2009) to small firms in the developing economy of Vietnam. Similarly, Studies 1 and 2 extend the positive influence of EO on performance in Western cultures to a country with Eastern cultural values as these studies confirm the positive influence of the family culture dimension of family in-
volvement on firm performance. These two studies shed light on the moderating effects that family involvement has on the EO-performance relationship. Combined, this provides an important contribution to the EO literature by framing and then utilising the constructs to explore and confirm these relationships.

8.2 On the influence of firm-level entrepreneurial risk-taking and family involvement on employee job outcomes

The influence of firm-level entrepreneurial risk-taking (ERT) and family involvement on employee job outcomes was explored in Study 3, which involved a multilevel analysis of owners and their employees nested within the organisations. In this study, employee outcomes were attributed to level 1 while the owner-manager’s ERT and involvement of their families were attributed to level 2. ERT is associated with making bold strategic decisions, such as taking on additional financing and thus ERT can involve negative emotions such as pain and anxiety (March & Shapira, 1987). This is because taking excessive risk (i.e., high ERT) might leave the owner-managers highly leveraged with financial funders, leading to feeling anxious about the new risky venture.

In Study 3, which was based on social contagion theory (Sy et al., 2005) and crossover theory (Ten Brummelhuis et al., 2014), the owner-manager’s ERT was hypothesised to crossover and leave the employees less satisfied in their job and less committed to the firm. This was because the stress of taking greater risks would permeate from the owner-manager to the firm’s employees. In this regard, employees come to work and physically notice their owner-manager appears to be under greater stress and is more anxious about business expenses. While employees were expected to react negatively to this stressor from the owner-manager, under the socio-emotional wealth (SEW) approach (Gómez-Mejía et al., 2007), the owner-manager’s family was consid-
ered as an influential stakeholder pursuing SEW. Family involvement was hypothesised to moderate the detrimental impacts of ERT on the employees in the firm. Thus, a family more invested and involved in an organisation was hypothesised to leave employees less stressed from the owner-manager’s risk-taking.

Study 3 provided empirical evidence that supports this hypothesised crossover from the owner-manager’s ERT to the employee’s job satisfaction (JS) and organisational commitment (OC). For the first time in the literature, the crossover between owner-managers and employees (followers) was found to work similarly to that of leaders and managers in smaller-sized groups and teams (e.g., Ten Brummelhuis et al., 2014). This helps explain the bridging that occurs between the firm level and the individual level that has consistently been called for in organisational behaviour (OB) studies (Cappelli & Sherer, 1991; Molloy et al., 2011). Hence, these findings contribute to crossover theory and suggest that not just immediate managers can influence their followers, but in small firms, the owner-manager has the power to influence his/her followers, albeit negatively in the present study.

Furthermore, while EO was found to have a positive influence on firm-level performance in Studies 1 and 2, Study 3 confirmed that ERT, a fundamental component of EO (Miller, 1983), is detrimental to employee-level job outcomes. Consequently, with this finding of the crossover effects of ERT, Study 3 extends the available literature on the EO-firm performance relationship at the firm-level (Miller, 2011; Rauch et al., 2009) to individual-level performance of those working in the firm. As far as can be determined, this is the first time owner-managers have been identified as playing a key role in the crossover between leaders and followers, and Study 3 provides empirical evidence that this can now be extended to include owner-managers (leaders) and employees (followers).
Regarding the role of the family in moderating the crossover effects of ERT, Study 3 provides empirical evidence that supports the moderating effect specifically from the power dimension of family involvement on the detrimental impact of ERT on employee job outcomes. Previous studies suggest family power as a fundamental aspect of family involvement in a firm for preserving the family’s SEW (Deephouse & Jaskiewicz, 2013; Gómez-Mejía et al., 2007). Family power has also been reported as critical to the firm’s adoption of the family-centred non-economic goals (Chrisman et al., 2012). With a crossover focus, the findings of Study 3 suggest that strong family involvement provides surety and confidence to employees (followers) of the owner-manager and his/her risk-taking strategies, which ultimately makes the followers perceive this risk as being more strategic and less extreme. Therefore, Study 3 adds to evidence confirming the positive influence of family involvement on the EO-performance relationship.

Overall, Study 3 answers research questions 3 and 4 about the influence of owner-manager’s ERT and involvement of the owner-manager’s family on employee job outcomes. Study 3 provides evidence of the detrimental impact of the entrepreneur’s ERT on employee job outcomes in the small firm context, but this crossover is moderated by the entrepreneur’s family involvement through the power dimension. Thus, by including employee-level performance in a multilevel analysis and adopting crossover theory, Study 3 contributes significantly to understanding firm-level entrepreneurial behaviour. In addition, by adopting the SEW approach Study 3 highlights the role of family involvement in moderating the crossover effects of ERT within a small firm. Interestingly, Studies 1 and 2 also found significant moderating effects from family involvement, but in the family culture dimension. Study 3 finds significant effects from family power. Again, these findings across three studies show the importance of family
involvement and especially the multidimensional approach. It suggests that dichotomous variables (e.g., family or not) might be too narrow and insufficient to identify specific effects, as was found across the first three studies in this thesis. Clearly, the implication is for researchers exploring the role of family to apply a multidimensional construct such as the one utilised here.

8.3 On the transition from employee to entrepreneur

Study 4 answers research question 5 about the transition from employee to entrepreneur. More specifically, it focused on current local employees in Vietnam, identified determinants of their entrepreneurial intentions (EI), and examined whether their turnover intentions (TI) may contribute to EI and its determinants.

By reference to the theory of planned behaviour (TPB) (Ajzen, 1991) and using an employee sample, Study 4 confirmed three determinants of EI, including perceived behavioural control (PBC), social norms (SN), and personal attitudes (PA). Strong support was found for the links from SN and PBC to PA and then on to EI. These findings are consistent with several studies using student samples (e.g., Liñán & Chen, 2009; Liñán et al., 2011; Maes et al., 2014) and, therefore, adds support for the generalisation of TPB (Ajzen, 1991) in studying EI of employees, beyond the student population focus.

Study 4 revealed a particular pattern of relationship between TI and EI that gives support for the proximal withdrawal states (PWS) approach (Hom et al., 2012). TI was found to have a positive effect on EI and enhances two determinants of EI: PA and PBC. Under the PWS approach (Hom et al., 2012), the employees who want to and are able to quit their jobs (enthusiastic leavers) consider starting their new business ventures, thereby being self-employed, as an alternative to their current paid jobs. This
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highlights the need to extend turnover criteria (Hom et al., 2012) and consider anticipated turnover destinations (Bergman et al., 2012) which include starting a new venture.

More importantly the effect of TI on EI was fully mediated by PA. This finding of the mediating effect of PA, combined with the findings of the direct effects on PA and PBC as presented above, contributes to explaining how TI enhances the development of EI. The more employees want to leave and the more they think they are able to quit their paid jobs (TI), the more confident they are in their entrepreneurial capacity (PBC) and the greater tendency of their pursuit of a self-employed career (EI). But all of this is conditional on their desires to make their own business ventures a reality (PA). For employees with little or no PA, i.e., those not willing to bear strong emotional experiences that are important qualities of an entrepreneur, such as risk-taking and business failure (Bird, 1989; Boyd & Gumpert, 1983; Kets de Vries, 1977), their high TI will not lead to development of EI, even though they might like to have their own business venture. Thus, the findings of the relationships between TI and determinants of EI contribute to understanding the effect of TI on the determinants of EI beyond direct effects of individual attitudes at work on EI that are presented in the literature (Brockhaus, 1980; Henley, 2007; Kickul & Zaper, 2000; Lee et al., 2011).

Therefore, while Study 3 suggests that different job outcomes for employees can be researched under firm-level phenomena (e.g., ERT, family involvement), Study 4 offers an insight into TI at the employee level, in particular in the transition from having a paid job to being self-employed. Overall, this thesis supports the generalisation of the TPB (Ajzen, 1991) to study EI of employees. It also supports the PWS approach (Hom et al., 2012) to study turnover and goes beyond the realm of current OB literature by mapping how employee’s TI contributes to development of the background factors towards EI.
8.4 On Vietnam as the study context

This thesis is set in Vietnam, which is dominated by small firms (General Statistics Office of Vietnam, 2016). Vietnamese entrepreneurs start their own businesses as a source of employment and income for their families (Ronnås & Ramamurthy, 2001). Small firms have strong family ties (Gerrard et al., 2003; Vuong & Tran, 2009) and the entrepreneurs’ families play an important role within the business (Do et al., 2008; Truong & Nguyen, 2002). Indeed, the findings from Studies 1 and 2 highlight the importance of the owner-manager’s entrepreneurial behaviours and involvement of their families to firm performance. Interestingly, the culture dimension intensifies the EO-performance relationship (Studies 1 and 2) while the power dimension reduces the crossover from ERT to employee job outcome (Study 3). This warrants further contextualised investigation into family involvement as a multidimensional construct, but the findings do support exploring family involvement within studies of EO and ERT.

The fact that Vietnam is a fast-developing economy with abundant opportunities for business creation (World Bank, 2015) helps explain the links between employee TI and determinants of EI (Study 4). For an employee who can see a business opportunity, that person may question why not quit his/her current job and seize the perceived opportunity. As discussed in Study 4, support from family (SN) and strong PA can help turn an intention to quit employment into an intention to start a new business venture. Thus, this thesis finds consistent positive benefits of greater family involvement within the lives of entrepreneurs and their employees, further reinforcing the need to research family involvement in contexts such as Vietnam.
8.5 Limitations of the thesis

This thesis offers a series of findings from various perspectives using multiple studies. As expected with any large research project, there are limitations. Firm-level performance in Studies 1 and 2 was measured through owner-manager’s perceptions of firm outcomes and attainment of personal goals. Nevertheless, relatively high correlations between subject measures have been reported in the literature; for example: $r = .69 \ (p < .001)$ for growth in sales, $r = 0.61 \ (p < .01)$ for returns on assets (Dess & Robinson, 1984), and $r = .68 \ (p < .01)$ for growth in employees (Murphy & Callaway, 2004). Based on their meta-analysis of EO, Rauch et al. (2009) suggest that the EO-performance relationship is robust to different measures of performance (i.e., similar magnitude of the relationship found for different measure of performance). Because small firm owners have low incentives to disclose their business information (Murphy & Callaway, 2004; Sapienza et al., 1988), subjective measures of firm performance have been used extensively in studying EO (Rauch et al., 2009). As such, the subjective measures that were used to capture the performance of small firms in this thesis provide less certainty than hard (actual) firm performance data. However, the approach conducted here aligns with much of the literature where asking respondents to disclose actual income and expenditure data is rarely practised.

EO in this thesis was generally measured using a global scale as in Naman and Slevin (1993) and Swierczek and Thai (2003). This warrants further exploration into influences of the dimensions of EO (i.e., innovativeness, proactiveness, and risk-taking (Miller, 1983) on firm-level performance, as well as employee attitudes – beyond job satisfaction (JS) and organisational commitment (OC) – under the moderating effect of family involvement.
While OB can be studied using three distinctive components – including cognition, affect, and behaviour (Breckler, 1984) – this thesis examined cognitive and affective components of employee JS, OC, and TI. Studying the behavioural component requires data collection through observation of employee behaviour and/or from the firm’s employee records. This was not included in the research design of this thesis due to inaccessibility of employee records and limited time and resources for completion of this research. Self-report data were used for the four studies that comprise this thesis, which is consistent with the overwhelming majority of studies in the literature (Anseel et al., 2010; Baruch & Holtom, 2008).

A cross-sectional design used in Studies 1 to 4 does not allow causal relationships to be assessed, although the use of cross-sectional design is typical of the literature (Gibb & Haar, 2010). In this thesis, it is important to consider the potential impact of common method variance (CMV). Harman’s single-factor test (Podsakoff et al., 2003) was used in Studies 1 and 2 and the test results suggested CMV is not a significant problem. More sophisticated statistical approaches were used to test the robustness of measures used (i.e., CFA in SEM) in Studies 3 and 4, confirming distinctiveness of the study variables. The multilevel approach of Study 3 provides data from different individuals (i.e., owner-managers versus employees) and is not likely to be attributed to CMV.

While in Study 4 it might have been desirable to track employees over time to determine whether they actually became entrepreneurs, such a longitudinal design is outside the scope and time limits of this thesis. This is also problematic given the ethics requirement around respondent confidentiality.

Overall, the limitations around data collection were typical of what is found in the literature (Bierwerth, Schwens, Isidor, & Kabst, 2015; Jin et al., in press; Miao,
Qian, & Ma, 2017; Rauch et al., 2009) and/or were a natural part of doctoral research. However, conducting the three studies where Studies 1 and 2 were based on one data collection phase, and then Study 3 had an additional component of employee (follower) data, and then Study 4 was unique again, overall provides greater confidence in the analyses and findings reported here.

8.6 Implications of the thesis

In spite of the above limitations, the findings from this thesis have several theoretical implications regarding research on EO, family involvement, firm performance, and OB within small firms. The following discusses the theoretical implications from which future research studies are suggested (Section 8.7). Implications for policy makers and business practitioners are also considered.

8.6.1 Theoretical implications

8.6.1.1 Studying entrepreneurial orientation and its relationship with firm-level performance

This thesis reaffirms the legitimacy of RBT (Barney, 1991) in researching EO and the EO-performance relationship. Although the realm of EO has been developed over three decades, starting with Miller (1983), a large body of the EO research was empirically driven (Edmond & Wiklund, 2010; Wales, 2016). Appendix 4 listing selected empirical studies of EO published in the 1986–2016 period and shows that while a few empirical studies in the list utilised the theoretical approach of the resource-based theory (RBT), the majority of studies the list were empirically driven only and without a theoretical base.
This practice was heavily based on Covin and Slevin’s (1991) conceptual model of entrepreneurship as firm behaviour that was built on the configuration approach (Miller, 1987). This model is a holistic view of the EO-performance relationship (i.e., EO has a direct effect on firm-level financial performance) and the EO-performance relationship is moderated by variables internal to the firm (i.e., top management values and organisational resources) as well as variables external to the firm (i.e., market hostility and industry life cycle stage).

Zahra (1993) extends Covin and Slevin’s (1991) model to include non-financial performance. Nevertheless, from a research approach, the empirical generalisation that has been commonly adopted in the EO literature is only an approximation to theory (Merton, 1967). Therefore, there is still a call for robust theorising of EO, with RBT (Barney, 1991) being highly recommended as a promising theoretical ground for EO research (Miller, 2011; Wales, 2016).

Using RBT (Barney, 1991), this thesis successfully associated EO with firm performance, providing clear evidence of the strength of the EO-performance relationship. More significantly, this thesis extended the domain of small firm performance to include small firm owner-manager’s attainment of goals, as suggested by several leading EO scholars (Lumpkin & Dess, 1996; Wales, 2016; Zahra, 1993). It also succeeded in presenting a relationship between EO and owner-manager’s attainment of personal achievement. This adds more evidence that EO is a source of competitive advantage associated with the superior performance of small firms. Accordingly, this thesis does support RBT (Barney, 1991) as a theoretical framework for EO research. This gives weight to the suggestion of Miller (2011) and Wales (2016) that further exploration of EO can be carried out under RBT (Barney, 1991).
In addition, this thesis is an advanced endeavour to prove that EO, a concept developed in the US and European contexts (Martens et al., 2016; Rauch et al., 2009), can work in the context of an Eastern developing economy (Vietnam). Previous studies, (e.g., Keh, Nguyen, & Ng, 2007; Swierczek & Thai, 2003) in the same context of Vietnam presented a positive association between EO and firm performance. However, these attempts were empirically driven and lacked a theoretical foundation for the EO-firm performance relationship. By confirming the influence of EO on firm performance under RBT (Barney, 1991) for Vietnamese small firms, this thesis suggests relevance of theoretically driven examination of EO in a developing economy of Vietnam, a context that is still minimally researched (Rauch et al., 2009). Thus, further study of EO in the context of a developing economy like Vietnam can be carried out under RBT (Barney, 1991).

8.6.1.2 Multilevel analysis of influence of EO on OB

It is surprising that over two decades since Zahra’s (1993) suggestion for an inclusion of non-financial outcomes such as increasing employee motivation, lower employee turnover, and creating positive organisational culture, Wales (2016) echoes Zahra’s (1993) suggestion for broadening the domain of dependent variables in the field of EO study. Regarding OB, there have been a few studies of EO in this direction, such as Yoo’s (2001) study of top/owner managers’ assessment of employee JS, Haar and White’s (2013) study of CEOs or senior managers’ assessment of employee retention, and Monsen and Wayne Boss’s (2009) study of impact of EO on employee retention among departmental managers and staff. Thus, how EO at the firm level may influence OB at lower levels has not been thoroughly researched.
Building on social contagion theory (Sy et al., 2005) and crossover theory (Ten Brummelhuis et al., 2014), this thesis successfully introduced a multilevel analysis by identifying risk-taking, a fundamental component of EO at the *firm level*, having a detrimental effect on *employee-level JS* and OC. This thesis significantly differs from the three research studies mentioned above in terms of research design. Both Yoo (2001) and Haar and White (2013) examined the relationship between EO and OB at the firm level. Yoo (2001) studied employee JS that was assessed by top/owner managers and thus, employee JS was aggregated to the firm level. In a similar vein, Haar and White (2013) researched employee retention through CEOs or senior managers, which led to an aggregate measure of employee retention. Monsen and Boss (2009) adopted a different design in that EO and employee retention was measured at the individual level, specifically departmental level managers and staff. Nevertheless, Monsen and Boss (2009) then tested and compared the relationship between EO and intention to quit among departmental level managers versus staff. Monsen and Boss (2009) did not address the question whether EO measured at the firm level had any influence on employee retention measured at the employee level.

Therefore, this thesis suggests it is feasible to study OB (i.e., JS and OC) at the employee level as a dependent variable while EO (i.e., ERT, a fundamental component of EO) is measured as an independent variable at the firm level. This is an important extension to current understanding that will help to unveil the influence of EO on performance with the firm.

8.6.1.3 The role of family involvement

This thesis successfully advanced research into the role of the owner-managers’ families to management processes in small firms. This thesis reaffirms the adoption of
RBT (Barney, 1991) to identify a unique bundle of resources resulting from interactions between the family and the firm for a competitive advantage of the firm (Habbershon et al., 2003). More importantly, using the F-PEC scale (Astrachan et al., 2002; Klein et al., 2005), this bundle of resources was factored into three dimensions (i.e., power, experience, and culture), each representing a distinctive channel for the influence of the family on the firm. With a consistent finding of the influence of the culture dimension on firm-level outcomes as well as owner-manager’s attainment of goals, this thesis confirms the requirement to treat family involvement as a multi-dimensional construct. More significantly, by presenting evidence of the direct effect and the moderating effect of the culture dimension, this thesis supports a notion of complex interactions between the family and the firm (Habbershon et al., 2003). This suggests the need for further research into family involvement as a multidimensional construct and different kinds of effects that family involvement has on the firm. An important finding from this study is that a complex approach to testing family involvement might be very fruitful for researchers, and is recommended over the typical dichotomous approach (i.e., family versus non-family).

This thesis also sheds light on the influence of family involvement on management processes with respect to employee job outcomes. By presenting the moderating effect of family power on the crossover of owner-manager’s entrepreneurial risk-taking to employee JS and OC, this thesis suggests a positive effect of family involvement on effectiveness of management practices. Combined with the implications for multilevel analysis mentioned above, this suggests broader applicability of multilevel analysis of influence of EO as well as family involvement in the firm.
8.6.2 Implications for policy maker and business practitioner

Since EO has positive implications for firm performance, this thesis suggests the need for improvements in the business environment to promote firm-level entrepreneurial behaviours. In the context of Vietnam, this includes removing barriers to business development, such as highly bureaucratic government (Benzing et al., 2005) and a high prevalence of corruption (Nguyen, Ho, Le, & Nguyen, 2016). This is particularly important to small firms, which are likely to be more vulnerable to environmental impacts due to their limited resources (Burns, 2001; Kean et al., 1998).

Entrepreneurs should be made aware of the influence of EO on firm performance as a global phenomenon in the real business world. Capturing the firm’s “strategy-making practices, management philosophies, and firm-level behaviours that are entrepreneurial in nature” (Anderson, Covin, & Slevin, 2009, p. 220), EO is a gestalt whose manifestation is expressed through both the entrepreneur and those who are involved in the strategic decision-making process within the firm. Wales, Monsen, and McKelvie (2011) suggest that EO can manifest “across organisational sub-units, from large strategic business units to small individual departments” (p. 896). Accordingly, the entrepreneur needs to create an organisational environment for key personnel from different sub-units/departments within the firm to pursue entrepreneurial behaviour such as innovation and proactiveness. Furthermore, these entrepreneurial behaviours from various sub-units/departments within the firm need harmonising under a global strategy for the firm.

However, entrepreneurs need to consider the possible trade-offs of EO. For example, risk-taking is a fundamental component of EO and entrepreneurs need to identify an optimal level of risk-taking that can balance a positive influence on firm-
level performance and a negative influence on employee job outcomes. This helps to sustain the firm as well as the well-being of the employees.

In the context of small firms in Vietnam, it is the culture dimension, an overlap of family values and firm values, which helps to enhance performance at different levels within the firm. It is important to align firm values with family values in order to consolidate the culture dimension of family involvement. The entrepreneurs also need to be aware of any potential conflicts between the family and the firm. Resolving these conflicts is critical to firm outcomes as well as the entrepreneur’s pursuit of goals.

8.7 Suggestions for future research

There are several suggestions for future research emerging from the implications of this thesis. They include, but are not limited to, the following.

Global knowledge of EO can be broadened by further reasoning and testing EO as a source of a competitive advantage under RBT (Barney, 1991), a theory that is highly recommended by leading EO scholars (Miller, 2011; Wales, 2016) and confirmed for applicability in this thesis. Examining different dimensions of EO, including innovativeness, proactiveness, and risk-taking (Miller, 1983), may also be theoretically driven in this direction. Moreover, theoretical driven study of manifestations of EO can be explored not only at the firm level, but also at sub-unit/department levels (Monsen & Boss, 2009; Spillecke & Brettel, 2014; Wales et al., 2011). Different measures of firm performance (i.e., financial, non-financial, and attainment of goals) should be taken into account as a source of a competitive advantage in researching into EO.

Future research that examines the influence of EO on employees’ attitude at work is encouraged. OB can be measured at the individual level, as in this thesis, or higher levels (e.g., team, department, sub-unit). Different components of OB (i.e., cognition,
affect, and behaviour) can also be studied. Research into the influence of EO on behav-
ioral components of OB may be the most promising, yet need a great deal of effort in
preparing research design and collecting data on employee behaviour. For example,
future studies might explore TI and actual turnover to see whether ERT by the owner-
manager drives employees to seek employment elsewhere. The potential to combine
aspects of Studies 3 and 4 might see a high level of risk-taking trigger employees’
intentions to become entrepreneurs.

Future research can further explore different facets of family involvement either
separately or simultaneously. Quantitative research can adopt the F-PEC scale
(Astrachan et al., 2002) that measures a continuum of family involvement, rather than
using a dichotomous classification (e.g., family versus non-family firm). Qualitative
research is also encouraged to explain interactions between the family and the firm,
which the family uses to exert its influence on the firm. This will help to justify assump-
tions underlying research into family involvement in the firm as well as validate quanti-
tative results of studies in this field. Examples of qualitative research questions are:
Why the family gets involved in the firm? To what extent can the SEW approach
(Gómez-Mejía et al., 2007) help to explain family involvement in the firm? Do different
facets of family involvement vary in affecting different managerial processes within the
firm? How is family involvement in the firm perceived and reacted to by employees
working in the firm?

More studies of transition from employee to entrepreneur should be done using
samples of employees of various education levels. Research has shown that
entrepreneurs’ qualifications range widely from no high school qualification to
postgraduate education (e.g., Department for Business Innovation and Skills of the
United Kingdom, 2013; Small Business Branch of Industry Canada, 2013). While the
recent literature of EI has focused on highly educated samples (Schlaegel & Koenig, 2014), studying samples consisting of individuals of different levels and forms of education may give more insight into the pursuit of an entrepreneurial career.

Future research in the Vietnamese context is also encouraged to take into account the prominent cultural values. This thesis of small firms in Vietnam revealed the importance of family culture that represents family commitment to the firm and an overlap of family values and firm values. Zoogah’s (2012) summary of the main characteristics of emerging economies includes a prevalence of traditional values that researchers should be aware of when studying in the Eastern context. Future research needs to consider cultural values that have been suggested in the literature (Do et al., 2008; Truong & Nguyen, 2002; Vuong & Tran, 2009) including areas such as how the prominence of Confucian values in Vietnamese families (Do et al., 2008; Vuong & Tran, 2009) may influence managerial practices.
Chapter 9
CONCLUSIONS

This thesis is a synthesis of four studies that explore the relationships among entrepreneurial orientation (EO), family involvement, firm-level performance, employee-level organisational behaviour (OB), and entrepreneurial intentions (EI) in the context of Vietnam. Studies 1 and 2 used a sample of 170 Vietnamese small firms to confirm the positive influence of EO on firm performance and an intensifying effect of the culture dimension of family involvement on the EO-performance relationship, as hypothesised under resource-based theory (RBT) (Barney, 1991). Thus, this thesis makes a significant contribution to the EO literature by successfully examining EO under RBT for its influence under family involvement on firm performance, in the Vietnamese context.

The thesis also examined employee-level organisational behaviour (OB) under entrepreneurial risk-taking (ERT), a fundamental aspect of the EO construct (Miller, 1983). In Study 3, a multilevel analysis using a sample of 67 entrepreneurs and 343 corresponding employees, confirms the negative influence of ERT on employee job satisfaction (JS) and organisational commitment (OC), as hypothesised based on social contagion theory (Sy et al., 2005) and crossover theory (Ten Brummelhuis et al., 2014). The thesis also confirms a moderating effect of the cultural dimension of family involvement, as hypothesised under the socio-emotional wealth (SEW) approach (Gómez-Mejía et al., 2007), on the negative influence of ERT. Thus, the thesis makes a second significant contribution to the EO literature by conducting a multilevel analysis of EO and employee-level JS and OC and, for the first time, finding direct effects from entre-
entrepreneurial behaviour influencing follower attitudes. The thesis also contributes to the scholarship of family involvement by highlighting the moderating effects of family culture on managerial processes within small firms in a developing nation context.

Finally, in Study 4, the thesis presents empirical findings from a sample of 147 employees to examine the transition from having a paid job to being self-employed. Based on these findings, the thesis supports the proximal withdrawal states (PWS) approach (Hom et al., 2012) in studying turnover and extends the realm of the current OB literature by mapping how turnover intentions (TI) can help in developing the background factors towards entrepreneurial intention (EI). The thesis also gives support for the generalisation of theory of planned behaviour (TPB) (Ajzen, 1991) in studying EI of employees, beyond the focus of using university student populations in the entrepreneurship literature (Liñán & Chen, 2009; Liñán et al., 2011; Maes et al., 2014).

This thesis makes a significant contribution to the literature on entrepreneurship, family business, and OB by successfully conducting a multilevel analysis of the relationships among ERT and family involvement (measured at the firm level) and the JS and OC components in OB (measured at the employee level). This not only extends the routine firm-level study of EO and family involvement and employee-level study of OB, but also bridges these different academic disciplines, as called for in the EO (Wales, 2016) and OB literatures (Cappelli & Sherer, 1991).

With the empirical findings on the role of the culture dimension of family involvement, the thesis highlights the importance of the family culture to managerial processes within small firms in Vietnam. This reaffirms the important role of family culture within the Eastern context in general (Zoogah, 2012) and in Vietnam in particular (Do et al., 2008; Gerrard et al., 2003; Vuong & Tran, 2009).
The implications of the thesis suggest the need for improvements in the business environment that could encourage small firms to be more entrepreneurial. Barriers to business development that have been identified in the case of Vietnam, such as highly bureaucratic government (Benzing et al., 2005) and a high prevalence of corruption (Nguyen et al., 2016), need to be mitigated. There are also lessons to be learned by entrepreneurs in managing their business. While pursuing entrepreneurial ventures that promise greater outcomes, entrepreneurs need to consider the detrimental effects of risk-taking inherent in these ventures on their employees’ well-being. Entrepreneurs can consider involvement of their families in their firms as that involvement helps in reducing the negative influence of firm-level risk-taking on their employees.

Several suggestions for future research emerge from this body of work. These include exploring different dimensions of EO and family involvement, reasoning the interaction between the family and the firm, bridging different academic disciplines, taking into account the context of developing economies like Vietnam, and applying multilevel analysis of relationships among study variables. These will help in moving forward the frontier at the intersections of the current literature on EO, family business, and OB. As this summary of the research findings shows, this thesis makes a substantial contribution to the literature in several respects and its recommendations have immediate implications for entrepreneurs, employees, policy makers, and researchers. The research results are of practical and theoretical value now and into the future.
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APPENDICES

Appendix 1 Vietnam on the map

Source: Harvard University Center for Geographic Analysis (2016).
Appendices

Appendix 2 Human ethics approval

MASSEY UNIVERSITY
ALBANY

15 September 2014

Hoang Nam Vu
c/- Professor Jarrod Haar
School of Management
Massey University
Albany

Dear Hoang Nam

HUMAN ETHICS APPROVAL APPLICATION – MUHECN 14/035
Further investigation into the relationship between entrepreneurial Orientation Dimensions and Firm Performance with regard to Family Involvement: Empirical Evidence from Small Firms in Vietnam

Thank you for your application. It has been fully considered, and approved by the Massey University Human Ethics Committee: Northern.

Approval is for three years. If this project has not been completed within three years from the date of this letter, a reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

[Signature]

Dr Andrew Chrystall
Acting Chair
Human Ethics Committee: Northern

cc Professor Jarrod Haar

Te Kuraenga
ki Pīrerehua
Research Ethics Office
Private Bag 102 904, Auckland, 0745, New Zealand Telephone +64 9 414 0800 ex 43279 humanethicsnorth@massey.ac.nz

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Appendix 3 Original scales that were adapted for the thesis

**Entrepreneurial orientation (EO)**

Source: Covin and Slevin (1989).

**Innovation**

1. In general, the top managers of my firm favour...
   - A strong emphasis on the marketing of tried and true products or services
   - A strong emphasis on R&D, technological leadership, and innovations

2. How many new lines of products/services has your firm marketed in the past 5 years?
   - No new lines of products/services
   - Very many new lines of products/services

3. Changes in product or service lines...
   - Have been mostly of a minor nature
   - Have usually been quite dramatic

**Proactiveness**

In dealing with its competitors, my firm...

4. Typically responds to actions which competitors initiate
   - Typically initiates actions which competitors then respond to

5. Is very seldom the first business to introduce new products/services, new products/services, administrative technologies, etc.
   - Is very often the first business to introduce administrative techniques, operating techniques, operating technologies, etc.

6. Typically seeks to avoid competitive posture
   - Typically adopts a very competitive, “undo-the-competitors” posture

**Risk-taking**

7. In general, the top managers of my firm have...
   - A strong proclivity for low-risk projects (with normal and certain rates of return)
   - A strong proclivity for high-risk projects (with chances of very high returns)
8. In general, the top managers of my firm believe that...

   - Owing to the nature of the environment, it is best to explore it gradually via timid, incremental behaviour
   - Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm’s objectives

9. When confronted with decision-making situations involving uncertainty, my firm...

   - Typically adopts a cautious, ‘wait-and-see’ posture in order to minimise the probability of making costly decisions
   - Typically adopts a bold, aggressive posture in order to maximise the probability of exploiting potential opportunities

**Family power, experience, and culture (F-PEC)**

Source: Astrachan et al. (2002).

**Definitions**

- Family is defined as a group of persons including those who are offspring of a couple (no matter what generation) and their in-laws as well as their legally adopted children.
- Ownership means ownership of stock or company capital. When the percentage of voting rights differs from percentage of ownership, please indicate voting rights.
- Management board refers to the company board that manages or runs an entity(ies).
- Persons named through family members represent the ideas, goals, and values of the family.

**Family power**

1. Please indicate the proportion of share ownership held by family and nonfamily members:
   
   (a) Family … %
   (b) Nonfamily … %

2. Are shares held in a holding company or similar entity (e.g., trust)?

   1. □ Yes  2. □ No

   If YES, please indicate the proportion of ownership:
(a) Main company owned by:
   (i) direct family ownership: ... %
   (ii) direct nonfamily: ... ownership: ... %
   (iii) holding company: ... %

(b) Holding company owned by:
   (i) family ownership: ... %
   (ii) nonfamily ownership: ... %
   (iii) 2nd holding company: ... %

(c) 2nd holding company owned by:
   (i) family ownership: ... %

3. Does the business have a governance board? 1. ☐ Yes  2. ☐ No
   If YES:
   (a) How many board members does it comprise? ... members
   (b) How many board members is family? ... family members
   (c) How many nonfamily (external) members nominated by the family are on the board? ... nonfamily members

4. Does the business have a management board? 1. ☐ Yes  2. ☐ No
   If YES:
   (a) How many persons does it comprise? ... members
   (b) How many management board members is 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 individual who contribute substantially to the business. These family members might hold official positions in the business as shareholders, board members, or employees.

Family experience
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
Family culture

Please rate (1 = not at all, 7 = to a large extent) the extent to which:

1. Your family has influence on your business.
2. Your family members share similar values.
3. Your family and business share similar values.

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

Firm outcomes

Source: Gupta and Govindarajan (1984), Raymond et al. (2013).

(1 = not at all satisfied, 7 = very satisfied)

Financial outcomes

1. Sales volumes of your firm.
2. Your firm’s operating profits.
3. Your firm’s cash flow from operations.
5. Growth of operating profits.
6. Your firm’s return on sales.
7. Your firm’s return on investment.
Non-financial outcomes

1. Number of employees in your firm.
2. Growth in employees in your firm.
3. Your firm’s market development.
4. Your firm’s personnel development.
5. Your firm’s dealing with political/public affairs.
6. Your firm’s profit-to-sales ratio.

Owner-manager’s goal attainment


(1 = not at all satisfied, 7 = very satisfied)
1. Realizing ideas of new product and business.
2. Having variety in work.
3. Having a sense of accomplishment.
4. Need to have fun.
5. Gaining recognition and social status.
6. Controlling your work.
7. Maintaining your personal freedom.
8. Preserving your family’s business tradition.
9. Earning more money for your family.
10. Providing jobs for family members.

Job satisfaction

Source: Judge et al. (2005) (1 = strongly disagree, 7 = strongly agree).

1. I consider my job rather unpleasant.\(^{(R)}\)
2. I feel fairly satisfied with my present job.
3. Most days I am enthusiastic about my work.
4. Each day at work seems like it will never end.\(^{(R)}\)
5. I find real enjoyment in my work.

Note: \(^{(R)}\) reversed coding.
Appendices

Organisational commitment

1. I would be very happy to send the rest of my career with this organisation.
2. I really feel as if this organisation’s problems are my own.
3. I do not feel a strong sense of “belonging” to my organisation.\(^{(R)}\)
4. I do not feel “emotionally attached” to this organisation.\(^{(R)}\)
5. I do not feel like “part of the family” at my organisation.\(^{(R)}\)
6. This organisation has a great deal of personal meaning for me.

Note: \(^{(R)}\) reversed coding.

Turnover intentions
Source: Cammann et al. (1983) (1 = strongly disagree, 7 = strongly agree).

1. I probably look for a new job in the next year.
2. I will likely actively look for a new job in the next year.
3. I often think about quitting.

Personal attitudes
Source: Liñán and Chen (2009) (1 = strongly disagree, 7 = strongly agree).

1. Being an entrepreneur implies more advantages than disadvantages to me.
2. A career as an entrepreneur is totally unattractive to me.
3. If I had the opportunity and resources, I would love to start a business.
4. Being an entrepreneur would give me great satisfaction.
5. Amongst various options, I would rather be anything but an entrepreneur.

Social norms
Source: Liñán and Chen (2009) (1 = strongly disagree, 7 = strongly agree).

1. My immediate family would approve of my decision to start a business.
2. My friends would approve of my decision to start a business.
3. My colleagues would approve of my decision to start a business.
**Perceived behavioural control**

Source: Liñán and Chen (2009) (1 = strongly disagree, 7 = strongly agree).

1. Starting a firm and keeping it viable would be easy for me.
2. I believe I would be completely unable to start a business.
3. I am able to control the creation process of a new business.
4. I know all about the practical details needed to start a business.
5. It would be very difficult for me to develop a business idea.
6. If I tried to start a business, I would have a high chance of being successful.

**Entrepreneurial intentions**

Source: Liñán and Chen (2009) (1 = strongly disagree, 7 = strongly agree).

1. I am ready to do anything to be an entrepreneur.
2. My professional goal is to be an entrepreneur.
3. I will make every effort to start and run my own business.
4. I am determined to create a business venture in the future.
5. I have serious doubts about ever starting my own business.
6. I have very seriously thought of starting a firm.
7. I have a very low intention of ever starting a business.\(^{(R)}\)

*Note: \(^{(R)}\) reversed coding.*
### Appendix 4 Selected empirical studies of EO-performance relationship, 1986–2016

Source: List of studies was created based on Rauch et al. (2009) (for the 1986–2008 period) and Discover/Scopus database search (for the 2009–2016 period).

**Note:** RBT: resource-based theory; INN: innovation; RT: risk-taking; PRO: proactiveness; AU: autonomy; CA: competitive aggressiveness.

sub.: subjective; obj.: objective; fin.: financial; nonfin: nonfinancial; EPS: earnings per share; ROI: return on investment; ROA: return on assets; ROS: return on sales.

<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Theoretical framework</th>
<th>Concept and origin</th>
<th>EO dimensions</th>
<th>EO scale: type and origin</th>
<th>Score computation</th>
<th>Performance measure</th>
<th>Moderator</th>
<th>Firm size, sample size, and response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Covin and Slevin (1986)</td>
<td>organisational-level entrepreneurship Miller (1983)</td>
<td>INN, RT, PRO</td>
<td>10 Likert 7-point items: 2 original, 6 from Khandwalla (1977), 2 from Miller and Friesen (1982).</td>
<td>composite score</td>
<td>sub. fin.: sales growth rate, operating profits, profit to sales ratio, cash flow from operations, ROI. sub. nonfin.: market share, new product development, market development, R&amp;D activities, cost reduction programs, personnel development, political/public affairs. (Gupta &amp; Govindarajan, 1984)</td>
<td>no</td>
<td>biased toward large firms 76 14.5%</td>
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<td>2</td>
<td>Covin and Slevin (1989)</td>
<td>strategic posture Miller (1983)</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items: 2 original, 6 from Khandwalla (1977), 1 from Miller and Friesen (1982).</td>
<td>composite score</td>
<td>sub. fin.: sales level, sales growth rate, cash flow, return on shareholder equity, gross profit margin, net profit from operations, profit to sales ratio, ROI, ability to fund business growth from profits (Gupta &amp; Govindarajan, 1984).</td>
<td>environment hostility small firms 161 28.1%</td>
<td></td>
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<td>3</td>
<td>Zahra (1991)</td>
<td>corporate entrepreneurship</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>obj. fin.: EPS, ROI, net income-to-sales, SD of ROA.</td>
<td>no</td>
<td>large firms 119 26.4%</td>
<td></td>
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<td>4</td>
<td>Covin et al. (1994)</td>
<td>strategic posture Miller (1983)</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>sub. fin.: sales level, sales growth rate, cash flow, return on shareholder equity, gross profit margin, net profit from operations, profit to sales ratio, ROI, ability to fund business growth from profits (Gupta &amp; Govindarajan, 1984).</td>
<td>strategy mission biased toward small firms 91 37.0%</td>
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<td>No.</td>
<td>Author(s) (Year)</td>
<td>Theoretical framework</td>
<td>Concept and origin</td>
<td>EO dimensions</td>
<td>EO scale: type and origin</td>
<td>Score computation</td>
<td>Performance measure</td>
<td>Moderator</td>
<td>Firm size, sample size, and response rate</td>
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<td>5</td>
<td>Barrett and Weinstein (1998)</td>
<td>corporate entrepreneurship</td>
<td>Covin and Slevin (1991)</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub. nonfin.: overall performance of previous year &amp; relative to leading competitors.</td>
<td>flexibility</td>
<td>varying 142 19.0%</td>
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<td>7</td>
<td>Atuahene-Gima and Ko (2001)</td>
<td>entrepreneurship orientation</td>
<td>Miller (1983)</td>
<td>INN, RT, PRO</td>
<td>6 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>obj. fin.: % of profits &amp; sales derived from new product less than 3 years old, aver. profits over last 3 years because of new products.</td>
<td>no</td>
<td>varying 145 37.3%</td>
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<tr>
<td>8</td>
<td>Lee et al. (2001)</td>
<td>combining RBT &amp; social capital theory</td>
<td>entrepreneurial orientation</td>
<td>Miller (1983)</td>
<td>6 obj. items; original</td>
<td>composite score</td>
<td>obj. fin.: sales growth.</td>
<td>external network linkages: partnership-based, sponsorship-based</td>
<td>SMEs 137 19.0%</td>
</tr>
<tr>
<td>9</td>
<td>Yoo (2001)</td>
<td>entrepreneurial orientation</td>
<td>Covin and Slevin (1989)</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>factorial scores</td>
<td>sub. fin.: 12 indicators (Gupta &amp; Govindarajan, 1984). sub. nonfin.: employees’ job satisfaction and commitment to firm’s objectives, public image and goodwill of a firm (Khandwalla, 1977).</td>
<td>no</td>
<td>small firms 277 20.5%</td>
</tr>
<tr>
<td>10</td>
<td>Kemelgor (2002)</td>
<td>corporate entrepreneurship</td>
<td>Covin and Slevin (1986)</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Covin and Slevin (1986)</td>
<td>composite score</td>
<td>obj. fin.: ROS. obj. nonfin.: no. of new patents, no. of new innovations.</td>
<td>no</td>
<td>small firms 177 -</td>
</tr>
<tr>
<td>11</td>
<td>Kreiser, Marino, and Weaver (2002a)</td>
<td>entrepreneurial orientation</td>
<td>Miller and Friesen (1982), Miller (1983), Covin and Slevin (1989)</td>
<td>INN, RT, PRO</td>
<td>8 Likert 5-point items Covin and Slevin (1989)</td>
<td>factorial scores</td>
<td>sub. fin.: sales level, sales growth, gross profit. environment characteristics: dynamism, munificence</td>
<td>SMEs 1,671 29.0%</td>
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<table>
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<th>No.</th>
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<th>Performance measure</th>
<th>Moderator</th>
<th>Firm size, sample size, and response rate</th>
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<td>12</td>
<td>Swierczek and Thai (2003)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>7 Likert 5-point items</td>
<td>composite score</td>
<td>obj. fin.: net profit.</td>
<td>no</td>
<td>SMEs 306</td>
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<td>sub. fin.: revenue, profit growth.</td>
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<td>sub. nonfin.: business stability, business growth.</td>
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<td>13</td>
<td>Wiklund and Shepherd (2003)</td>
<td>RBT</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert items</td>
<td>composite score</td>
<td>sub. fin.: sales growth, revenue growth, net profit margin.</td>
<td>knowledge of knowledge-based resources</td>
<td>SMEs 384</td>
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<td></td>
<td>sub. nonfin.: growth in no. of employees, product/service innovation process innovation, adoption of new technology, product/service quality, product/service variety, customer satisfaction.</td>
<td></td>
<td>50.2%</td>
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<td>14</td>
<td>Dimitratos, Lioukas, and Carter (2004)</td>
<td>-</td>
<td>entrepreneurship</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>obj. fin.: % of sales in foreign country.</td>
<td>contingency effects: environmental uncertainty, environmental hostility</td>
<td>varying</td>
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<td>sub. nonfin.: satisfaction with performance.</td>
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<td>33.0%</td>
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<tr>
<td>15</td>
<td>Jantunen, Puumalainen, Saarenketo, and Kylläheiko (2005)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>sub. fin.: sales volume, profitability.</td>
<td>no</td>
<td>varying</td>
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<td>sub. nonfin.: market share, market access, development of image, development of know-how, as a whole.</td>
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<td>obj. fin.: international sales as % of total sales, no. of countries in which the company operates.</td>
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<td>16</td>
<td>Wiklund and Shepherd (2005)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>8 Likert 7-point items</td>
<td>composite score</td>
<td>sub. fin.: (relative to competitors) gross margin, profitability, cash flow.</td>
<td>environment dynamism, access to financial capital</td>
<td>small firms</td>
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<td>sub. nonfin.: (relative to competitors) growth.</td>
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<td>51.1%</td>
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<tr>
<td>17</td>
<td>Covin, Green, and Slevin (2006)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>7 Likert 7-point items</td>
<td>composite score</td>
<td>obj. fin.: sales growth rate relative to its industry.</td>
<td>strategic process</td>
<td>medium &amp; large</td>
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<td>Author(s)</td>
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<td>Theoretical framework</td>
<td>Concept and origin</td>
<td>EO dimensions</td>
<td>EO scale: type and origin</td>
<td>Score computation</td>
<td>Performance measure</td>
<td>Moderator</td>
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<td>18</td>
<td>Hughes and Morgan</td>
<td>2007</td>
<td>-</td>
<td>Entrepreneurial orientation</td>
<td>INN, RT, PRO, AU, CA</td>
<td>18 Likert 7-point items (various sources)</td>
<td>factorial scores</td>
<td>Sub. nonfin.: (relative to competitors) profitability, sales growth. Sub. fin.: market share, overall performance, achieve start-up goals, provide secure job to employees, satisfaction with company’s performance.</td>
<td>no</td>
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<td>19</td>
<td>Keh et al.</td>
<td>2007</td>
<td>-</td>
<td>Entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>8 Likert 5-point items Miller and Friesen (1982), Covin and Slevin (1989)</td>
<td>composite score</td>
<td>Sub. nonfin.: firm’s overall performance compared to last year, major competitor, other similar firms in the industry (Frazier, 2000; Niehm, 2002).</td>
<td>no</td>
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<td>20</td>
<td>Runyan, Droge, and Swinney</td>
<td>2008</td>
<td>-</td>
<td>Entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Miller and Friesen (1982), Covin and Slevin (1989)</td>
<td>composite score</td>
<td>Sub. fin.: (for new venture) gross profits, net profit margin. Sub. nonfin.: (for new venture) sales growth, employment growth, market share, innovation in products &amp; services, speed in developing new products &amp; services, quality of products &amp; services, cost control, customer satisfaction.</td>
<td>Longevity SMEs 267 24.5%</td>
</tr>
<tr>
<td>21</td>
<td>Stam and Elfring</td>
<td>2008</td>
<td>-</td>
<td>Entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Miller and Friesen (1989)</td>
<td>composite score</td>
<td>Sub. nonfin.: (firm’s performance relative to their principal competitors for last 3 years) sales growth rate, market share, pre-tax profit growth rate, overall performance. Obj. fin.: sales volumes.</td>
<td>Network centrality bridging ties - 87 72.0%</td>
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<tr>
<td>22</td>
<td>Tang, Tang, Marino, Zhang, and Li</td>
<td>2008</td>
<td>-</td>
<td>Entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>8 Likert 5-point items Miller and Friesen (1989)</td>
<td>Composite score</td>
<td>Sub. nonfin.: (firm’s performance relative to their principal competitors for last 3 years) sales growth rate, market share, pre-tax profit growth rate, overall performance. Obj. fin.: sales volumes.</td>
<td>No</td>
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<td>24</td>
<td>Arbaugh, Cox, and Camp (2009)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert items</td>
<td>composite score</td>
<td>obj. fin.: ROS, change in firm’s net worth over last 3 years.</td>
<td>no</td>
<td>1,045, 26.1%</td>
</tr>
<tr>
<td>25</td>
<td>Frishammar and Andersson (2009)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert items</td>
<td>factorial scores</td>
<td>sub. nonfin.: 4 quantitative performance items, 2 qualitative performance items (Nummela, Saarenketo, &amp; Paumalainen, 2004).</td>
<td>no</td>
<td>SMEs, 188, 51.6%</td>
</tr>
<tr>
<td>26</td>
<td>González-Benito, González-Benito, and Muñoz-Gallego (2009)</td>
<td>-</td>
<td>entrepreneurship</td>
<td>INN, RT, PRO</td>
<td>6 Likert 7-point items</td>
<td>composite score</td>
<td>obj. fin.: profitability, profit margin, ROI. sub. nonfin.: market response, market position value, new product success.</td>
<td>market orientation</td>
<td>-, 183, 17.9%</td>
</tr>
<tr>
<td>27</td>
<td>Richard, Wu, and Chadwick (2009)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert items</td>
<td>composite score</td>
<td>obj. fin.: ROA, ROE.</td>
<td>CEO position tenure CEO industry tenure</td>
<td>-, 579, 82.7%</td>
</tr>
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<td>28</td>
<td>Wiklund, Patzelt, and Shepherd (2009)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>8 Likert 7-point items</td>
<td>composite score</td>
<td>obj. fin.: sales growth. sub. nonfin.: employee growth. sub. nonfin.: comparison with competing businesses in the market.</td>
<td>no</td>
<td>small firms, 413, 51.1%</td>
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<td>29</td>
<td>Andersén (2010)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert items</td>
<td>composite score</td>
<td>obj. fin.: ROA, ROS, growth in sales. sub. nonfin.: growth in employment. sub. nonfin.: overall performance.</td>
<td>no</td>
<td>SMEs, 155, 48.8%</td>
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<tr>
<td>30</td>
<td>Awang, Asghar, and Suban (2010)</td>
<td>RBT</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO, CA</td>
<td>29 Likert 7-point items Khandwalla (1977), Miller and Friesen (1982), Miller (1983), Lumpkin and Dess (1996), Shane, Venkataraman, and MacMillan (1995)</td>
<td>factorial scores</td>
<td>obj. fin.: ROS, ROA, ROI.</td>
<td>distinctive capabilities (development process; fin. information; human resources; capital structure; general administration; entrepreneurial management; information technology; engineering)</td>
<td>small firms 125 31.3%</td>
</tr>
<tr>
<td>31</td>
<td>Casillas and Moreno (2010)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO, AU, CA</td>
<td>15 Likert 7-point items Lumpkin (1998), Lumpkin and Dess (2001)</td>
<td>factorial scores</td>
<td>obj. fin.: % of growth in sales over 4 years.</td>
<td>family involvement: managing director is the owner’s family member, over 50% of top management team: owner’s family, firm’s long-term strategy and guideline designed essentially by owner’s family members.</td>
<td>SMEs 449 10.4%</td>
</tr>
<tr>
<td>32</td>
<td>Casillas et al. (2010)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>10 Likert 7-point items Lumpkin (1998), Lumpkin and Dess (2001)</td>
<td>factorial scores</td>
<td>obj. fin.: % of growth in sales over 4 years.</td>
<td>generational involvement, environment dynamism, environment hostility</td>
<td>SMEs 317 10.4%</td>
</tr>
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<td>Frank, Kessler, and Fink (2010)</td>
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<td>entrepreneurial orientation</td>
<td>Zahra and Covin (1995)</td>
<td>INN, RT, PRO</td>
<td>8 Likert 7-point items Miller (1983)</td>
<td>composite score</td>
<td>sub. fin.: sales growth, cash-flow growth (relative to competitor) (Wiklund &amp; Shepherd, 2005). access to financial capital, environmental dynamism</td>
<td>SMEs</td>
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<td>36</td>
<td>Kraus, Rigtering, Hughes, and Hosman (2012)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>Lumpkin and Dess (1996)</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>factorial score</td>
<td>sub. fin.: gross margin, profitability, cash flow, sales growth rate. sub. nonfin.: employee growth. (Wiklund &amp; Shepherd, 2005)</td>
<td>market turbulence</td>
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<td>37</td>
<td>Sundqvist, Kyläheiko, Kuivalainen, and Cadogan (2012)</td>
<td>-</td>
<td>entrepreneurially oriented behaviour</td>
<td>Covin and Slevin (1991)</td>
<td>INN, RT, PRO, AU, CA</td>
<td>24 Likert 7-point items INN, PRO, RT, AU: Jambulingam, Kathuria, and Doucette (2005) CA: Narver and Slater (1990), Jaworski and Kohli (1993)</td>
<td>composite score</td>
<td>sub. fin.: satisfaction with export profits over last 3 years, overall assessment of profitability of exporting operations for last financial year. market dynamism</td>
<td>-</td>
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<td>40</td>
<td>Anderson and Eshima (2013)</td>
<td>RBT</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>8 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub. nonfin.: sales growth rate, market share growth, employee growth.</td>
<td>firm age, intangible resource advantage</td>
<td>SMEs 207 21%</td>
</tr>
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<td>41</td>
<td>Dada and Watson (2013)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>7 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub. nonfin. (Keh et al., 2007).</td>
<td>no</td>
<td>- 97</td>
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<td>42</td>
<td>Eggers, Kraus, Hughes, Laraway, and Snycerski (2013)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>14 Likert 5-point items various sources including Miller (1983), Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub.: more employees, higher sales.</td>
<td>no</td>
<td>SMEs 660 6.6%</td>
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<tr>
<td>44</td>
<td>Haar and White (2013)</td>
<td>RBT</td>
<td>corporate entrepreneurship</td>
<td>INN, RT, PRO</td>
<td>9 Likert 5-point items Barringer and Bluedorn (1999)</td>
<td>composite score</td>
<td>sub. nonfin.: employee retention (Huselid, 1995).</td>
<td>information technology competency</td>
<td>large 158 19.3%</td>
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<tr>
<td>45</td>
<td>Messersmith and Wales (2013)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>obj. fin.: sales growth.</td>
<td>high-performance work system, partnership philosophy</td>
<td>varying 119 10.8%</td>
</tr>
<tr>
<td>46</td>
<td>Van Doorn, Jansen, Van den Bosch, and Volberda (2013)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub. fin.: revenue, profit, ROA (Wiklund &amp; Shepherd, 2005). sub. nonfin.: market share.</td>
<td>senior team heterogeneity, senior team shared vision, environment dynamism</td>
<td>varying 346 31.5%</td>
</tr>
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<td>48</td>
<td>Arshad, Rasli, Arshad, and Zain (2014)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>Lumpkin and Dess (1996)</td>
<td>27 Likert 5-point items Covin and Slevin (1989)</td>
<td>factorial score</td>
<td>sub. fin. and nonfin (Covin &amp; Slevin, 1989; Smart &amp; Conant, 1994).</td>
<td>no</td>
<td>SMEs 48 58.6%</td>
</tr>
<tr>
<td>49</td>
<td>Dai, Maksimov, Gilbert, and Fernhaber (2014)</td>
<td>cost-benefit view</td>
<td>entrepreneurial orientation</td>
<td>Lumpkin and Dess (1996)</td>
<td>9 Likert 5-point items Covin and Slevin (1989)</td>
<td>factorial score</td>
<td>obj. nonfin: international scope (number of foreign countries).</td>
<td>no</td>
<td>SMEs 500 -</td>
</tr>
<tr>
<td>50</td>
<td>Lindsay, Ashill, Roxas, and Victorio (2014)</td>
<td>institutional theory</td>
<td>entrepreneurial orientation</td>
<td>Covin (1991)</td>
<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub.: sales, net income, market share, ROI.</td>
<td>no</td>
<td>microenterprises 735 45.9%</td>
</tr>
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<td>52</td>
<td>Akhtar, Ismail, Hussain, and Umair-ur-Rehman (2015)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>Lumpkin and Dess (1996)</td>
<td>23 Likert 5-point items Lumpkin and Dess (2001)</td>
<td>factorial score</td>
<td>sub. nonfin: 7 items (uniqueness, value to customer, market creation).</td>
<td>no</td>
<td>- 150 -</td>
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<td>53</td>
<td>Brouthers, Nakos, and Dimitratos (2015)</td>
<td>RBT</td>
<td>entrepreneurial orientation</td>
<td>Miller (1983)</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>sub.: international performance: ROI, profitability, overall performance.</td>
<td>strategic alliances</td>
<td>SMEs 162 27%</td>
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<td>54</td>
<td>Engelen, Gupta, Strenger, and Brettel (2015)</td>
<td>RBT</td>
<td>entrepreneurial orientation</td>
<td>Covin and Slevin (1989)</td>
<td>8 Likert 7-point items</td>
<td>composite score</td>
<td>sub. fin.: profitability, ROI, ROS, reaching financial goals. sub. nonfin.: customer satisfaction, delivering value to your customers, delivering what your customers want, retaining valued customers, market share growth, growth in sales revenue, acquiring new customers, increasing sales to existing customers. (Vorhies &amp; Morgan, 2005)</td>
<td>top management’s transformational leadership behaviours</td>
<td>SMEs 790 13.2%</td>
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<td>55</td>
<td>Felzensztein, Ciravegna, Robson, and Amorós (2015)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>Miller (1983)</td>
<td>9 Likert 7-point items</td>
<td>factorial score</td>
<td>obj. fin.: internationalisation scope.</td>
<td>no</td>
<td>SMEs 446 12.9%</td>
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<td>56</td>
<td>Fernández-Mesa and Alegre (2015)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>Covin and Slevin (1989)</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>obj. fin.: export intensity.</td>
<td>no</td>
<td>SMEs 150 -</td>
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<td>57</td>
<td>Fuentes-Fuentes, Bojica, and Ruiz-Arroyo (2015)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>Lumpkin and Dess (1996)</td>
<td>9 Likert 7-point items</td>
<td>composite score</td>
<td>sub. fin. and nonfin.</td>
<td>no</td>
<td>bias towards small firms 118 4.7%</td>
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<td>58</td>
<td>Grimmer, Miles, and Grimmer (2015)</td>
<td>RBT</td>
<td>entrepreneurial orientation</td>
<td>Rauch et al. (2009)</td>
<td>8 Likert 7-point items</td>
<td>composite score</td>
<td>sub. fin.: sales, profits, ROI. sub. nonfin.: customer retention.</td>
<td>environment hostility</td>
<td>small firms 401 23.7%</td>
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<td>INN, RT, PRO, management professionalism</td>
<td>Likert 7-point items Zhan and Deschoolmeester (2004)</td>
<td>factorial score</td>
<td>obj. and sub. fin.</td>
<td>no</td>
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<td>Choi and Williams (2016)</td>
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<td>entrepreneurial orientation</td>
<td>Miller and Friesen (1983)</td>
<td>INN, RT, PRO</td>
<td>4 Likert 5-point items Miller (1983), Covin and Slevin (1990)</td>
<td>composite score</td>
<td>sub. fin. and nonfin.: market share, growth rate, profitability.</td>
<td>no</td>
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<td>Deligianni, Dimitratos, Petrou, and Aharoni (2016)</td>
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<td>Rauch et al. (2009)</td>
<td>INN, RT, PRO</td>
<td>8 Likert 5-point items various sources including Miller and Friesen (1982), Covin and Slevin (1990)</td>
<td>composite score</td>
<td>sub.: sales, market share, ROI, profitability, overall performance.</td>
<td>environment dynamism</td>
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<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub. fin.: revenue growth, productivity growth, ROI, ROA, ROS. sub. nonfin: innovative performance.</td>
<td>knowledge-leakage risk</td>
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<td>Lomberg, Uribig, Stöckmann, Marino, and Dickson (in press)</td>
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<td>entrepreneurial orientation</td>
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<td>8 Likert items Covin and Slevin (1989)</td>
<td>factorial and composite scores</td>
<td>sub.: 7 items (Gupta &amp; Govindarajan, 1984).</td>
<td>no</td>
<td>SMEs</td>
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<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite score</td>
<td>sub.: performance of international new venture (efficiency, effectiveness, adaptiveness).</td>
<td>no</td>
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<td>Semrau, Ambos, and Kraus (2016)</td>
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<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite scores</td>
<td>sub.: gross margins, profits, cash flow, and sales, employment growth (relative to competitors) (Wildlund &amp; Shepherd, 2005).</td>
<td>no</td>
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<td>70</td>
<td>Shirokova, Bogatyreva, Beliaeva, and Puffer (2016)</td>
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<td>9 Likert 7-point items Covin and Slevin (1989)</td>
<td>composite scores</td>
<td>obj. fin.: sales growth.</td>
<td>environmental hostility, market growth</td>
<td>SMEs</td>
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<td>9 Likert 7-point items Covin and Slevin (1989), Miller and Friesen (1982), Zou, Taylor, and Osland (1998)</td>
<td>factorial score</td>
<td>sub.: firm growth.</td>
<td>no</td>
<td>bias towards large firms</td>
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<td>INN, RT, PRO</td>
<td>9 Likert 5-point items Miller (1983)</td>
<td>composite scores</td>
<td>sub.: sales growth rate, cash flow, market share, gross profit margin, profit to sales ratio, ROA.</td>
<td>firm ownership, CEO’s values (self-enhancing, self-transcending)</td>
<td>SMEs 148</td>
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<td>Thanos, Dimitratos, and Sapouna (in press)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 5-point items Miller (1983)</td>
<td>composite scores</td>
<td>sub.: sales level, return on investment, profitability, market share, and overall satisfaction with international performance (relative to competitors).</td>
<td>politicisation, international hostility</td>
<td>SMEs 208</td>
</tr>
<tr>
<td>74</td>
<td>Linton and Kask (2017)</td>
<td>-</td>
<td>entrepreneurial orientation</td>
<td>INN, RT, PRO</td>
<td>9 Likert 7-point items Miller (1983), Covin and Slevin (1989)</td>
<td>factorial score</td>
<td>obj. fin.: profit margin (earnings before interest and taxes).</td>
<td>no</td>
<td>small firms 67</td>
</tr>
</tbody>
</table>

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Appendix 5 Glossary of key terms

buffering effect: Impact of a moderator variable that makes a relationship between other variables less strong. (related to intensifying effect and moderating effect)

Confucianism: System of ethics that originated in China about 2,000 years ago, specifying five sets of relationships that govern society: between the sovereign and ministers, father and son, husband and wife, elder and younger brothers, and between friends. Confucianism is a significant force in Vietnam’s history and Confucian values are still dominant in Vietnamese society.

crossover: Transmission of stress and/or strain between two persons in the same social context, such that the stress experienced by one person causes a change in the level of stress in another person. This thesis studies crossover of stress and strain from the owner-manager to his/her employees (i.e., how the entrepreneur’s risk-taking causes changes in the employee’s organisational behaviour).

direct effect: Effect of the independent variable on the dependent variable; in a regression model, it is inferred from the regression coefficient of the independent variable. (related to interaction effect)

employee level: A level of analysis that considers the individual as the unit of analysis. (related to firm level)

entrepreneurial intentions (EI): Inclination of the individual who is currently not an entrepreneur to start a new business venture. This thesis studies entrepreneurial intentions as related to turnover intentions.

entrepreneurial orientation (EO): Entrepreneurial activity that occurs as a process in an entrepreneurial firm and encompasses different firm-level elements that
characterises an entrepreneurial firm, such as innovativeness, risk-taking, and proactiveness.

In this thesis, EO has been studied at the firm level and includes elements of innovation, risk-taking, and being proactive.

**entrepreneurial risk-taking (ERT):** A behavioural pattern that occurs in an entrepreneurial firm, especially bold, aggressive decisions to exploit potential market opportunities and to achieve the firm’s objectives. High level ERT often involves a strong proclivity for high-risk business projects for expected high returns.

**familiness:** A bundle of resources that result from interactions between the firm and the family that is involved in the firm (e.g., the family owning or sharing ownership of the firm, having the family member(s) on the governance board and/or management board, commitment of the family to the firm).

**family:** A group of persons, including those who are offspring of a couple, their in-laws, and their legally adopted children.

In this thesis, the term family refers to the family of the owner-manager.

**family culture:** A dimension of family involvement in the firm that encompasses an overlap of family values and firm values as well as commitment of the family to the firm. (related to family experience, family power, and F-PEC scale)

**family experience:** A dimension of family involvement in the firm that encompasses experience in doing business that is gained and transferred from generation to generation within a family. (related to family culture, family power, and F-PEC scale)

**family involvement:** Interactions of the family with the firm through the family’s founding of the firm, mobilizing resources for business development, and exerting
their personal influence on the strategic management and direction of the firm. (includes family culture, family experience, and family power; related to F-PEC scale)

**family power**: A dimension of family involvement in the firm that encompasses power of the family over the firm, based on the family ownership and presence of the family member(s) on the governance board and/or management board. (related to family culture, family experience, and F-PEC scale)

**financial performance satisfaction (FPS)**: Satisfaction with financial outcomes of the firm, such as revenues and profits. (related to non-financial performance satisfaction)

This thesis studies the owner-manager’s satisfaction with financial outcomes of their small firms.

**firm level**: A level of analysis that considers the firm as a whole and uses measures of aggregate outcomes of the firm, such as total revenues and total profits. (related to employee level)

**firm performance**: Level of outcomes of the firm’s processes.

**F-PEC scale**: Scale of levels of family involvement in the firm, measured across three dimensions: family power, family experience, and family culture. (related to family involvement)

**intensifying effect**: Impact of a moderator variable that makes a relationship between other variables stronger. (related to buffering effect and mediating effect)

**interaction effect**: Effect resulting from the interaction between two variables; can be inferred from the regression coefficient of product term of two variables in a regression model. (related to direct effect)
job satisfaction (JS): Positive feeling of the individual about his/her job that results from his/her evaluation of the characteristics of the job.

mediating effect: Function of an intermediary through which the indirect effect of the independent variable is transmitted onto the dependent variable.

moderating effect: Impact of a moderator variable that causes changes to the direction and/or strength of the relationship between other two variables. (related to buffering effect and intensifying effect)

multilevel analysis: Analysis that uses statistical models of parameters that vary at more than one level. For example, levels within the organisation include individual level, team/group level, and organisational level.

This thesis focuses on the individual level (employee level) of organisational behaviour and organisational level (firm level) of entrepreneurial orientation and family involvement.

non-financial performance satisfaction (NFPS): Satisfaction with non-financial outcomes of the firm, such as employment growth and market expansion. (related to financial performance satisfaction)

This thesis studies the owner-managers’ satisfaction with non-financial outcomes of their small firms.

organisational behaviour (OB): Behaviour of individuals and groups in an organisational context. Organisational behaviour research includes the three components of cognition, affect, and conduct of behaviour.

This thesis focuses on organisational behaviour at the individual level, especially employee-related variables of job satisfaction and organisational commitment.
organisational commitment (OC): Degree to which the employee identifies with a particular organisation and its goals and wishes to maintain membership in the organisation.

This thesis focuses on the affective component of organisational behaviour (i.e., organisational commitment due to strong positive attitudes toward the organisation).

owner-manager: The individual who owns or shares ownership of and is in charge of running a business entity.

perceived behavioural control (PBC): The individual’s perception of expectation from reference people, such as family members and friends. Under theory of planned behaviour, perceived behavioural control is a determinant of the individual’s intentions to act. (related to personal attitudes and social norms)

This thesis studies social norms as related to entrepreneurial intentions.

personal attitudes (PA): Degree to which the individual has a favourable or unfavourable evaluation or appraisal of a specified behaviour. Under theory of planned behaviour, personal attitudes is a determinant of the individual’s intentions to act. (related to perceived behavioural control and social norms)

This thesis studies personal attitudes as related to entrepreneurial intentions.

proximal withdrawal states (PWS): The employee action tendencies to achieve desired end states of employment, resulting from the employee’s preference for staying or leaving under perceived control of the preference. There are four prime states: the enthusiastic stayer, the reluctant stayer, the enthusiastic leaver, and the reluctant leaver.

This thesis focuses on the enthusiastic leaver.
resource-based theory (RBT): A theory stating that resources (tangible and intangible) are heterogeneous and imperfectly mobile among firms; the firm’s competitive advantage results from the firm’s use of a bundle of resources that the firm can mobilise.

This thesis uses resource-based theory to study entrepreneurial orientation as an intangible of the firm that can result in a firm’s competitive advantage.

small firm: A business entity with a small scale of resources and a small scope of operations.

While there has been a little consensus on a definition of small firm, this thesis defines a small firm as hiring less than 200 employees.

social norms (SN): The individual’s perception of expectation from the reference people, such as family members and friends. Under theory of planned behaviour, social norms is a determinant of the individual’s intentions to act. (related to perceived behavioural control and personal attitudes)

This thesis studies social norms as related to entrepreneurial intentions.

theory of planned behaviour (TPB): A theory that links the individual’s perception of (1) his/her behavioural control, (2) social norms, and (3) his/her attitudes toward an activity, to his/her action.

This thesis uses theory of planned behaviour to predict the employee’s entrepreneurial intentions.

turnover intentions (TI): Inclination of the individual, who is currently a member of an organisation, towards termination of his/her membership with the organisation.

This thesis studies turnover intentions as related to entrepreneurial intentions.
Appendix 6 Statements of contribution to doctoral thesis containing publications

- Statement of contribution to Chapter 4 as an article,
- Statement of contribution to Chapter 5 as an article,
- Statement of contribution to Chapter 6 as an article, and
- Statement of contribution to Chapter 7 as an article.
STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate’s Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate’s contribution as indicated below in the Statement of Originality.

Name of Candidate: Hoang Nam Vu

Name/Title of Principal Supervisor: Professor Stephen Kelly

Name of Published Research Output and full reference:


In which Chapter is the Published Work: Chapter 4

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate: 80%
  and / or

- Describe the contribution that the candidate has made to the Published Work:

  The PhD candidate drove the paper and led everything:
  - Designing the study and collecting the data for the study;
  - Preparing the dataset and carrying out the data analysis; and
  - Writing up a draft and finalizing the article.

  Co-authors/supervisors role has been to check the analysis (2nd author) and then also help shape the existing paper. Overall, the large majority of the work was the candidates and the idea and formulation of the paper was driven by the candidate.

Hoang Nam Vu

Candidate’s Signature

Date: 06/12/2016

Stephen Kelly

Principal Supervisor’s signature

Date: 06/12/2016
STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS

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In which Chapter is the Published Work: Chapter 5

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and/or

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- Preparing the dataset and carrying out the data analysis; and
- Writing up a draft and finalizing the article.

Co-authors/supervisors role has been to check the analysis (2nd author) and then also help shape the existing paper. Overall, the large majority of the work was the candidates and the idea and formulation of the paper was driven by the candidate.

Hoang Nam Vu

Candidate’s Signature       Date

Principal Supervisor’s signature       Date

Stephen Kelly

06/12/2016

06/12/2016
STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS

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Name of Published Research Output and full reference:

In which Chapter is the Published Work: Chapter 6

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  - Preparing the dataset and contributing to the data analysis; and
  - Writing up a draft and finalizing the article.
  Co-author/supervisor role has been to check the analysis and help shape the existing paper. Overall, the large majority of the work was the candidates and the idea and formulation of the paper was driven by the candidate.

Hoang Nam Vu

Principal Supervisor’s signature

Candidate’s Signature

Date

Stephen Kelly

Date
STATEMENT OF CONTRIBUTION
TO DOCTORAL THESIS CONTAINING PUBLICATIONS

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

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Name/Title of Principal Supervisor: Professor Stephen Kelly

Name of Published Research Output and full reference:

In which Chapter is the Published Work: Chapter 7

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  and / or

• Describe the contribution that the candidate has made to the Published Work:
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  - Designing the study and collecting the data for the study;
  - Preparing the dataset and contributing to the data analysis; and
  - Writing up a draft and finalizing the article.
  Co-author/supervisor role has been to check the analysis and help shape the existing paper. Overall, the large majority of the work was the candidates and the idea and formulation of the paper was driven by the candidate.

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Candidate’s Signature

06/12/2016

Stephen Kelly
Principal Supervisor’s signature

06/12/2016